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**ZONING COMMISSION**  
**District of Columbia**

CASE NO. 06-01  
EXHIBIT NO. 10

**ZONING COMMISSION**  
District of Columbia  
CASE NO.06-01  
EXHIBIT NO.6A1

**SQUARE 776  
TRANSPORTATION IMPACT STUDY  
WASHINGTON, D.C.**

Prepared for:  
Steuart Investment Company

Prepared by:  
Wells & Associates, LLC

January 6, 2006

**SQUARE 776**  
**TRANSPORTATION IMPACT STUDY**  
**WASHINGTON, D.C.**

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## **Section I INTRODUCTION**

This report presents the results of a transportation impact study, which was prepared in support of Steuart Investment Company's planned unit development (PUD) application for Square 776.

The subject site is bounded by Eye Street on the north, H Street on the south, 3<sup>rd</sup> Street on the west, and 4<sup>th</sup> Street on the east, in the northeast section of Washington, D.C., as shown on Figure I-1. An existing north/south alley that intersects H and Eye Streets bisects square 776. In addition, two east/west alleys intersect 3<sup>rd</sup> and 4<sup>th</sup> Streets. The subject site includes the entire frontage along H Street, most of the frontage along 3<sup>rd</sup> Street, and about a quarter of the frontage along 4<sup>th</sup> Street. The site currently is vacant. Directly to the north of the site, several townhouses exist and are not planned to be modified. The Union Station Metro station is located approximately 1,400 feet walking distance from the site.

As shown on Figure I-2, Steuart Investment Company proposes to re-develop the site with 232 residential units and approximately 61,964 square feet (S.F.) of grocery store space and 9,551 S.F. of retail space. A shared commercial/residential underground parking garage is proposed with approximately 375 parking spaces on three levels. All vehicular access to the parking garage would be provided from 3<sup>rd</sup> Street.

For purposes of this traffic analysis, this development was assumed to be completely built and occupied by 2008.

Tasks undertaken in this study included the following:

1. Review Steuart Investment Company's development program, plans prepared by Torti Gallas and Partners, Inc., and other background data.
2. A field reconnaissance of existing roadway and intersection geometrics, traffic controls, traffic signal phasing/timings, and speed limits.
3. Counts of existing vehicular and pedestrian traffic at eight (8) key intersections (including the existing alleys).
4. Analysis of existing levels of service at these intersections.
5. Background future traffic volumes were forecasted for project buildout (2008).

6. Background levels of service were calculated at key intersections based on background traffic forecasts, existing traffic controls, and existing intersection geometrics.
7. The number of AM and PM peak hour vehicle-trips that would be generated by the proposed project were estimated based on: (1) Institute of Transportation Engineers (ITE) trip generation rates, (2) the proximity of the project to the Union Station Metro station, and (3) experience with other comparable projects in Washington, D.C.
8. Total future traffic volumes were forecasted for 2008.
9. Total future levels of service were calculated at key intersections based on total future traffic forecasts, existing traffic controls, and existing intersection geometrics.
10. Operational improvements required to adequately accommodate site traffic were identified.

Sources of data for this analysis included traffic counts conducted by Wells & Associates, ITE, the Washington Metropolitan Area Transit Authority (WMATA), the District of Columbia, U. S. Census Bureau, and previous transportation impact studies prepared for other area developments by Wells & Associates.

***The conclusions of this traffic impact study are as follows:***

1. ***All of the key intersections currently operate at an overall acceptable level of service (LOS) "D" or better during both the AM and the PM peak hours.***
2. ***The approved but unbuilt projects in the study area will generate a total of 773 AM peak hour trips and 812 PM peak hour trips.***
3. ***These additional trips can be adequately accommodated at all the key intersections in the study area.***
4. ***The proposed development of Square 776 will generate 166 additional AM peak hour trips and 342 additional PM peak hour trips.***
5. ***These additional site-generated trips can be adequately accommodated at the key intersections in the study area with a slight traffic signal timing modification at the intersection of 3<sup>rd</sup> Street and H Street. The garage***

***entrance off 3<sup>rd</sup> Street is anticipated to operate at a LOS “B” and “C” during the AM and PM peak hours, respectively.***

- 6. The proposed on-site parking supply would exceed the minimum zoning parking requirements. The loading/delivery/service facilities provided for this development would adequately meet the project and D.C. minimum zoning requirements.***



Figure 1-1  
Site Location





## Section 2 BACKGROUND DATA

### Study Scope

This traffic study includes the following intersections:

1. H Street/3<sup>rd</sup> Street,
2. H Street/4<sup>th</sup> Street,
3. H Street/Public Alley,
4. Eye Street/3<sup>rd</sup> Street,
5. Eye Street/4<sup>th</sup> Street,
6. Eye Street/Public Alley,
7. 3<sup>rd</sup> Street/Public Alley, and
8. 4<sup>th</sup> Street/Public Alley.

This study also includes the following development projects:

1. **Station Place** (approved). This 1,396,00 S.F. office project is located on the west side of 2<sup>nd</sup> Street, between F and H Streets, adjacent to Union Station. Station Place is the new headquarters for the Securities and Exchange Commission (SEC). Phase I is currently open and occupied and consists of approximately 650,000 S.F. of office space.
2. **Office Building** (approved). A new, 213,895 S.F. office building currently is under construction at 830 1<sup>st</sup> Street.
3. **Senate Square** (approved). This 500-condominium residential project is bounded by Eye Street on the north, H Street on the south, 3<sup>rd</sup> Street on the east, and 2<sup>nd</sup> Street on the west.
4. **318 Eye Street**. A proposed 140 residential condominiums building with a business center/administrative offices/health club area for future residents only.
5. **Capitol Place**. A proposed 318 residential condominiums development with approximately 74,800 S.F. of commercial space. This development is bounded by 2<sup>nd</sup>, 3<sup>rd</sup>, G, and H Streets.

The impacts of these approved projects and the subject project were evaluated at project buildout, which is anticipated to occur by 2008.

## **Public Road Network**

Vehicular access/egress to and from Square 776 is provided by 3<sup>rd</sup>, 4<sup>th</sup>, Eye, and H Streets. Existing intersection lane use and traffic control at key intersections in the site vicinity are shown on Figure 2-1.

**3<sup>rd</sup> Street** is a north/south two-lane street with a posted speed limit of 25 mp. Curb parking for Zone 6 residential parking permit holders is provided on both sides of the street. The intersection of 3<sup>rd</sup> Street with Eye is controlled by stop signs and the intersection of 3<sup>rd</sup> Street and H Street is controlled by a traffic signal.

**4<sup>th</sup> Street** is a one-travel-lane, one-way southbound street with a posted speed limit of 25 mph. Curb parking is available on both sides of the street for Zone 6 residential parking permit holders. The 4<sup>th</sup> Street and Eye Street intersection is controlled by a stop sign and the 4<sup>th</sup> Street and H Street intersection is controlled by a traffic signal.

**Eye Street** is a one-travel-lane, one-way eastbound street just east of 3<sup>rd</sup> Street. Two-way traffic is permitted west of 3<sup>rd</sup> Street. The posted speed limit is 25 mph. Curb parking is available on both sides of the street for Zone 6 residential parking permit holders. Three (3)-hour parking is available on Monday-Friday from 9:30AM to 4:00PM just west and south of the 3<sup>rd</sup> Street and Eye Street intersection.

**H Street** is an east/west six-lane road with a posted speed limit of 25 mph. There is one designated parking lane in each direction, which becomes a travel lane during the AM and PM peak hours.

## **Existing Traffic Counts**

**Vehicle Traffic Counts.** Existing AM and PM peak period vehicular and pedestrian traffic counts were conducted on Wednesday, November 16, 2005, by Wells & Associates at the following intersections:

1. H Street/3<sup>rd</sup> Street,
2. H Street/4<sup>th</sup> Street,
3. H Street/Public Alley,
4. Eye Street/3<sup>rd</sup> Street,
5. Eye Street/4<sup>th</sup> Street,
6. Eye Street/Public Alley,
7. 3<sup>rd</sup> Street/Public Alley, and
8. 4<sup>th</sup> Street/Public Alley.

Vehicular traffic counts are presented in Appendix A and summarized on Figure 2-2. Pedestrian traffic counts are also presented in Appendix A and summarized on Figure 2-3.

The AM peak hour generally occurred at 7:45 to 8:45 AM; the PM peak hour generally occurred at 4:45 to 5:45 PM.

Figure 2-2 indicates that H Street, east of 3<sup>rd</sup> Street, presently carries 2,072 AM peak hour vehicle trips and 1,933 PM peak hour vehicle trips. Approximately 81 percent of all AM peak hour trips travel in the westbound direction towards the central business district; 19 percent travel in the eastbound direction. Approximately 30 percent of all PM peak hour trips travel in the westbound direction; 70 percent travel in the eastbound direction away from the central business district.

Eye Street, north of the subject site presently carries only 51 AM peak hour trips and 110 PM peak hour trips. 3<sup>rd</sup> Street, west of the subject site carries 439 AM peak hour trips and 434 PM peak hour trips. 4<sup>th</sup> Street, east of the subject site carries 372 AM peak hour trips and 356 PM peak hour trips.

### **Public Transportation Facilities and Services**

The subject site is served by three Metrobus line. The D8, X1, and X2 Metrobus lines operate on H Street, just south of the subject site. The Union Station Metro station is located three (3) blocks (or approximately 900 feet) southwest of the subject site. The Union Station Metro station, commuter rail service, and various bus lines operate at Union Station.

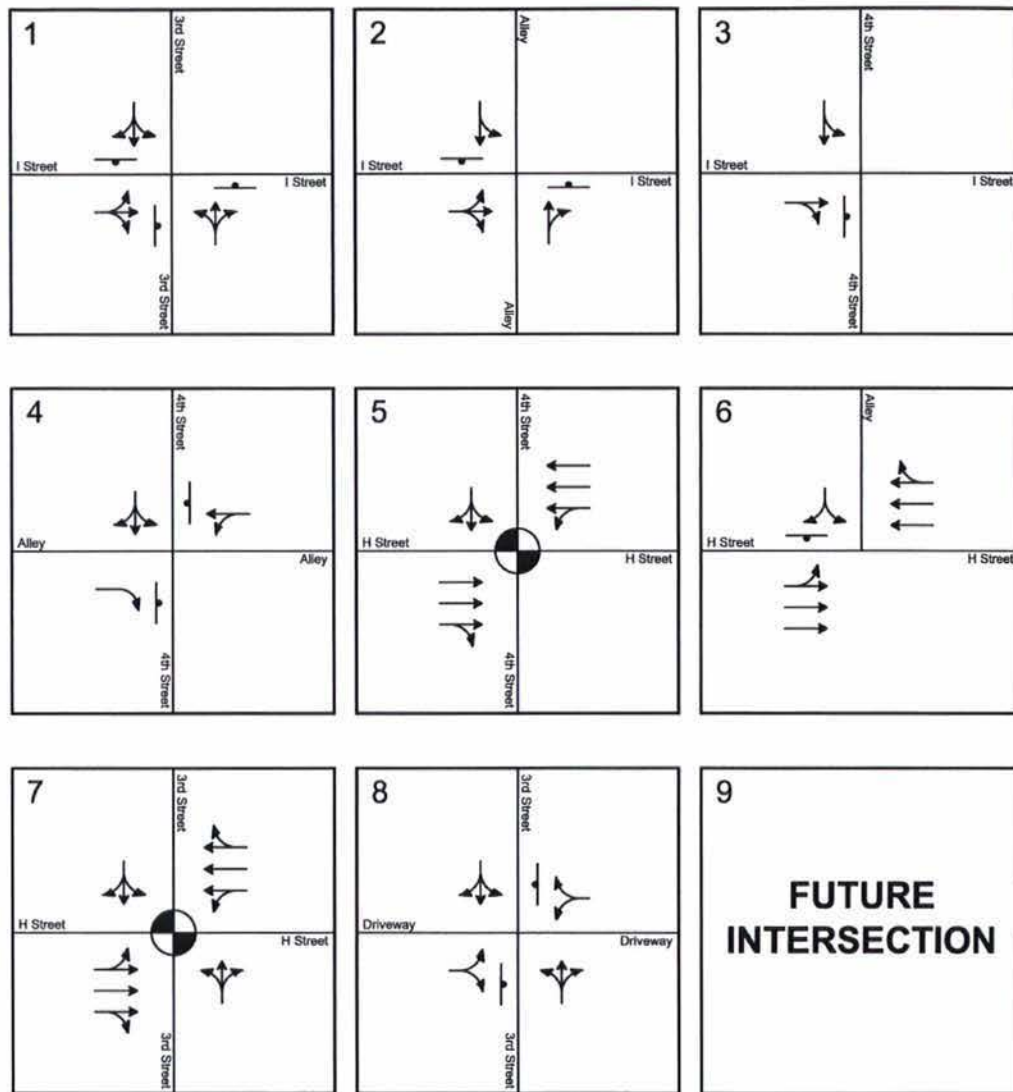


Figure 2-1  
Existing Lane Use And Traffic Control

← Represents One Travel Lane  
 ● Signalized Intersection  
 — Stop Sign



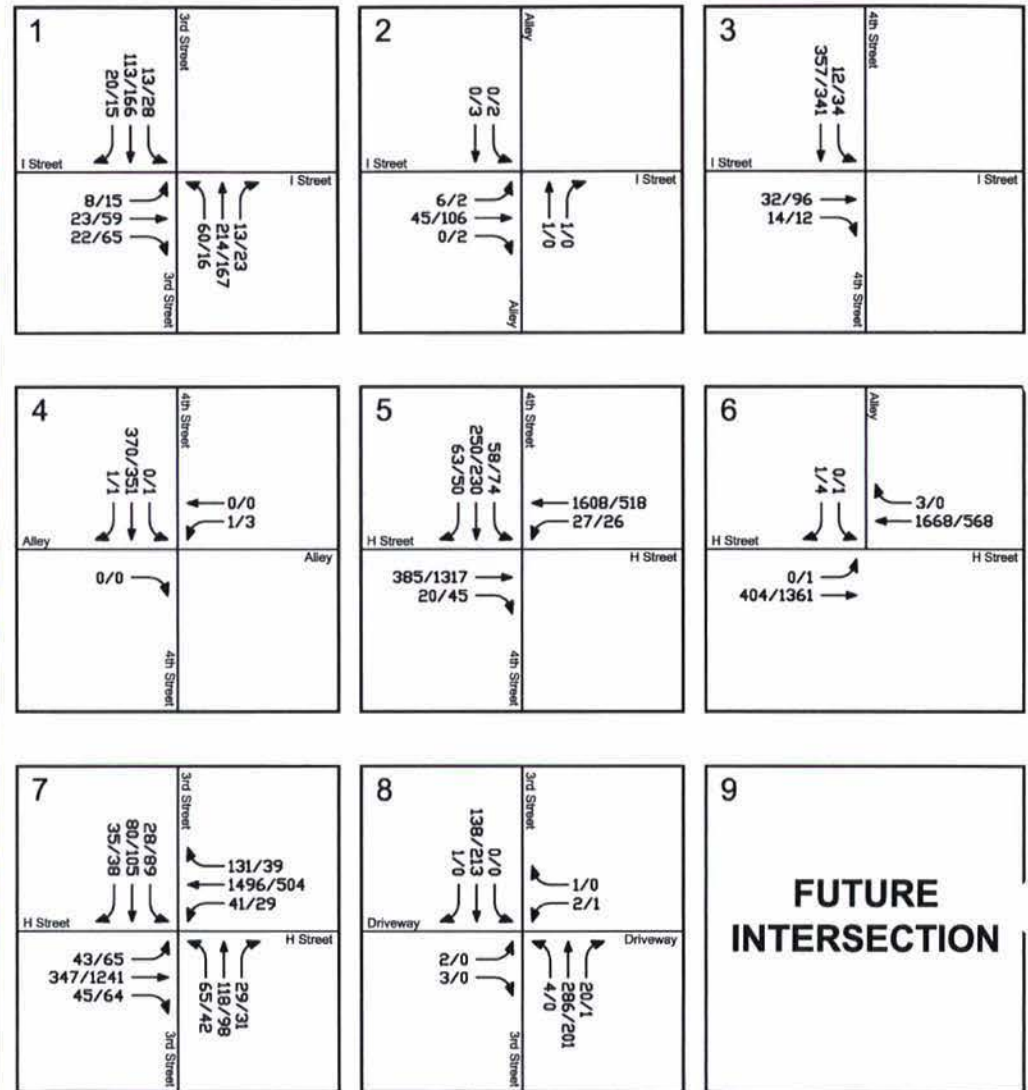


Figure 2-2  
Existing Peak Hour Vehicular Traffic Counts

AM PEAK HOUR  
PM PEAK HOUR  
000/000



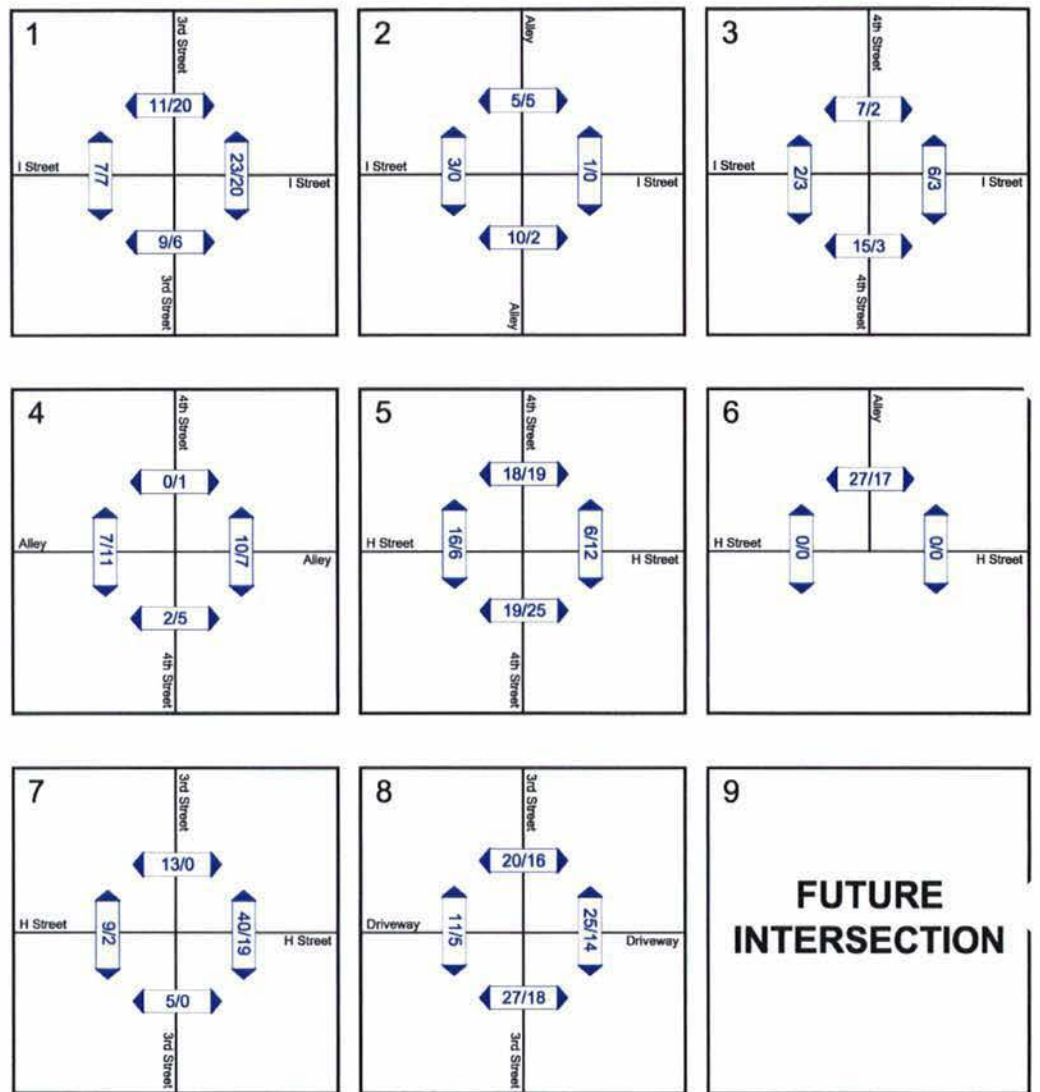


Figure 2-3  
Existing Peak Hour Pedestrian Counts

AM PM  
PM PM  
000/000



## **Section 3 ANALYSIS**

### **Existing Levels of Service**

Existing peak hour levels of service were estimated at the eight (8) key intersections in the study area based on the existing lane usage and traffic control shown on Figure 2-1, the existing traffic volumes shown on Figure 2-2, and the Highway Capacity Manual. The results are presented in Appendix B and summarized in Table 3-1.

Table 3-1 indicates that all of the key intersections currently operate at an overall acceptable level of service (LOS) “D” or better during both the AM and the PM peak hours.

### **Other Development Trip Generation**

The number of peak hour trips that will be generated by the five other approved but incomplete development projects were estimated based on their respective development programs, peak hour equations included in the Institute of Transportation Engineers' (ITE) Trip Generation manual, 7th Edition, and/or approved traffic impact studies. As shown in Table 3-2, it is estimated that these projects will generate a total of 773 AM peak hour trips, and 812 PM peak hour trips, upon completion.

### **Trip Distribution Analysis**

The distributions of the other approved projects were determined based on existing traffic patterns and previously-approved traffic studies. The distribution of Square 776 was based on the previously-approved distribution for Senate Square and existing travel patterns. The following distribution was applied:

| <u>To/From</u>                     | <u>Residential</u> | <u>Retail</u> |
|------------------------------------|--------------------|---------------|
| North along 3 <sup>rd</sup> Street | 25%                | 3%            |
| South along 3 <sup>rd</sup> Street | 10%                | 15%           |
| North along 4 <sup>th</sup> Street | 5%                 | 2%            |
| West along Eye Street              | 10%                | 25%           |
| East along H Street                | 15%                | 20%           |
| <u>West along H Street</u>         | <u>35%</u>         | <u>35%</u>    |
| Total                              | 100%               | 100%          |

Table 3-1  
Square 776  
Peak Hour Intersection Levels of Service <sup>1</sup>

| Intersection                 | Type of Control | 2005 Existing Conditions |                | 2008 Background Conditions |                | 2008 Total Future Conditions |                 |
|------------------------------|-----------------|--------------------------|----------------|----------------------------|----------------|------------------------------|-----------------|
|                              |                 | AM                       | PM             | AM                         | PM             | AM                           | PM              |
| 1 3rd Street/Eye Street      | Stop Sign       |                          |                |                            |                |                              |                 |
| Eastbound LTR                |                 | A[8.1]                   | A[8.9]         | A[9.2]                     | B[10.9]        | A[9.6]                       | B[12.3]         |
| Northbound LTR               |                 | A[9.8]                   | A[9.3]         | B[11.0]                    | B[10.9]        | B[12.0]                      | B[12.9]         |
| Southbound LTR               |                 | A[8.4]                   | A[9.4]         | A[9.5]                     | B[10.9]        | A[9.8]                       | B[12.0]         |
| 2 Eye Street/North Alley     | Stop Sign       |                          |                |                            |                |                              |                 |
| Eastbound LTR                |                 | A[0.9]                   | A[0.1]         | A[0.5]                     | A[0.1]         | A[0.4]                       | A[0.1]          |
| Northbound TR                |                 | A[9.0]                   | A[0.0]         | A[9.2]                     | A[0.0]         | A[9.3]                       | A[0.0]          |
| Southbound LT                |                 | A[0.0]                   | A[9.5]         | A[0.0]                     | A[9.8]         | A[0.0]                       | A[9.9]          |
| 3 4th Street/Eye Street      | Stop Sign       |                          |                |                            |                |                              |                 |
| Eastbound TR                 |                 | B[12.1]                  | B[14.1]        | B[13.0]                    | C[15.9]        | B[13.2]                      | C[16.3]         |
| Southbound LT                |                 | A[0.3]                   | A[0.9]         | A[0.3]                     | A[0.9]         | A[0.3]                       | A[0.9]          |
| 4 4th Street/East Alley      | Stop Sign       |                          |                |                            |                |                              |                 |
| Eastbound R                  |                 | A[0.0]                   | A[0.0]         | A[0.0]                     | A[0.0]         | B[10.9]                      | B[10.7]         |
| Westbound LT                 |                 | B[11.5]                  | B[11.3]        | B[11.9]                    | B[11.6]        | B[11.9]                      | B[11.7]         |
| 5 4th Street/H Street        | Signal          |                          |                |                            |                |                              |                 |
| Eastbound                    |                 | A(6.1)                   | A(6.1)         | A(6.2)                     | A(6.1)         | A(6.5)                       | A(6.6)          |
| Westbound                    |                 | B(13.9)                  | A(9.5)         | B(15.2)                    | A(9.7)         | B(15.3)                      | A(9.9)          |
| Southbound                   |                 | <u>D(36.1)</u>           | <u>C(34.9)</u> | <u>D(39.2)</u>             | <u>D(36.9)</u> | <u>D(39.8)</u>               | <u>D(37.7)</u>  |
| Overall                      |                 | <b>B(16.0)</b>           | <b>B(11.4)</b> | <b>B(17.3)</b>             | <b>B(11.7)</b> | <b>B(17.5)</b>               | <b>B(12.1)</b>  |
| 6 H Street/South Alley       | Stop Sign       |                          |                |                            |                |                              |                 |
| Eastbound TR                 |                 | A[9.2]                   | B[10.2]        | A[9.5]                     | B[10.4]        | N/A                          | N/A             |
| Southbound LR                |                 |                          |                |                            |                |                              |                 |
| 7 3rd Street/H Street        | Signal          |                          |                |                            |                |                              |                 |
| Eastbound                    |                 | A(6.3)                   | A(8.8)         | A(6.4)                     | A(9.7)         | A(6.6)                       | B(11.1)         |
| Westbound                    |                 | A(6.4)                   | A(5.5)         | A(7.8)                     | A(5.6)         | A(8.0)                       | A(5.6)          |
| Northbound                   |                 | D(39.2)                  | D(35.6)        | D(42.9)                    | D(36.5)        | D(47.4)                      | D(38.9)         |
| Southbound                   |                 | <u>C(33.1)</u>           | <u>D(46.9)</u> | <u>D(36.2)</u>             | <u>D(55.0)</u> | <u>D(43.2)</u>               | <u>F(204.9)</u> |
| Overall                      |                 | <b>B(10.8)</b>           | <b>B(13.7)</b> | <b>B(12.4)</b>             | <b>B(15.0)</b> | <b>B(14.1)</b>               | <b>D(37.9)</b>  |
| Optimize signal timings      |                 |                          |                |                            |                |                              |                 |
| Eastbound                    | Signal          | N/A                      | N/A            | N/A                        | N/A            | B(11.2)                      | B(19.6)         |
| Westbound                    |                 | N/A                      | N/A            | N/A                        | N/A            | C(31.7)                      | B(11.9)         |
| Northbound                   |                 | N/A                      | N/A            | N/A                        | N/A            | C(28.3)                      | C(26.5)         |
| Southbound                   |                 | <u>N/A</u>               | <u>N/A</u>     | <u>N/A</u>                 | <u>N/A</u>     | <u>C(27.7)</u>               | <u>D(51.0)</u>  |
| Overall                      |                 | <b>N/A</b>               | <b>N/A</b>     | <b>N/A</b>                 | <b>N/A</b>     | <b>C(27.4)</b>               | <b>C(22.5)</b>  |
| 8 3rd Street/West Alley      | Stop Sign       |                          |                |                            |                |                              |                 |
| Eastbound LTR                |                 | B[10.3]                  | A[0.0]         | B[10.9]                    | A[0.0]         | B[11.3]                      | A[0.0]          |
| Westbound LTR                |                 | B[11.5]                  | B[12.2]        | B[12.2]                    | B[13.1]        | N/A                          | N/A             |
| Northbound LTR               |                 | A[0.1]                   | A[0.0]         | A[0.1]                     | A[0.0]         | A[0.1]                       | A[0.0]          |
| 9 3rd Street/Garage Entrance | Stop Sign       |                          |                |                            |                |                              |                 |
| Westbound LR                 |                 | N/A                      | N/A            | N/A                        | N/A            | B[13.9]                      | C[20.4]         |
| Southbound LT                |                 | N/A                      | N/A            | N/A                        | N/A            | A[1.2]                       | A[1.8]          |

Notes: <sup>1</sup> Analysis performed using Synchro/Simtraffic Version 6.0

Table 3-2  
 Square 776  
 Trips Generated by Other Approved Developments

| Trip Type/<br>Land Use                             | Background<br>Project | Development<br>Program | Units | AM Peak Hour |            |            | PM Peak Hour |            |            |
|----------------------------------------------------|-----------------------|------------------------|-------|--------------|------------|------------|--------------|------------|------------|
|                                                    |                       |                        |       | In           | Out        | Total      | In           | Out        | Total      |
| <b><u>ITE Vehicle-Trips <sup>1</sup></u></b>       |                       |                        |       |              |            |            |              |            |            |
| Office                                             | Station Place         | 746,000                | S.F   | 824          | 112        | 936        | 155          | 759        | 914        |
| Office                                             | 830 1st Street NE     | 213,895                | S.F   | 303          | 41         | 345        | 54           | 264        | 318        |
| Residential                                        | Senate Square         | 500                    | DU    | 32           | 155        | 187        | 151          | 74         | 225        |
| Residential                                        | 318 Eye Street        | 140                    | DU    | 12           | 56         | 68         | 53           | 26         | 79         |
| Residential                                        | Capitol Square        | 318                    | DU    | 22           | 108        | 130        | 104          | 51         | 155        |
| Retail                                             |                       | 74,800                 | S.F.  | 131          | 18         | 149        | 28           | 135        | 163        |
|                                                    | Subtotal              |                        |       | 1,324        | 491        | 1,815      | 546          | 1,309      | 1,855      |
| <b><u>ITE Person-Trips <sup>2</sup></u></b>        |                       |                        |       |              |            |            |              |            |            |
| Office                                             | Station Place         | 746,000                | S.F.  | 906          | 124        | 1,030      | 171          | 835        | 1,006      |
| Office                                             | 830 1st Street NE     | 213,985                | S.F.  | 334          | 45         | 379        | 60           | 291        | 350        |
| Residential                                        | Senate Square         | 500                    | DU    | 41           | 198        | 239        | 193          | 95         | 288        |
| Residential                                        | 318 Eye Street        | 140                    | DU    | 15           | 72         | 87         | 68           | 33         | 101        |
| Residential                                        | Capitol Square        | 318                    | DU    | 28           | 138        | 166        | 133          | 65         | 198        |
| Retail                                             |                       | 74,800                 | S.F   | 233          | 32         | 264        | 49           | 240        | 289        |
|                                                    | Subtotal              |                        |       | 1,557        | 609        | 2,165      | 673          | 1,558      | 2,231      |
| <b><u>Projected Vehicle Trips <sup>3</sup></u></b> |                       |                        |       |              |            |            |              |            |            |
| Office                                             | Station Place         | 746,000                | S.F.  | 279          | 38         | 317        | 53           | 257        | 309        |
| Office                                             | 830 1st Street NE     | 213,895                | S.F.  | 103          | 14         | 117        | 18           | 89         | 108        |
| Residential                                        | Senate Square         | 500                    | DU    | 23           | 107        | 129        | 104          | 51         | 155        |
| Residential                                        | 318 Eye Street        | 140                    | DU    | 9            | 39         | 48         | 37           | 18         | 55         |
| Residential                                        | Capitol Square        | 318                    | DU    | 11           | 54         | 64         | 52           | 26         | 77         |
| Retail                                             |                       | 74,800                 | S.F.  | 87           | 12         | 99         | 18           | 90         | 108        |
| <b>Total Background Trips</b>                      |                       |                        |       | <b>511</b>   | <b>264</b> | <b>773</b> | <b>282</b>   | <b>531</b> | <b>812</b> |

Notes:

<sup>1</sup>

Based on ITE, Trip Generation, 7th Edition.

<sup>2</sup>

Assumptions:

Office

Residential

Non-auto mode split:

0%

10%

Average vehicle occupancy  
(persons per vehicle)

1.1

1.15

<sup>3</sup>

Assumptions:

Office

Residential

Non-auto mode split:

60%

30%

Average vehicle occupancy  
(persons per vehicle)

1.3

1.3

### **Other Development Project Traffic Assignments**

The trips shown in Table 3-2 were assigned to the public road network based on previously-approved trip distributions. The results are shown on Figure 3-1.

### **Background Traffic Growth**

Annual background traffic growth was estimated at 1.5 percent per year compounded for three (3) years for project buildout (2008). This growth rate was applied to all movements at the key intersections.

### **Background Traffic Forecasts**

Background peak hour traffic forecasts, without the development of Square 776, were estimated based on existing traffic counts, traffic generated by approved but incomplete development, and background traffic growth. The background traffic forecasts for the year of project buildout (2008) are shown on Figure 3-2.

### **Background Future Levels of Service**

Future peak hour levels of service, without the development of Square 776, were estimated at the eight (8) key intersections in the study area for the year of project buildout (2008) based on: the intersection lane usage and traffic control shown on Figure 2-1; the background traffic forecasts shown on Figure 3-2; and the Highway Capacity Manual. The results are presented in Appendix C, and are summarized in Table 3-1.

Table 3-1 indicates that all of the key intersections will continue to operate at an overall acceptable level of service (LOS) "D" or better during both the AM and the PM peak hours.

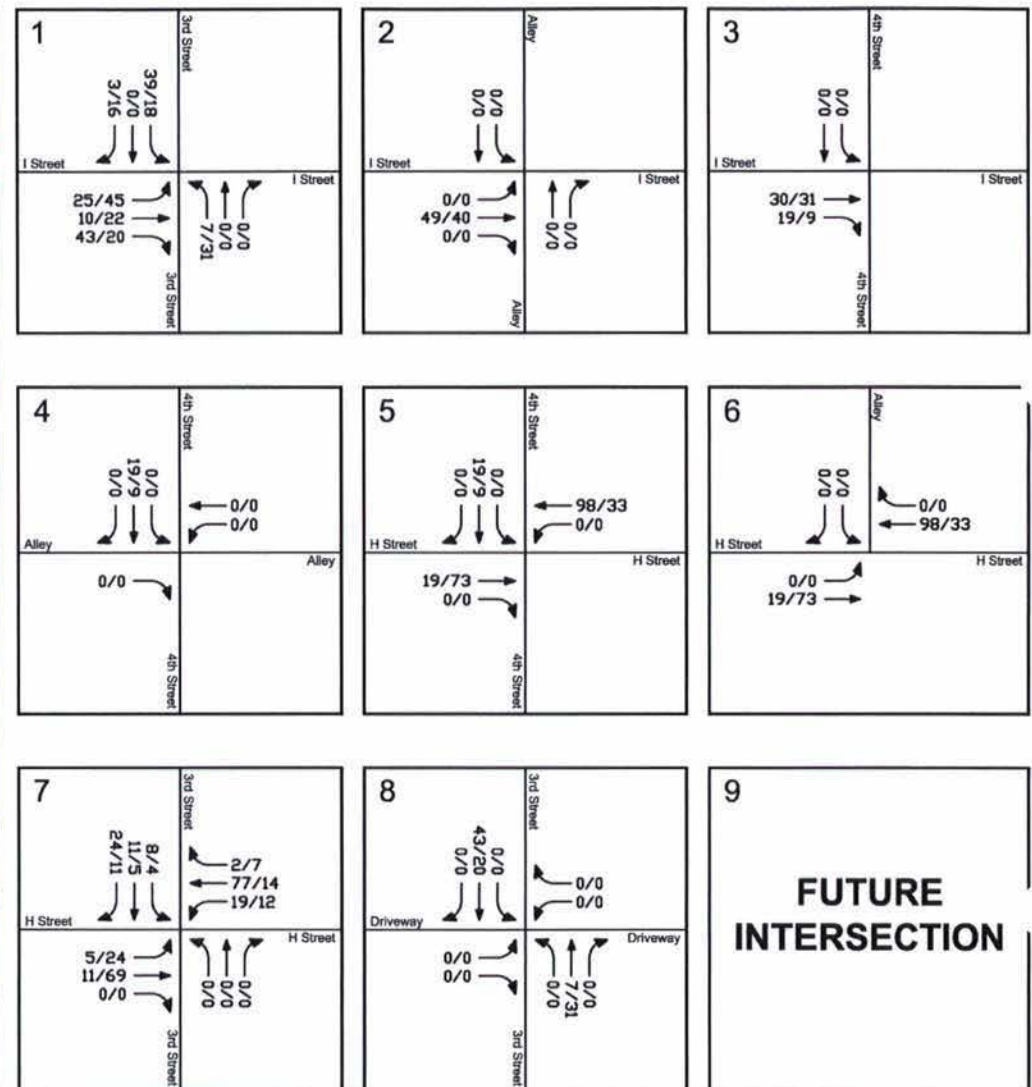


Figure 3-1  
Other Development Traffic Assignments

AM PEAK HOUR  
PM PEAK HOUR  
600/000



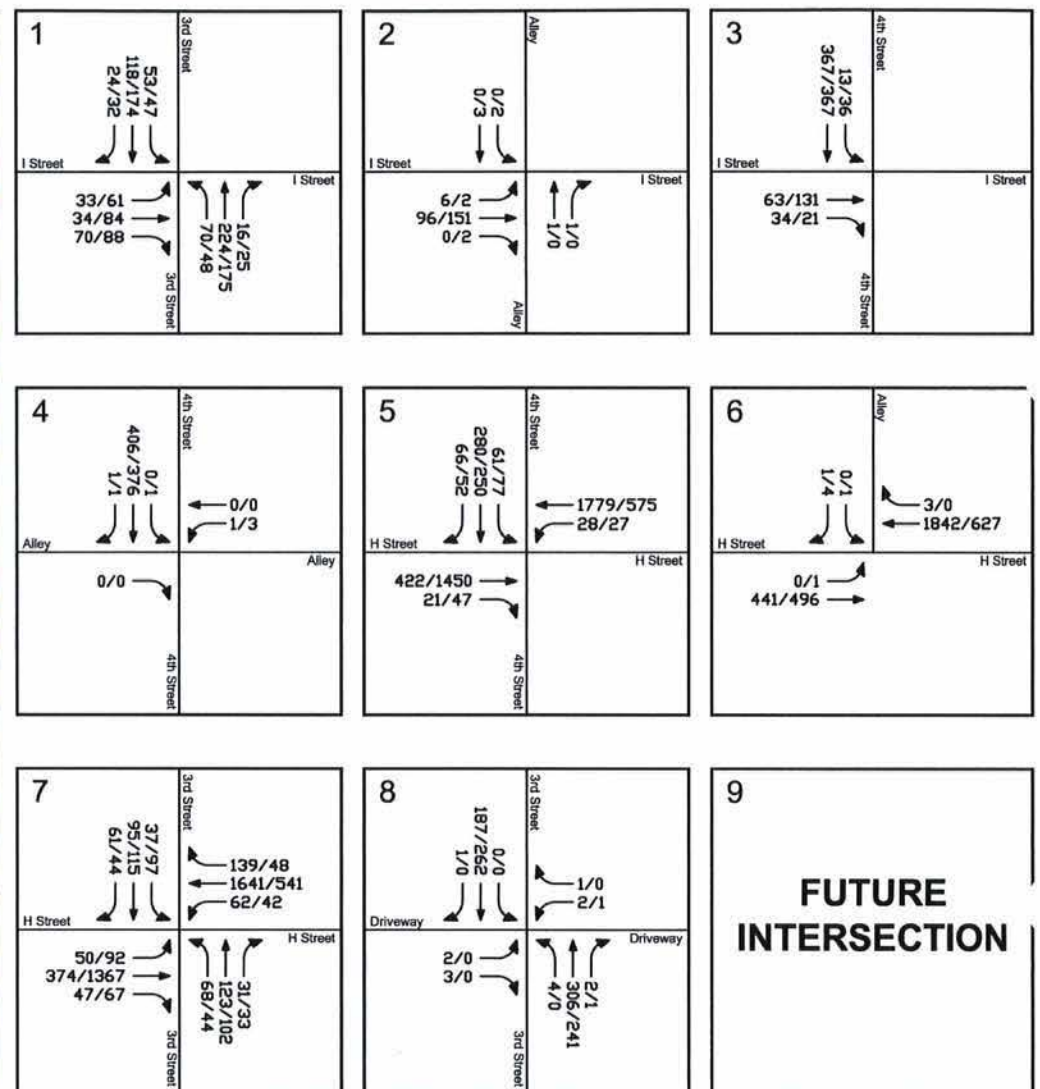


Figure 3-2  
2008 Background Future Peak Hour Traffic Forecasts

AM PEAK HOUR  
PM PEAK HOUR  
000/000



## **Site Trip Generation Analysis**

The number of trips that will be generated by the development of Square 776 were estimated based on: (1) Institute of Transportation Engineers (ITE) trip generation rates, (2) the proximity of the project to the Union Station Metro station, and (3) experience with other comparable projects in Washington, D.C.

This development is anticipated to generate 166 AM peak hour trips (83 in and 84 out), and 342 PM peak hour trips (173 in and 171 out), at project buildout, as shown in Table 3-3. This estimate assumes that 50 percent of all residential site-generated person-trips and 65 percent of all retail and grocery store site-generated person-trips would be made by Metro or some other non-auto mode. The prevailing mode split in this neighborhood is 50 percent, according to the 2000 U.S. Census.

## **Site Traffic Assignments**

The site-generated traffic volumes were assigned to the public road network according to the directional distribution described above. The resulting site traffic assignments are shown on Figure 3-3.

## **Total Future Traffic Forecasts**

These site traffic assignments were added to the future background traffic volumes shown on Figure 3-2 to yield the total future traffic forecasts shown on Figure 3-4.

## **Total Future Levels of Service**

Future peak hour levels of service with development of Square 776 were estimated at the key intersections in the study area based on: the lane usage and traffic controls shown on Figure 2-1; the total future traffic forecasts shown on Figure 3-4; and the Highway Capacity Manual. The results are presented in Appendix D and summarized in Table 3-1.

Table 3-1 indicates that all of the key intersections will continue to operate at an overall level of service (LOS) "D" or better during both the AM and the PM peak hours with development of Square 776. The southbound movement at the intersection of 3<sup>rd</sup> Street and H Street will operate at an LOS "F" during the PM peak hour; however modifying the traffic signal timings (within the existing cycle lengths) would allow this movement to operate at an acceptable level of service "D" or better, without adversely affecting other intersections.

The garage entrance off 3<sup>rd</sup> Street is anticipated to operate at a LOS "B" and "C" during the AM and PM peak hours, respectively.

## **Parking Analysis**

The subject site is proposed to be zoned as C-2-B. The District of Columbia zoning ordinance minimum parking requirement in zone C-2-B for apartment houses or multiple dwellings is one (1) space for every three units. In zone C-2-B for commercial space, the parking requirements is one (1) space for each 750 S.F. in excess of 3,000 S.F. of gross floor area.

Auto availability for owner-occupied residential units in Census Tract 83.01, in which the subject site is located, is 1.35 vehicles per unit, according to the 2000 U.S. Census. Approximately 5 percent of all owner-occupied households owned no vehicle; 61 percent owned one (1) vehicle; and 29 percent owned two (2) or more vehicles.

Auto availability for renter-occupied residential units in Census Tract 83.01 is 0.79 vehicles per unit, according to the 2000 U.S. Census. Approximately 36 percent of all owner-occupied households owned no vehicle; 49 percent owned one (1) vehicle; and 13 percent owned two (2) or more vehicles.

Per the District of Columbia zoning ordinance minimum parking requirements, the subject site would require 92 commercial parking spaces and 78 residential parking spaces, for a total of 170 parking spaces.

The subject site will be served by three (3) levels of underground parking with approximately 375 parking spaces. This is 205 more parking spaces than the minimum number of spaces required by the zoning ordinance.

In summary, the proposed on-site parking supply would exceed the minimum zoning parking requirements.

## **Loading Analysis**

The District of Columbia zoning ordinance requires one (1) 30-foot-deep loading berth, one (1) 55-foot-deep loading berth, one (1) 200-square-foot loading platform, and one (1) 20-foot-deep service/delivery loading space for the subject site.

The residential and retail loading dock area will be located on 4<sup>th</sup> Street, and the grocery store loading dock will be located near the parking garage entrance on 3<sup>rd</sup> Street. The trucks would back into the appropriate loading areas, as shown on Figure 3-5.

The loading/delivery/service facilities provided for this development would adequately meet the project and D.C. minimum zoning requirements.

Table 3-3  
Square 776  
Site Trip Generation Summary

| Trip Type/<br>Land Use                             | Development<br>Program | Units | AM Peak Hour |           |            | PM Peak Hour |            |            |
|----------------------------------------------------|------------------------|-------|--------------|-----------|------------|--------------|------------|------------|
|                                                    |                        |       | In           | Out       | Total      | In           | Out        | Total      |
| <b><u>ITE Vehicle-Trips <sup>1</sup></u></b>       |                        |       |              |           |            |              |            |            |
| Retail                                             | 9,551                  | S.F.  | 25           | 3         | 29         | 15           | 74         | 90         |
| Grocery Store                                      | 61,964                 | S.F.  | 164          | 105       | 269        | 326          | 313        | 639        |
| Residential                                        | 232                    | DU    | 17           | 84        | 101        | 80           | 40         | 120        |
|                                                    | Subtotal               |       | 206          | 192       | 399        | 421          | 427        | 849        |
| <b><u>ITE Person-Trips <sup>2</sup></u></b>        |                        |       |              |           |            |              |            |            |
| Retail                                             | 9,551                  | S.F.  | 45           | 6         | 51         | 27           | 132        | 159        |
| Grocery Store                                      | 61,964                 | S.F.  | 292          | 187       | 478        | 579          | 557        | 1,136      |
| Residential                                        | 232                    | DU    | 22           | 107       | 129        | 102          | 51         | 153        |
|                                                    | Subtotal               |       | 358          | 300       | 658        | 709          | 740        | 1,448      |
| <b><u>Projected Vehicle Trips <sup>3</sup></u></b> |                        |       |              |           |            |              |            |            |
| Retail                                             | 9,551                  | S.F.  | 10           | 1         | 11         | 6            | 29         | 35         |
| Grocery Store                                      | 61,964                 | S.F.  | 64           | 41        | 105        | 127          | 122        | 249        |
| Residential                                        | 232                    | DU    | 9            | 42        | 50         | 40           | 20         | 59         |
| <b>Total Site-Generated Trips</b>                  |                        |       | <b>83</b>    | <b>84</b> | <b>166</b> | <b>173</b>   | <b>171</b> | <b>342</b> |

Notes:

<sup>1</sup> Based on ITE, Trip Generation, 7th Edition.

<sup>2</sup> Assumptions:

|                                                    | <u>Retail</u> | <u>Residential</u> | <u>Grocery Store</u> |
|----------------------------------------------------|---------------|--------------------|----------------------|
| Non-auto mode split:                               | 10%           | 10%                | 10%                  |
| Average vehicle occupancy<br>(persons per vehicle) | 1.60          | 1.15               | 1.60                 |

<sup>3</sup> Assumptions:

|                                                    | <u>Retail</u> | <u>Residential</u> | <u>Grocery Store</u> |
|----------------------------------------------------|---------------|--------------------|----------------------|
| Non-auto mode split:                               | 65%           | 50%                | 65%                  |
| Average vehicle occupancy<br>(persons per vehicle) | 1.60          | 1.3                | 1.60                 |

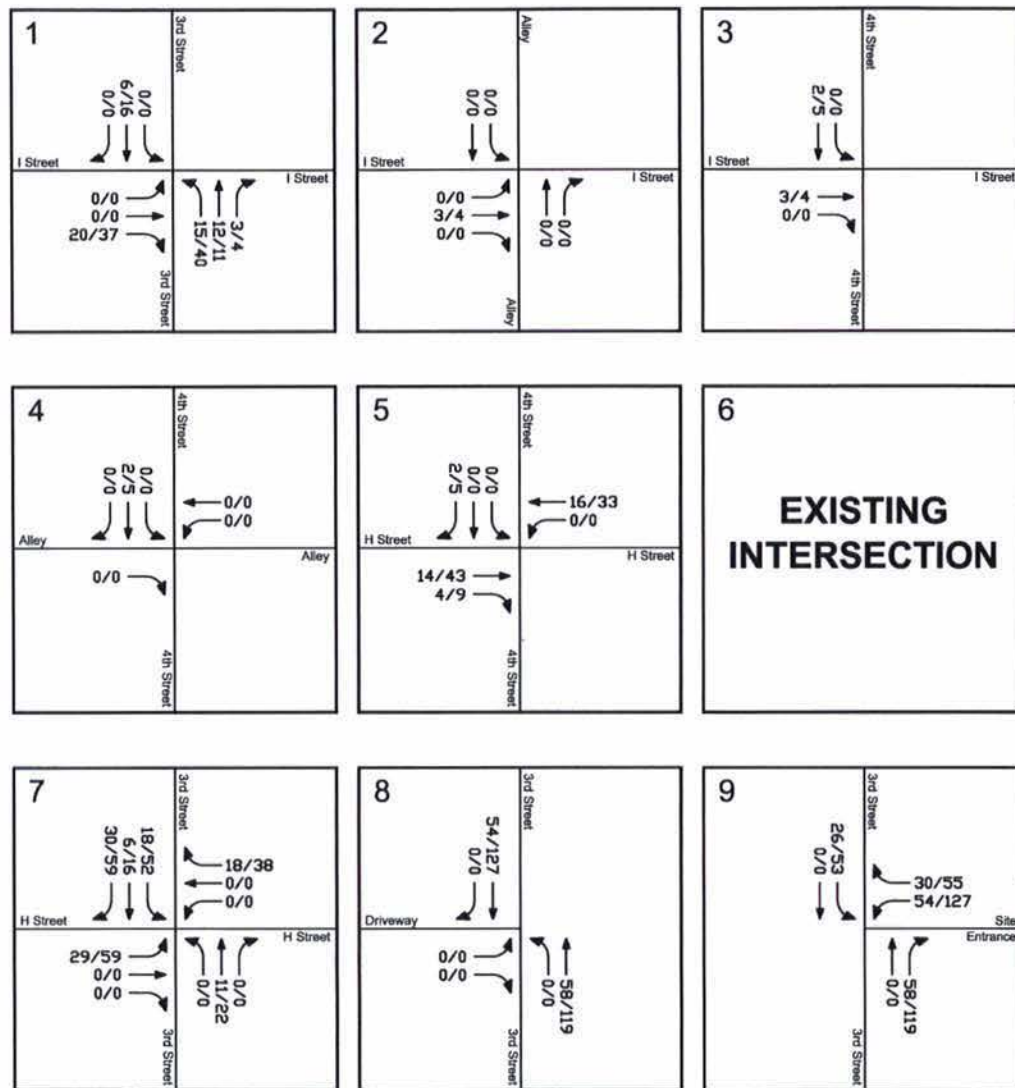


Figure 3-3  
Site-Generated Traffic Assignments

ALL TRAFFIC  
000/000



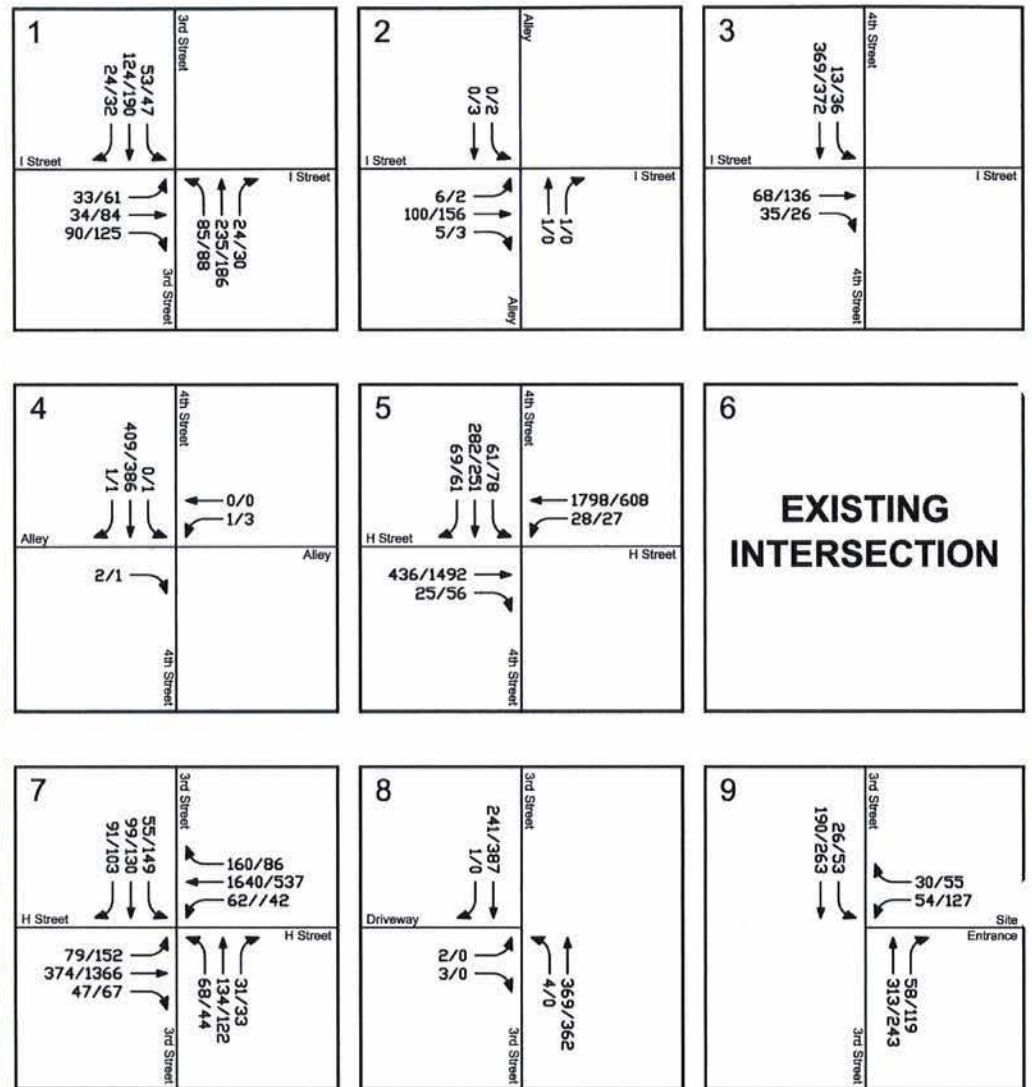
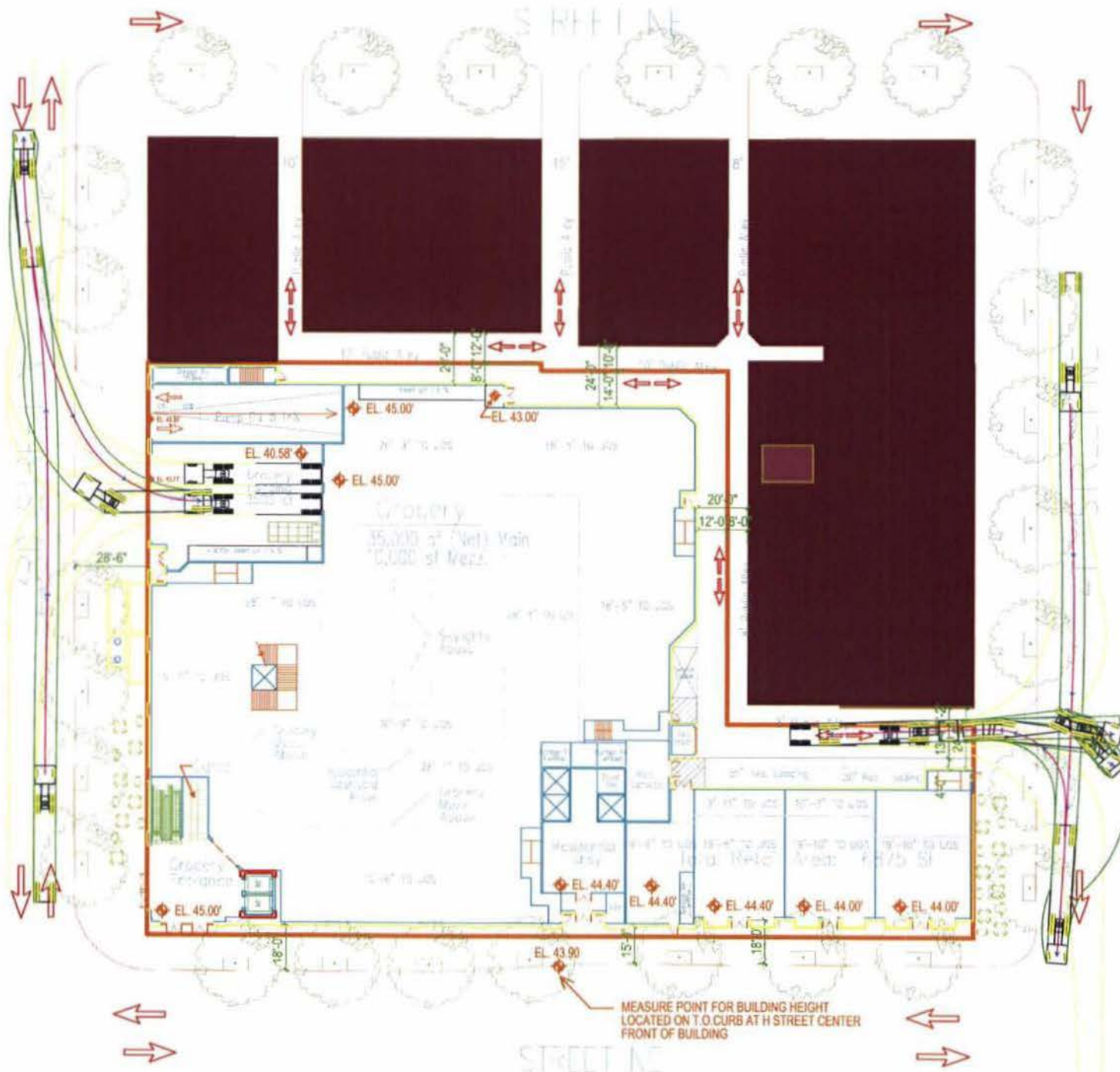


Figure 3-4  
2008 Total Future Peak Hour Traffic Forecasts

AM PEAK HOUR  
PM PEAK HOUR  
000/000





## **Section 4**

### **CONCLUSIONS**

The conclusions of this traffic impact study are as follows:

1. All of the key intersections currently operate at an overall acceptable level of service (LOS) "D" or better during both the AM and the PM peak hours.
2. The approved but unbuilt projects in the study area will generate a total of 773 AM peak hour trips and 812 PM peak hour trips.
3. These additional trips can be adequately accommodated at all the key intersections in the study area.
4. The proposed development of Square 776 will generate 166 additional AM peak hour trips and 342 additional PM peak hour trips.
5. These additional site-generated trips can be adequately accommodated at the key intersections in the study area with a slight traffic signal timing modification at the intersection of 3<sup>rd</sup> Street and H Street. The garage entrance off 3<sup>rd</sup> Street is anticipated to operate at a LOS "B" and "C" during the AM and PM peak hours, respectively.
6. The proposed on-site parking supply would exceed the minimum zoning parking requirements. The loading/delivery/service facilities provided for this development would adequately meet the project and D.C. minimum zoning requirements.

## Appendix A

### Existing Vehicular and Pedestrian Traffic Counts

# Wells & Associates, LLC

McLean, Virginia

## Existing Traffic Count

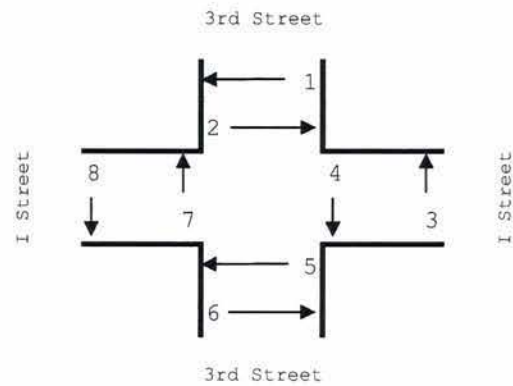
| PROJECT: Square 776                   |                       |        |        | DATE: 11/16/2005 |                    |        |        | SOUTHBOUND ROAD: 3rd Street |                       |        |        | 3rd Street |                    |         |         |       |               |             |       |      |                   |
|---------------------------------------|-----------------------|--------|--------|------------------|--------------------|--------|--------|-----------------------------|-----------------------|--------|--------|------------|--------------------|---------|---------|-------|---------------|-------------|-------|------|-------------------|
| W & A JOB NO.: 3013                   |                       |        |        | DAY: Wednesday   |                    |        |        | NORTHBOUND ROAD: 3rd Street |                       |        |        | 3rd Street |                    |         |         |       |               |             |       |      |                   |
| INTERSECTION: 3rd Street and I Street |                       |        |        | WEATHER: Clear   |                    |        |        | WESTBOUND ROAD: I Street    |                       |        |        | I Street   |                    |         |         |       |               |             |       |      |                   |
| LOCATION: Washington, DC              |                       |        |        | COUNTED BY: Matt |                    |        |        | EASTBOUND ROAD: I Street    |                       |        |        | I Street   |                    |         |         |       |               |             |       |      |                   |
|                                       |                       |        |        | INPUTED BY: CP   |                    |        |        |                             |                       |        |        |            |                    |         |         |       |               |             |       |      |                   |
| Time Period                           | Turning Movements     |        |        |                  |                    |        |        |                             |                       |        |        |            |                    |         |         |       |               |             | Total | PHF  | Time Period       |
|                                       | Southbound 3rd Street |        |        |                  | Westbound I Street |        |        |                             | Northbound 3rd Street |        |        |            | Eastbound I Street |         |         |       | North & South | East & West |       |      |                   |
|                                       | 1 Right               | 2 Thru | 3 Left | Total            | 4 Right            | 5 Thru | 6 Left | Total                       | 7 Right               | 8 Thru | 9 Left | Total      | 10 Right           | 11 Thru | 12 Left | Total |               |             |       |      |                   |
| AM                                    |                       |        |        |                  |                    |        |        |                             |                       |        |        |            |                    |         |         |       |               |             |       |      |                   |
| 6:00-6:15                             | 0                     | 13     | 0      | 13               | 0                  | 0      | 0      | 0                           | 1                     | 9      | 0      | 10         | 0                  | 0       | 0       | 0     | 23            | 0           | 23    |      | 6:00-6:15         |
| 6:15-6:30                             | 0                     | 12     | 2      | 14               | 0                  | 0      | 0      | 0                           | 3                     | 13     | 1      | 17         | 1                  | 0       | 1       | 2     | 31            | 2           | 33    |      | 6:15-6:30         |
| 6:30-6:45                             | 2                     | 5      | 0      | 7                | 0                  | 0      | 0      | 0                           | 3                     | 16     | 2      | 21         | 1                  | 1       | 0       | 2     | 28            | 2           | 30    |      | 6:30-6:45         |
| 6:45-7:00                             | 1                     | 12     | 1      | 14               | 0                  | 0      | 0      | 0                           | 2                     | 29     | 3      | 34         | 2                  | 2       | 2       | 6     | 48            | 6           | 54    |      | 6:45-7:00         |
| 7:00-7:15                             | 1                     | 13     | 0      | 14               | 0                  | 0      | 0      | 0                           | 2                     | 20     | 2      | 24         | 2                  | 3       | 1       | 6     | 38            | 6           | 44    |      | 7:00-7:15         |
| 7:15-7:30                             | 2                     | 17     | 1      | 20               | 0                  | 0      | 0      | 0                           | 2                     | 36     | 6      | 44         | 1                  | 5       | 0       | 6     | 64            | 6           | 70    |      | 7:15-7:30         |
| 7:30-7:45                             | 1                     | 23     | 1      | 25               | 0                  | 0      | 0      | 0                           | 3                     | 35     | 7      | 45         | 3                  | 4       | 4       | 11    | 70            | 11          | 81    |      | 7:30-7:45         |
| 7:45-8:00                             | 5                     | 27     | 1      | 33               | 0                  | 0      | 0      | 0                           | 4                     | 43     | 6      | 53         | 6                  | 1       | 2       | 9     | 86            | 9           | 95    |      | 7:45-8:00         |
| 8:00-8:15                             | 11                    | 30     | 0      | 41               | 0                  | 0      | 0      | 0                           | 0                     | 52     | 14     | 66         | 5                  | 4       | 1       | 10    | 107           | 10          | 117   |      | 8:00-8:15         |
| 8:15-8:30                             | 3                     | 22     | 3      | 28               | 0                  | 0      | 0      | 0                           | 4                     | 57     | 18     | 79         | 7                  | 5       | 3       | 15    | 107           | 15          | 122   |      | 8:15-8:30         |
| 8:30-8:45                             | 3                     | 25     | 2      | 30               | 0                  | 0      | 0      | 0                           | 5                     | 64     | 13     | 82         | 9                  | 6       | 3       | 18    | 112           | 18          | 130   |      | 8:30-8:45         |
| 8:45-9:00                             | 3                     | 36     | 6      | 45               | 0                  | 0      | 0      | 0                           | 4                     | 38     | 9      | 51         | 5                  | 4       | 1       | 10    | 96            | 10          | 106   |      | 8:45-9:00         |
| 3 Hour Totals                         | 32                    | 235    | 17     | 284              | 0                  | 0      | 0      | 0                           | 33                    | 412    | 81     | 526        | 42                 | 35      | 18      | 95    | 810           | 95          | 905   |      |                   |
| 1 Hour Totals                         |                       |        |        |                  |                    |        |        |                             |                       |        |        |            |                    |         |         |       |               |             |       |      |                   |
| 6:00-7:00                             | 3                     | 42     | 3      | 48               | 0                  | 0      | 0      | 0                           | 9                     | 67     | 6      | 82         | 4                  | 3       | 3       | 10    | 130           | 10          | 140   | 0.65 | 6:00-7:00         |
| 6:15-7:15                             | 4                     | 42     | 3      | 49               | 0                  | 0      | 0      | 0                           | 10                    | 78     | 8      | 96         | 6                  | 6       | 4       | 16    | 145           | 16          | 161   | 0.75 | 6:15-7:15         |
| 6:30-7:30                             | 6                     | 47     | 2      | 55               | 0                  | 0      | 0      | 0                           | 9                     | 101    | 13     | 123        | 6                  | 11      | 3       | 20    | 178           | 20          | 198   | 0.71 | 6:30-7:30         |
| 6:45-7:45                             | 5                     | 65     | 3      | 73               | 0                  | 0      | 0      | 0                           | 9                     | 120    | 18     | 147        | 8                  | 14      | 7       | 29    | 220           | 29          | 249   | 0.77 | 6:45-7:45         |
| 7:00-8:00                             | 9                     | 80     | 3      | 92               | 0                  | 0      | 0      | 0                           | 11                    | 134    | 21     | 166        | 12                 | 13      | 7       | 32    | 258           | 32          | 290   | 0.76 | 7:00-8:00         |
| 7:15-8:15                             | 19                    | 97     | 3      | 119              | 0                  | 0      | 0      | 0                           | 9                     | 166    | 33     | 208        | 15                 | 14      | 7       | 36    | 327           | 36          | 363   | 0.78 | 7:15-8:15         |
| 7:30-8:30                             | 20                    | 102    | 5      | 127              | 0                  | 0      | 0      | 0                           | 11                    | 187    | 45     | 243        | 21                 | 14      | 10      | 45    | 370           | 45          | 415   | 0.85 | 7:30-8:30         |
| 7:45-8:45                             | 22                    | 104    | 6      | 132              | 0                  | 0      | 0      | 0                           | 13                    | 216    | 51     | 280        | 27                 | 16      | 9       | 52    | 412           | 52          | 464   | 0.89 | 7:45-8:45         |
| 8:00-9:00                             | 20                    | 113    | 11     | 144              | 0                  | 0      | 0      | 0                           | 13                    | 211    | 54     | 278        | 26                 | 19      | 8       | 53    | 422           | 53          | 475   | 0.91 | 8:00-9:00         |
| AM Peak 8:00-9:00                     | 20                    | 113    | 11     | 144              | 0                  | 0      | 0      | 0                           | 13                    | 211    | 54     | 278        | 26                 | 19      | 8       | 53    | 422           | 53          | 475   | 0.91 | AM Peak 8:00-9:00 |
| PM                                    |                       |        |        |                  |                    |        |        |                             |                       |        |        |            |                    |         |         |       |               |             |       |      |                   |
| 4:00-4:15                             | 2                     | 37     | 5      | 44               | 0                  | 0      | 0      | 0                           | 7                     | 44     | 7      | 58         | 7                  | 8       | 2       | 17    | 102           | 17          | 119   |      | 4:00-4:15         |
| 4:15-4:30                             | 2                     | 33     | 2      | 37               | 0                  | 0      | 0      | 0                           | 2                     | 32     | 0      | 34         | 12                 | 6       | 1       | 19    | 71            | 19          | 90    |      | 4:15-4:30         |
| 4:30-4:45                             | 5                     | 34     | 6      | 45               | 0                  | 0      | 0      | 0                           | 5                     | 42     | 5      | 52         | 12                 | 5       | 2       | 19    | 97            | 19          | 116   |      | 4:30-4:45         |
| 4:45-5:00                             | 2                     | 52     | 2      | 56               | 0                  | 0      | 0      | 0                           | 3                     | 30     | 1      | 34         | 12                 | 12      | 0       | 24    | 90            | 24          | 114   |      | 4:45-5:00         |
| 5:00-5:15                             | 4                     | 41     | 8      | 53               | 0                  | 0      | 0      | 0                           | 4                     | 51     | 7      | 62         | 17                 | 12      | 8       | 37    | 115           | 37          | 152   |      | 5:00-5:15         |
| 5:15-5:30                             | 3                     | 31     | 5      | 39               | 0                  | 0      | 0      | 0                           | 8                     | 45     | 6      | 59         | 18                 | 14      | 4       | 36    | 98            | 36          | 134   |      | 5:15-5:30         |
| 5:30-5:45                             | 6                     | 37     | 8      | 51               | 0                  | 0      | 0      | 0                           | 3                     | 41     | 3      | 47         | 8                  | 19      | 3       | 30    | 98            | 30          | 128   |      | 5:30-5:45         |
| 5:45-6:00                             | 3                     | 31     | 4      | 38               | 0                  | 0      | 0      | 0                           | 2                     | 34     | 2      | 38         | 13                 | 11      | 2       | 26    | 76            | 26          | 102   |      | 5:45-6:00         |
| 6:00-6:15                             | 4                     | 20     | 7      | 31               | 0                  | 0      | 0      | 0                           | 3                     | 35     | 4      | 42         | 9                  | 17      | 8       | 34    | 73            | 34          | 107   |      | 6:00-6:15         |
| 6:15-6:30                             | 2                     | 15     | 1      | 18               | 0                  | 0      | 0      | 0                           | 5                     | 31     | 2      | 38         | 3                  | 6       | 0       | 9     | 56            | 9           | 65    |      | 6:15-6:30         |
| 6:30-6:45                             | 2                     | 15     | 4      | 21               | 0                  | 0      | 0      | 0                           | 2                     | 21     | 0      | 23         | 3                  | 10      | 0       | 13    | 44            | 13          | 57    |      | 6:30-6:45         |
| 6:45-7:00                             | 3                     | 9      | 2      | 14               | 0                  | 0      | 0      | 0                           | 3                     | 34     | 0      | 37         | 4                  | 6       | 2       | 12    | 51            | 12          | 63    |      | 6:45-7:00         |
| 3 Hour Totals                         | 38                    | 355    | 54     | 447              | 0                  | 0      | 0      | 0                           | 47                    | 440    | 37     | 524        | 118                | 126     | 32      | 276   | 971           | 276         | 1,247 |      |                   |
| 1 Hour Totals                         |                       |        |        |                  |                    |        |        |                             |                       |        |        |            |                    |         |         |       |               |             |       |      |                   |
| 4:00-5:00                             | 11                    | 156    | 15     | 182              | 0                  | 0      | 0      | 0                           | 17                    | 148    | 13     | 178        | 43                 | 31      | 5       | 79    | 360           | 79          | 439   | 0.92 | 4:00-5:00         |
| 4:15-5:15                             | 13                    | 160    | 18     | 191              | 0                  | 0      | 0      | 0                           | 14                    | 155    | 13     | 182        | 53                 | 35      | 11      | 99    | 373           | 99          | 472   | 0.78 | 4:15-5:15         |
| 4:30-5:30                             | 14                    | 158    | 21     | 193              | 0                  | 0      | 0      | 0                           | 20                    | 168    | 19     | 207        | 59                 | 43      | 14      | 116   | 400           | 116         | 516   | 0.85 | 4:30-5:30         |
| 4:45-5:45                             | 15                    | 161    | 23     | 199              | 0                  | 0      | 0      | 0                           | 18                    | 167    | 17     | 202        | 55                 | 57      | 15      | 127   | 401           | 127         | 528   | 0.87 | 4:45-5:45         |
| 5:00-6:00                             | 16                    | 140    | 25     | 181              | 0                  | 0      | 0      | 0                           | 17                    | 171    | 18     | 206        | 56                 | 56      | 17      | 129   | 387           | 129         | 516   | 0.85 | 5:00-6:00         |
| 5:15-6:15                             | 16                    | 119    | 24     | 159              | 0                  | 0      | 0      | 0                           | 16                    | 155    | 15     | 186        | 48                 | 61      | 17      | 126   | 345           | 126         | 471   | 0.88 | 5:15-6:15         |
| 5:30-6:30                             | 15                    | 103    | 20     | 138              | 0                  | 0      | 0      | 0                           | 13                    | 141    | 11     | 165        | 33                 | 53      | 13      | 99    | 303           | 99          | 402   | 0.79 | 5:30-6:30         |
| 5:45-6:45                             | 11                    | 81     | 16     | 108              | 0                  | 0      | 0      | 0                           | 12                    | 121    | 8      | 141        | 28                 | 44      | 10      | 82    | 249           | 82          | 331   | 0.77 | 5:45-6:45         |
| 6:00-7:00                             | 11                    | 59     | 14     | 84               | 0                  | 0      | 0      | 0                           | 13                    | 121    | 6      | 140        | 19                 | 39      | 10      | 68    | 224           | 68          | 292   | 0.68 | 6:00-7:00         |
| PM Peak 4:45-5:45                     | 15                    | 161    | 23     | 199              | 0                  | 0      | 0      | 0                           | 18                    | 167    | 17     | 202        | 55                 | 57      | 15      | 127   | 401           | 127         | 528   | 0.87 | PM Peak 4:45-5:45 |

Wells & Associates, LLC  
McLean, Virginia

# Pedestrian Volume Survey



Project Name: Square 776  
Project Number: 3013  
Location: Washington DC  
Intersection: 3rd Street and I Street  
Weather: Clear  
Date: 11/16/2005  
Surveyor: Daryl  
Hours: Mileage:



| TIME      | Movement |   |   |   |   |   |   |   |
|-----------|----------|---|---|---|---|---|---|---|
|           | 1        | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| AM        |          |   |   |   |   |   |   |   |
| 6:00-6:15 | 0        | 0 | 0 | 0 | 0 | 2 | 0 | 1 |
| 6:15-6:30 | 0        | 0 | 0 | 5 | 0 | 0 | 0 | 0 |
| 6:30-6:45 | 1        | 0 | 2 | 0 | 0 | 0 | 0 | 2 |
| 6:45-7:00 | 1        | 5 | 0 | 1 | 0 | 0 | 0 | 1 |
| 7:00-7:15 | 1        | 1 | 1 | 3 | 0 | 0 | 0 | 0 |
| 7:15-7:30 | 0        | 1 | 2 | 0 | 0 | 0 | 0 | 1 |
| 7:30-7:45 | 1        | 1 | 3 | 3 | 0 | 0 | 2 | 0 |
| 7:45-8:00 | 2        | 1 | 3 | 1 | 1 | 1 | 0 | 0 |
| 8:00-8:15 | 0        | 2 | 4 | 5 | 0 | 0 | 0 | 0 |
| 8:15-8:30 | 1        | 1 | 0 | 0 | 0 | 0 | 0 | 1 |
| 8:30-8:45 | 1        | 0 | 5 | 0 | 1 | 1 | 1 | 1 |
| 8:45-9:00 | 3        | 3 | 8 | 1 | 2 | 5 | 0 | 4 |
| PM        |          |   |   |   |   |   |   |   |
| 4:00-4:15 | 0        | 3 | 6 | 0 | 1 | 1 | 0 | 0 |
| 4:15-4:30 | 2        | 1 | 1 | 3 | 0 | 0 | 0 | 1 |
| 4:30-4:45 | 2        | 2 | 2 | 1 | 0 | 1 | 0 | 1 |
| 4:45-5:00 | 5        | 1 | 0 | 1 | 0 | 0 | 0 | 0 |
| 5:00-5:15 | 1        | 2 | 1 | 2 | 1 | 4 | 0 | 4 |
| 5:15-5:30 | 2        | 5 | 2 | 4 | 0 | 0 | 0 | 0 |
| 5:30-5:45 | 3        | 1 | 5 | 5 | 0 | 1 | 0 | 3 |
| 5:45-6:00 | 2        | 2 | 1 | 6 | 0 | 0 | 1 | 2 |
| 6:00-6:15 | 4        | 1 | 3 | 5 | 0 | 0 | 0 | 0 |
| 6:15-6:30 | 1        | 2 | 1 | 3 | 1 | 2 | 1 | 1 |
| 6:30-6:45 | 2        | 1 | 2 | 2 | 0 | 1 | 0 | 2 |
| 6:45-7:00 | 3        | 1 | 1 | 3 | 1 | 1 | 0 | 1 |

# Wells & Associates, LLC

McLean, Virginia

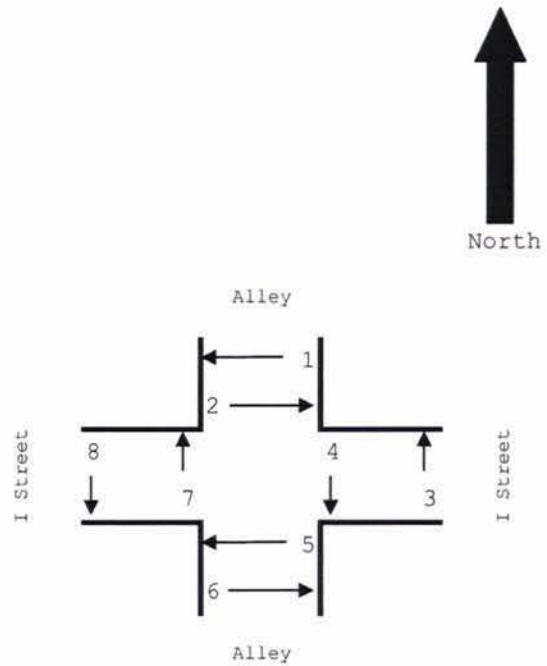
## Existing Traffic Count

| PROJECT: Square 776              |                   |        |        | DATE: 11/16/2005    |                    |        |        | SOUTHBOUND ROAD: Alley   |                  |        |        |       |                    |         |         |       |       |     |             |               |             |                   |
|----------------------------------|-------------------|--------|--------|---------------------|--------------------|--------|--------|--------------------------|------------------|--------|--------|-------|--------------------|---------|---------|-------|-------|-----|-------------|---------------|-------------|-------------------|
| W & A JOB NO.: 3013              |                   |        |        | DAY: Wednesday      |                    |        |        | NORTHBOUND ROAD: Alley   |                  |        |        |       |                    |         |         |       |       |     |             |               |             |                   |
| INTERSECTION: I Street and Alley |                   |        |        | WEATHER: Clear      |                    |        |        | WESTBOUND ROAD: I Street |                  |        |        |       |                    |         |         |       |       |     |             |               |             |                   |
| LOCATION: Washington, DC         |                   |        |        | COUNTED BY: Roberto |                    |        |        | EASTBOUND ROAD: I Street |                  |        |        |       |                    |         |         |       |       |     |             |               |             |                   |
|                                  |                   |        |        | INPUTED BY: CP      |                    |        |        |                          |                  |        |        |       |                    |         |         |       |       |     |             |               |             |                   |
| Time Period                      | Turning Movements |        |        |                     |                    |        |        |                          |                  |        |        |       |                    |         |         |       | Total | PHF | Time Period |               |             |                   |
|                                  | Southbound Alley  |        |        |                     | Westbound I Street |        |        |                          | Northbound Alley |        |        |       | Eastbound I Street |         |         |       |       |     |             | North & South | East & West |                   |
|                                  | 1 Right           | 2 Thru | 3 Left | Total               | 4 Right            | 5 Thru | 6 Left | Total                    | 7 Right          | 8 Thru | 9 Left | Total | 10 Right           | 11 Thru | 12 Left | Total |       |     |             |               |             |                   |
| AM                               |                   |        |        |                     |                    |        |        |                          |                  |        |        |       |                    |         |         |       |       |     |             |               |             |                   |
| 6:00-6:15                        | 0                 | 1      | 0      | 1                   | 0                  | 0      | 0      | 0                        | 0                | 0      | 0      | 0     | 0                  | 2       | 0       | 2     | 1     | 2   | 3           |               | 6:00-6:15   |                   |
| 6:15-6:30                        | 0                 | 0      | 0      | 0                   | 0                  | 0      | 0      | 0                        | 0                | 0      | 0      | 0     | 0                  | 5       | 0       | 5     | 0     | 5   | 5           |               | 6:15-6:30   |                   |
| 6:30-6:45                        | 0                 | 0      | 0      | 0                   | 0                  | 0      | 0      | 0                        | 0                | 0      | 1      | 0     | 1                  | 5       | 0       | 5     | 1     | 5   | 6           |               | 6:30-6:45   |                   |
| 6:45-7:00                        | 0                 | 0      | 0      | 0                   | 0                  | 0      | 0      | 0                        | 0                | 0      | 0      | 0     | 0                  | 5       | 0       | 5     | 0     | 5   | 5           |               | 6:45-7:00   |                   |
| 7:00-7:15                        | 0                 | 1      | 0      | 1                   | 0                  | 0      | 0      | 0                        | 0                | 0      | 0      | 0     | 0                  | 4       | 0       | 4     | 1     | 4   | 5           |               | 7:00-7:15   |                   |
| 7:15-7:30                        | 0                 | 0      | 0      | 0                   | 0                  | 0      | 0      | 0                        | 0                | 0      | 0      | 0     | 0                  | 6       | 1       | 7     | 0     | 7   | 7           |               | 7:15-7:30   |                   |
| 7:30-7:45                        | 0                 | 2      | 1      | 3                   | 0                  | 0      | 0      | 0                        | 0                | 0      | 0      | 0     | 0                  | 7       | 0       | 7     | 3     | 7   | 10          |               | 7:30-7:45   |                   |
| 7:45-8:00                        | 0                 | 0      | 0      | 0                   | 0                  | 0      | 0      | 0                        | 0                | 0      | 1      | 0     | 1                  | 4       | 1       | 5     | 1     | 5   | 6           |               | 7:45-8:00   |                   |
| 8:00-8:15                        | 0                 | 0      | 0      | 0                   | 0                  | 0      | 0      | 0                        | 0                | 0      | 0      | 0     | 0                  | 7       | 0       | 7     | 0     | 7   | 7           |               | 8:00-8:15   |                   |
| 8:15-8:30                        | 0                 | 0      | 0      | 0                   | 0                  | 0      | 0      | 0                        | 0                | 0      | 1      | 0     | 1                  | 14      | 2       | 16    | 1     | 16  | 17          |               | 8:15-8:30   |                   |
| 8:30-8:45                        | 0                 | 0      | 0      | 0                   | 0                  | 0      | 0      | 0                        | 0                | 1      | 0      | 0     | 1                  | 12      | 3       | 15    | 1     | 15  | 16          |               | 8:30-8:45   |                   |
| 8:45-9:00                        | 0                 | 0      | 0      | 0                   | 0                  | 0      | 0      | 0                        | 0                | 0      | 0      | 0     | 0                  | 12      | 1       | 13    | 0     | 13  | 13          |               | 8:45-9:00   |                   |
| 3 Hour Totals                    | 0                 | 4      | 1      | 5                   | 0                  | 0      | 0      | 0                        | 0                | 1      | 3      | 0     | 4                  | 0       | 83      | 8     | 91    | 9   | 91          | 100           |             |                   |
| 1 Hour Totals                    |                   |        |        |                     |                    |        |        |                          |                  |        |        |       |                    |         |         |       |       |     |             |               |             |                   |
| 6:00-7:00                        | 0                 | 1      | 0      | 1                   | 0                  | 0      | 0      | 0                        | 0                | 0      | 1      | 0     | 1                  | 0       | 17      | 0     | 17    | 2   | 17          | 19            | 0.79        | 6:00-7:00         |
| 6:15-7:15                        | 0                 | 1      | 0      | 1                   | 0                  | 0      | 0      | 0                        | 0                | 0      | 1      | 0     | 1                  | 0       | 19      | 0     | 19    | 2   | 19          | 21            | 0.88        | 6:15-7:15         |
| 6:30-7:30                        | 0                 | 1      | 0      | 1                   | 0                  | 0      | 0      | 0                        | 0                | 0      | 1      | 0     | 1                  | 0       | 20      | 1     | 21    | 2   | 21          | 23            | 0.82        | 6:30-7:30         |
| 6:45-7:45                        | 0                 | 3      | 1      | 4                   | 0                  | 0      | 0      | 0                        | 0                | 0      | 0      | 0     | 0                  | 22      | 1       | 23    | 4     | 23  | 27          | 0.68          | 6:45-7:45   |                   |
| 7:00-8:00                        | 0                 | 3      | 1      | 4                   | 0                  | 0      | 0      | 0                        | 0                | 0      | 1      | 0     | 1                  | 0       | 21      | 2     | 23    | 5   | 23          | 28            | 0.70        | 7:00-8:00         |
| 7:15-8:15                        | 0                 | 2      | 1      | 3                   | 0                  | 0      | 0      | 0                        | 0                | 0      | 1      | 0     | 1                  | 0       | 24      | 2     | 26    | 4   | 26          | 30            | 0.75        | 7:15-8:15         |
| 7:30-8:30                        | 0                 | 2      | 1      | 3                   | 0                  | 0      | 0      | 0                        | 0                | 0      | 2      | 0     | 2                  | 0       | 32      | 3     | 35    | 5   | 35          | 40            | 0.59        | 7:30-8:30         |
| 7:45-8:45                        | 0                 | 0      | 0      | 0                   | 0                  | 0      | 0      | 0                        | 0                | 1      | 2      | 0     | 3                  | 0       | 37      | 6     | 43    | 3   | 43          | 46            | 0.68        | 7:45-8:45         |
| 8:00-9:00                        | 0                 | 0      | 0      | 0                   | 0                  | 0      | 0      | 0                        | 0                | 1      | 1      | 0     | 2                  | 0       | 45      | 6     | 51    | 2   | 51          | 53            | 0.78        | 8:00-9:00         |
| AM Peak 8:00-9:00                | 0                 | 0      | 0      | 0                   | 0                  | 0      | 0      | 0                        | 0                | 1      | 1      | 0     | 2                  | 0       | 45      | 6     | 51    | 2   | 51          | 53            | 0.78        | AM Peak 8:00-9:00 |
| PM                               |                   |        |        |                     |                    |        |        |                          |                  |        |        |       |                    |         |         |       |       |     |             |               |             |                   |
| 4:00-4:15                        | 0                 | 0      | 0      | 0                   | 0                  | 0      | 0      | 0                        | 0                | 0      | 0      | 0     | 0                  | 0       | 19      | 0     | 19    | 0   | 19          | 19            |             | 4:00-4:15         |
| 4:15-4:30                        | 0                 | 0      | 0      | 0                   | 0                  | 0      | 0      | 0                        | 0                | 1      | 0      | 0     | 1                  | 1       | 14      | 0     | 15    | 1   | 15          | 16            |             | 4:15-4:30         |
| 4:30-4:45                        | 0                 | 0      | 0      | 0                   | 0                  | 0      | 0      | 0                        | 0                | 1      | 0      | 0     | 1                  | 1       | 23      | 0     | 24    | 1   | 24          | 25            |             | 4:30-4:45         |
| 4:45-5:00                        | 0                 | 0      | 0      | 0                   | 0                  | 0      | 0      | 0                        | 0                | 0      | 0      | 0     | 0                  | 0       | 15      | 0     | 15    | 0   | 15          | 15            |             | 4:45-5:00         |
| 5:00-5:15                        | 0                 | 0      | 0      | 0                   | 0                  | 0      | 0      | 0                        | 0                | 0      | 0      | 0     | 0                  | 1       | 22      | 1     | 24    | 0   | 24          | 24            |             | 5:00-5:15         |
| 5:15-5:30                        | 0                 | 3      | 0      | 3                   | 0                  | 0      | 0      | 0                        | 0                | 0      | 0      | 0     | 0                  | 0       | 29      | 0     | 29    | 3   | 29          | 32            |             | 5:15-5:30         |
| 5:30-5:45                        | 0                 | 0      | 1      | 1                   | 0                  | 0      | 0      | 0                        | 0                | 0      | 0      | 0     | 0                  | 0       | 34      | 0     | 34    | 1   | 34          | 35            |             | 5:30-5:45         |
| 5:45-6:00                        | 1                 | 0      | 1      | 2                   | 0                  | 0      | 0      | 0                        | 0                | 0      | 0      | 0     | 0                  | 1       | 21      | 1     | 23    | 2   | 23          | 25            |             | 5:45-6:00         |
| 6:00-6:15                        | 0                 | 1      | 0      | 1                   | 0                  | 0      | 0      | 0                        | 0                | 0      | 0      | 0     | 0                  | 0       | 17      | 0     | 17    | 1   | 17          | 18            |             | 6:00-6:15         |
| 6:15-6:30                        | 0                 | 0      | 0      | 0                   | 0                  | 0      | 0      | 0                        | 0                | 0      | 0      | 0     | 0                  | 0       | 11      | 1     | 12    | 0   | 12          | 12            |             | 6:15-6:30         |
| 6:30-6:45                        | 0                 | 0      | 0      | 0                   | 0                  | 0      | 0      | 0                        | 0                | 0      | 0      | 0     | 0                  | 0       | 13      | 0     | 13    | 0   | 13          | 13            |             | 6:30-6:45         |
| 6:45-7:00                        | 0                 | 0      | 0      | 0                   | 0                  | 0      | 0      | 0                        | 0                | 0      | 0      | 0     | 0                  | 2       | 13      | 0     | 15    | 0   | 15          | 15            |             | 6:45-7:00         |
| 3 Hour Totals                    | 1                 | 4      | 2      | 7                   | 0                  | 0      | 0      | 0                        | 0                | 2      | 0      | 0     | 2                  | 6       | 231     | 3     | 240   | 9   | 240         | 249           |             |                   |
| 1 Hour Totals                    |                   |        |        |                     |                    |        |        |                          |                  |        |        |       |                    |         |         |       |       |     |             |               |             |                   |
| 4:00-5:00                        | 0                 | 0      | 0      | 0                   | 0                  | 0      | 0      | 0                        | 0                | 2      | 0      | 0     | 2                  | 2       | 71      | 0     | 73    | 2   | 73          | 75            | 0.75        | 4:00-5:00         |
| 4:15-5:15                        | 0                 | 0      | 0      | 0                   | 0                  | 0      | 0      | 0                        | 0                | 2      | 0      | 0     | 2                  | 3       | 74      | 1     | 78    | 2   | 78          | 80            | 0.80        | 4:15-5:15         |
| 4:30-5:30                        | 0                 | 3      | 0      | 3                   | 0                  | 0      | 0      | 0                        | 0                | 1      | 0      | 0     | 1                  | 2       | 89      | 1     | 92    | 4   | 92          | 96            | 0.75        | 4:30-5:30         |
| 4:45-5:45                        | 0                 | 3      | 1      | 4                   | 0                  | 0      | 0      | 0                        | 0                | 0      | 0      | 0     | 0                  | 1       | 100     | 1     | 102   | 4   | 102         | 106           | 0.76        | 4:45-5:45         |
| 5:00-6:00                        | 1                 | 3      | 2      | 6                   | 0                  | 0      | 0      | 0                        | 0                | 0      | 0      | 0     | 0                  | 2       | 106     | 2     | 110   | 6   | 110         | 116           | 0.83        | 5:00-6:00         |
| 5:15-6:15                        | 1                 | 4      | 2      | 7                   | 0                  | 0      | 0      | 0                        | 0                | 0      | 0      | 0     | 0                  | 1       | 101     | 1     | 103   | 7   | 103         | 110           | 0.79        | 5:15-6:15         |
| 5:30-6:30                        | 1                 | 1      | 2      | 4                   | 0                  | 0      | 0      | 0                        | 0                | 0      | 0      | 0     | 0                  | 1       | 83      | 2     | 86    | 4   | 86          | 90            | 0.64        | 5:30-6:30         |
| 5:45-6:45                        | 1                 | 1      | 1      | 3                   | 0                  | 0      | 0      | 0                        | 0                | 0      | 0      | 0     | 0                  | 1       | 62      | 2     | 65    | 3   | 65          | 68            | 0.68        | 5:45-6:45         |
| 6:00-7:00                        | 0                 | 1      | 0      | 1                   | 0                  | 0      | 0      | 0                        | 0                | 0      | 0      | 0     | 0                  | 2       | 54      | 1     | 57    | 1   | 57          | 58            | 0.81        | 6:00-7:00         |
| PM Peak 5:00-6:00                | 1                 | 3      | 2      | 6                   | 0                  | 0      | 0      | 0                        | 0                | 0      | 0      | 0     | 0                  | 2       | 106     | 2     | 110   | 6   | 110         | 116           | 0.83        | PM Peak 5:00-6:00 |

Wells & Associates, LLC  
McLean, Virginia

# Pedestrian Volume Survey

Project Name: Square 776  
Project Number: 3013  
Location: Washington DC  
Intersection: I Street and Alley  
Weather: Clear  
Date: 11/16/2005  
Surveyor: Daryl  
Hours: Mileage:



| TIME      | Movement |   |   |   |   |   |   |   |
|-----------|----------|---|---|---|---|---|---|---|
|           | 1        | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| AM        |          |   |   |   |   |   |   |   |
| 6:00-6:15 | 1        | 0 | 0 | 0 | 1 | 1 | 0 | 0 |
| 6:15-6:30 | 0        | 0 | 0 | 0 | 1 | 0 | 0 | 0 |
| 6:30-6:45 | 0        | 0 | 0 | 1 | 1 | 1 | 0 | 0 |
| 6:45-7:00 | 0        | 4 | 0 | 0 | 1 | 0 | 0 | 0 |
| 7:00-7:15 | 1        | 0 | 0 | 0 | 3 | 0 | 0 | 0 |
| 7:15-7:30 | 3        | 0 | 0 | 0 | 2 | 0 | 0 | 0 |
| 7:30-7:45 | 1        | 0 | 1 | 0 | 1 | 0 | 0 | 0 |
| 7:45-8:00 | 3        | 0 | 0 | 1 | 2 | 2 | 1 | 2 |
| 8:00-8:15 | 0        | 0 | 0 | 0 | 1 | 0 | 0 | 2 |
| 8:15-8:30 | 2        | 1 | 0 | 0 | 2 | 1 | 0 | 0 |
| 8:30-8:45 | 1        | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 8:45-9:00 | 1        | 0 | 1 | 0 | 5 | 2 | 0 | 1 |
| PM        |          |   |   |   |   |   |   |   |
| 4:00-4:15 | 1        | 2 | 0 | 1 | 0 | 0 | 0 | 0 |
| 4:15-4:30 | 0        | 0 | 1 | 0 | 0 | 0 | 0 | 0 |
| 4:30-4:45 | 1        | 0 | 0 | 0 | 0 | 1 | 0 | 0 |
| 4:45-5:00 | 0        | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 5:00-5:15 | 1        | 1 | 0 | 0 | 0 | 0 | 0 | 0 |
| 5:15-5:30 | 1        | 0 | 0 | 0 | 1 | 0 | 0 | 0 |
| 5:30-5:45 | 1        | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 5:45-6:00 | 1        | 0 | 0 | 0 | 1 | 0 | 0 | 0 |
| 6:00-6:15 | 0        | 0 | 0 | 0 | 0 | 0 | 0 | 2 |
| 6:15-6:30 | 0        | 1 | 0 | 0 | 0 | 0 | 0 | 0 |
| 6:30-6:45 | 1        | 2 | 0 | 0 | 0 | 0 | 0 | 0 |
| 6:45-7:00 | 0        | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

# Wells & Associates, LLC

McLean, Virginia

## Existing Traffic Count

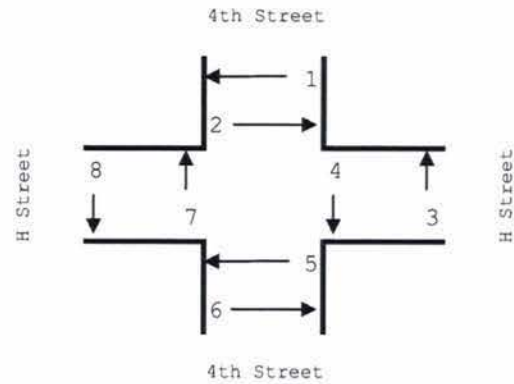
| PROJECT: Square 776                   |                       |        |        | DATE: 11/16/2005       |                    |        |        | SOUTHBOUND ROAD: 4th Street |                       |        |        |       |                    |         |         |       |               |             |       |                   |             |
|---------------------------------------|-----------------------|--------|--------|------------------------|--------------------|--------|--------|-----------------------------|-----------------------|--------|--------|-------|--------------------|---------|---------|-------|---------------|-------------|-------|-------------------|-------------|
| W & A JOB NO.: 3013                   |                       |        |        | DAY: Wednesday         |                    |        |        | NORTHBOUND ROAD: 4th Street |                       |        |        |       |                    |         |         |       |               |             |       |                   |             |
| INTERSECTION: 4th Street and H Street |                       |        |        | WEATHER: Clear         |                    |        |        | WESTBOUND ROAD: H Street    |                       |        |        |       |                    |         |         |       |               |             |       |                   |             |
| LOCATION: Washington, DC              |                       |        |        | COUNTED BY: AJ & Gerri |                    |        |        | EASTBOUND ROAD: H Street    |                       |        |        |       |                    |         |         |       |               |             |       |                   |             |
|                                       |                       |        |        | INPUTED BY: CP         |                    |        |        |                             |                       |        |        |       |                    |         |         |       |               |             |       |                   |             |
| Time Period                           | Turning Movements     |        |        |                        |                    |        |        |                             |                       |        |        |       |                    |         |         |       |               |             | Total | PHF               | Time Period |
|                                       | Southbound 4th Street |        |        |                        | Westbound H Street |        |        |                             | Northbound 4th Street |        |        |       | Eastbound H Street |         |         |       | North & South | East & West |       |                   |             |
|                                       | 1 Right               | 2 Thru | 3 Left | Total                  | 4 Right            | 5 Thru | 6 Left | Total                       | 7 Right               | 8 Thru | 9 Left | Total | 10 Right           | 11 Thru | 12 Left | Total |               |             |       |                   |             |
| <b>AM</b>                             |                       |        |        |                        |                    |        |        |                             |                       |        |        |       |                    |         |         |       |               |             |       |                   |             |
| 8:00-8:15                             | 10                    | 11     | 0      | 21                     | 0                  | 148    | 0      | 148                         | 0                     | 0      | 0      | 0     | 1                  | 36      | 0       | 37    | 21            | 185         | 206   | 6:00-6:15         |             |
| 8:15-8:30                             | 12                    | 18     | 1      | 31                     | 0                  | 216    | 12     | 228                         | 0                     | 0      | 0      | 0     | 2                  | 34      | 0       | 36    | 31            | 264         | 295   | 6:15-6:30         |             |
| 8:30-8:45                             | 9                     | 21     | 7      | 37                     | 0                  | 264    | 3      | 267                         | 0                     | 0      | 0      | 0     | 1                  | 49      | 0       | 50    | 37            | 317         | 354   | 6:30-6:45         |             |
| 8:45-7:00                             | 7                     | 28     | 3      | 38                     | 0                  | 311    | 3      | 314                         | 0                     | 0      | 0      | 0     | 0                  | 63      | 0       | 63    | 38            | 377         | 415   | 6:45-7:00         |             |
| 7:00-7:15                             | 11                    | 29     | 6      | 46                     | 0                  | 374    | 5      | 379                         | 0                     | 0      | 0      | 0     | 2                  | 76      | 0       | 78    | 46            | 457         | 503   | 7:00-7:15         |             |
| 7:15-7:30                             | 16                    | 32     | 5      | 53                     | 0                  | 426    | 5      | 431                         | 0                     | 0      | 0      | 0     | 6                  | 74      | 0       | 80    | 53            | 511         | 564   | 7:15-7:30         |             |
| 7:30-7:45                             | 11                    | 48     | 12     | 71                     | 0                  | 421    | 7      | 428                         | 0                     | 0      | 0      | 0     | 3                  | 54      | 0       | 57    | 71            | 485         | 556   | 7:30-7:45         |             |
| 7:45-8:00                             | 20                    | 59     | 8      | 87                     | 0                  | 410    | 7      | 417                         | 0                     | 0      | 0      | 0     | 5                  | 69      | 0       | 74    | 87            | 491         | 578   | 7:45-8:00         |             |
| 8:00-8:15                             | 14                    | 55     | 12     | 81                     | 0                  | 383    | 5      | 388                         | 0                     | 0      | 0      | 0     | 3                  | 109     | 0       | 112   | 81            | 500         | 581   | 8:00-8:15         |             |
| 8:15-8:30                             | 18                    | 58     | 16     | 92                     | 0                  | 394    | 8      | 402                         | 0                     | 0      | 0      | 0     | 5                  | 92      | 0       | 97    | 92            | 499         | 591   | 8:15-8:30         |             |
| 8:30-8:45                             | 24                    | 51     | 14     | 89                     | 0                  | 361    | 9      | 370                         | 0                     | 0      | 0      | 0     | 7                  | 72      | 0       | 79    | 89            | 449         | 538   | 8:30-8:45         |             |
| 8:45-9:00                             | 14                    | 62     | 11     | 87                     | 0                  | 358    | 10     | 368                         | 0                     | 0      | 0      | 0     | 5                  | 83      | 0       | 88    | 87            | 456         | 543   | 8:45-9:00         |             |
| 3 Hour Totals                         | 166                   | 472    | 95     | 733                    | 0                  | 4,066  | 74     | 4,140                       | 0                     | 0      | 0      | 0     | 40                 | 811     | 0       | 851   | 733           | 4,991       | 5,724 |                   |             |
| <b>1 Hour Totals</b>                  |                       |        |        |                        |                    |        |        |                             |                       |        |        |       |                    |         |         |       |               |             |       |                   |             |
| 6:00-7:00                             | 38                    | 78     | 11     | 127                    | 0                  | 939    | 18     | 957                         | 0                     | 0      | 0      | 0     | 4                  | 182     | 0       | 186   | 127           | 1,143       | 1,270 | 0.77 6:00-7:00    |             |
| 6:15-7:15                             | 39                    | 96     | 17     | 152                    | 0                  | 1,165  | 23     | 1,188                       | 0                     | 0      | 0      | 0     | 5                  | 222     | 0       | 227   | 152           | 1,415       | 1,567 | 0.78 6:15-7:15    |             |
| 6:30-7:30                             | 43                    | 110    | 21     | 174                    | 0                  | 1,375  | 16     | 1,391                       | 0                     | 0      | 0      | 0     | 9                  | 262     | 0       | 271   | 174           | 1,662       | 1,836 | 0.81 6:30-7:30    |             |
| 6:45-7:45                             | 45                    | 137    | 26     | 208                    | 0                  | 1,532  | 20     | 1,552                       | 0                     | 0      | 0      | 0     | 11                 | 267     | 0       | 278   | 208           | 1,830       | 2,038 | 0.90 6:45-7:45    |             |
| 7:00-8:00                             | 58                    | 168    | 31     | 257                    | 0                  | 1,631  | 24     | 1,655                       | 0                     | 0      | 0      | 0     | 16                 | 273     | 0       | 289   | 257           | 1,944       | 2,201 | 0.95 7:00-8:00    |             |
| 7:15-8:15                             | 61                    | 194    | 37     | 292                    | 0                  | 1,640  | 24     | 1,664                       | 0                     | 0      | 0      | 0     | 17                 | 306     | 0       | 323   | 292           | 1,987       | 2,279 | 0.98 7:15-8:15    |             |
| 7:30-8:30                             | 63                    | 220    | 48     | 331                    | 0                  | 1,608  | 27     | 1,635                       | 0                     | 0      | 0      | 0     | 16                 | 324     | 0       | 340   | 331           | 1,975       | 2,306 | 0.98 7:30-8:30    |             |
| 7:45-8:45                             | 76                    | 223    | 50     | 349                    | 0                  | 1,548  | 29     | 1,577                       | 0                     | 0      | 0      | 0     | 20                 | 342     | 0       | 362   | 349           | 1,939       | 2,288 | 0.97 7:45-8:45    |             |
| 8:00-9:00                             | 70                    | 226    | 53     | 349                    | 0                  | 1,496  | 32     | 1,528                       | 0                     | 0      | 0      | 0     | 20                 | 356     | 0       | 376   | 349           | 1,904       | 2,253 | 0.95 8:00-9:00    |             |
| <b>AM Peak 7:30-8:30</b>              |                       |        |        |                        |                    |        |        |                             |                       |        |        |       |                    |         |         |       |               |             |       |                   |             |
| 63                                    | 220                   | 48     | 331    | 0                      | 1,608              | 27     | 1,635  | 0                           | 0                     | 0      | 0      | 16    | 324                | 0       | 340     | 331   | 1,975         | 2,306       | 0.98  | AM Peak 7:30-8:30 |             |
| <b>PM</b>                             |                       |        |        |                        |                    |        |        |                             |                       |        |        |       |                    |         |         |       |               |             |       |                   |             |
| 4:00-4:15                             | 20                    | 54     | 15     | 89                     | 0                  | 112    | 10     | 122                         | 0                     | 0      | 0      | 0     | 13                 | 323     | 0       | 336   | 89            | 458         | 547   | 4:00-4:15         |             |
| 4:15-4:30                             | 0                     | 55     | 20     | 75                     | 0                  | 118    | 4      | 122                         | 0                     | 0      | 0      | 0     | 15                 | 284     | 0       | 299   | 75            | 421         | 496   | 4:15-4:30         |             |
| 4:30-4:45                             | 13                    | 34     | 14     | 61                     | 0                  | 104    | 3      | 107                         | 0                     | 0      | 0      | 0     | 10                 | 329     | 0       | 339   | 61            | 446         | 507   | 4:30-4:45         |             |
| 4:45-5:00                             | 11                    | 50     | 17     | 78                     | 0                  | 104    | 3      | 107                         | 0                     | 0      | 0      | 0     | 12                 | 289     | 0       | 301   | 78            | 408         | 486   | 4:45-5:00         |             |
| 5:00-5:15                             | 9                     | 51     | 15     | 75                     | 0                  | 137    | 10     | 147                         | 0                     | 0      | 0      | 0     | 11                 | 321     | 0       | 332   | 75            | 479         | 554   | 5:00-5:15         |             |
| 5:15-5:30                             | 11                    | 58     | 18     | 87                     | 0                  | 112    | 3      | 115                         | 0                     | 0      | 0      | 0     | 13                 | 346     | 0       | 359   | 87            | 474         | 561   | 5:15-5:30         |             |
| 5:30-5:45                             | 14                    | 61     | 23     | 98                     | 0                  | 113    | 7      | 120                         | 0                     | 0      | 0      | 0     | 12                 | 316     | 0       | 328   | 98            | 448         | 546   | 5:30-5:45         |             |
| 5:45-6:00                             | 10                    | 53     | 18     | 81                     | 0                  | 114    | 6      | 120                         | 0                     | 0      | 0      | 0     | 7                  | 322     | 0       | 329   | 81            | 449         | 530   | 5:45-6:00         |             |
| 6:00-6:15                             | 13                    | 62     | 15     | 90                     | 0                  | 95     | 7      | 102                         | 0                     | 0      | 0      | 0     | 15                 | 301     | 0       | 316   | 90            | 418         | 508   | 6:00-6:15         |             |
| 6:15-6:30                             | 3                     | 30     | 18     | 51                     | 0                  | 107    | 6      | 113                         | 0                     | 0      | 0      | 0     | 8                  | 251     | 0       | 259   | 51            | 372         | 423   | 6:15-6:30         |             |
| 6:30-6:45                             | 6                     | 44     | 15     | 65                     | 0                  | 98     | 5      | 103                         | 0                     | 0      | 0      | 0     | 14                 | 258     | 0       | 272   | 65            | 375         | 440   | 6:30-6:45         |             |
| 6:45-7:00                             | 34                    | 35     | 6      | 75                     | 0                  | 84     | 3      | 87                          | 0                     | 0      | 0      | 0     | 11                 | 236     | 0       | 247   | 75            | 334         | 409   | 6:45-7:00         |             |
| 3 Hour Totals                         | 144                   | 587    | 194    | 925                    | 0                  | 1,298  | 67     | 1,365                       | 0                     | 0      | 0      | 0     | 141                | 3,576   | 0       | 3,717 | 925           | 5,082       | 6,007 |                   |             |
| <b>1 Hour Totals</b>                  |                       |        |        |                        |                    |        |        |                             |                       |        |        |       |                    |         |         |       |               |             |       |                   |             |
| 4:00-5:00                             | 44                    | 193    | 66     | 303                    | 0                  | 438    | 20     | 458                         | 0                     | 0      | 0      | 0     | 50                 | 1,225   | 0       | 1,275 | 303           | 1,733       | 2,036 | 0.93 4:00-5:00    |             |
| 4:15-5:15                             | 33                    | 190    | 66     | 289                    | 0                  | 463    | 20     | 483                         | 0                     | 0      | 0      | 0     | 48                 | 1,223   | 0       | 1,271 | 289           | 1,754       | 2,043 | 0.92 4:15-5:15    |             |
| 4:30-5:30                             | 44                    | 193    | 64     | 301                    | 0                  | 457    | 19     | 476                         | 0                     | 0      | 0      | 0     | 46                 | 1,285   | 0       | 1,331 | 301           | 1,807       | 2,108 | 0.94 4:30-5:30    |             |
| 4:45-5:45                             | 45                    | 220    | 73     | 338                    | 0                  | 466    | 23     | 489                         | 0                     | 0      | 0      | 0     | 48                 | 1,272   | 0       | 1,320 | 338           | 1,809       | 2,147 | 0.96 4:45-5:45    |             |
| 5:00-6:00                             | 44                    | 223    | 74     | 341                    | 0                  | 476    | 26     | 502                         | 0                     | 0      | 0      | 0     | 43                 | 1,305   | 0       | 1,348 | 341           | 1,850       | 2,191 | 0.98 5:00-6:00    |             |
| 5:15-6:15                             | 48                    | 234    | 74     | 356                    | 0                  | 434    | 23     | 457                         | 0                     | 0      | 0      | 0     | 47                 | 1,285   | 0       | 1,332 | 356           | 1,789       | 2,145 | 0.96 5:15-6:15    |             |
| 5:30-6:30                             | 40                    | 206    | 74     | 320                    | 0                  | 429    | 26     | 455                         | 0                     | 0      | 0      | 0     | 42                 | 1,190   | 0       | 1,232 | 320           | 1,687       | 2,007 | 0.92 5:30-6:30    |             |
| 5:45-6:45                             | 32                    | 189    | 66     | 287                    | 0                  | 414    | 24     | 438                         | 0                     | 0      | 0      | 0     | 44                 | 1,132   | 0       | 1,176 | 287           | 1,614       | 1,901 | 0.90 5:45-6:45    |             |
| 6:00-7:00                             | 56                    | 171    | 54     | 281                    | 0                  | 384    | 21     | 405                         | 0                     | 0      | 0      | 0     | 48                 | 1,046   | 0       | 1,094 | 281           | 1,499       | 1,780 | 0.88 6:00-7:00    |             |
| <b>PM Peak 5:00-6:00</b>              |                       |        |        |                        |                    |        |        |                             |                       |        |        |       |                    |         |         |       |               |             |       |                   |             |
| 44                                    | 223                   | 74     | 341    | 0                      | 476                | 26     | 502    | 0                           | 0                     | 0      | 0      | 43    | 1,305              | 0       | 1,348   | 341   | 1,850         | 2,191       | 0.98  | PM Peak 5:00-6:00 |             |

Wells & Associates, LLC  
McLean, Virginia

# Pedestrian Volume Survey



Project Name: Square 776  
Project Number: 3013  
Location: Washington DC  
Intersection: 4th Street and H Street  
Weather: Clear  
Date: 11/16/2005  
Surveyor: Daryl  
Hours: Mileage:



| TIME      | Movement |    |   |   |   |   |   |   |
|-----------|----------|----|---|---|---|---|---|---|
|           | 1        | 2  | 3 | 4 | 5 | 6 | 7 | 8 |
| AM        |          |    |   |   |   |   |   |   |
| 6:00-6:15 | 1        | 0  | 0 | 0 | 1 | 0 | 0 | 0 |
| 6:15-6:30 | 1        | 0  | 0 | 1 | 1 | 0 | 0 | 0 |
| 6:30-6:45 | 1        | 0  | 2 | 2 | 0 | 1 | 0 | 0 |
| 6:45-7:00 | 1        | 2  | 0 | 2 | 3 | 2 | 0 | 1 |
| 7:00-7:15 | 0        | 10 | 0 | 2 | 7 | 3 | 0 | 8 |
| 7:15-7:30 | 2        | 0  | 0 | 0 | 5 | 3 | 0 | 0 |
| 7:30-7:45 | 2        | 1  | 3 | 0 | 1 | 3 | 2 | 3 |
| 7:45-8:00 | 4        | 4  | 0 | 1 | 4 | 1 | 0 | 4 |
| 8:00-8:15 | 1        | 2  | 0 | 1 | 2 | 0 | 0 | 1 |
| 8:15-8:30 | 2        | 2  | 0 | 1 | 3 | 5 | 2 | 4 |
| 8:30-8:45 | 7        | 0  | 0 | 4 | 9 | 3 | 3 | 5 |
| 8:45-9:00 | 2        | 0  | 0 | 0 | 1 | 6 | 1 | 0 |
| PM        |          |    |   |   |   |   |   |   |
| 4:00-4:15 | 2        | 1  | 2 | 4 | 6 | 1 | 5 | 0 |
| 4:15-4:30 | 3        | 5  | 1 | 0 | 2 | 2 | 4 | 0 |
| 4:30-4:45 | 3        | 4  | 0 | 1 | 3 | 1 | 1 | 0 |
| 4:45-5:00 | 3        | 2  | 1 | 0 | 3 | 1 | 1 | 0 |
| 5:00-5:15 | 4        | 8  | 1 | 4 | 3 | 8 | 1 | 2 |
| 5:15-5:30 | 2        | 2  | 1 | 3 | 3 | 1 | 0 | 2 |
| 5:30-5:45 | 0        | 1  | 3 | 0 | 0 | 4 | 0 | 0 |
| 5:45-6:00 | 2        | 0  | 0 | 0 | 5 | 1 | 0 | 1 |
| 6:00-6:15 | 0        | 1  | 1 | 0 | 2 | 2 | 2 | 2 |
| 6:15-6:30 | 2        | 0  | 0 | 0 | 0 | 1 | 0 | 0 |
| 6:30-6:45 | 2        | 2  | 0 | 0 | 0 | 0 | 0 | 1 |
| 6:45-7:00 | 3        | 0  | 1 | 0 | 1 | 4 | 0 | 0 |

# Wells & Associates, LLC

McLean, Virginia

## Existing Traffic Count

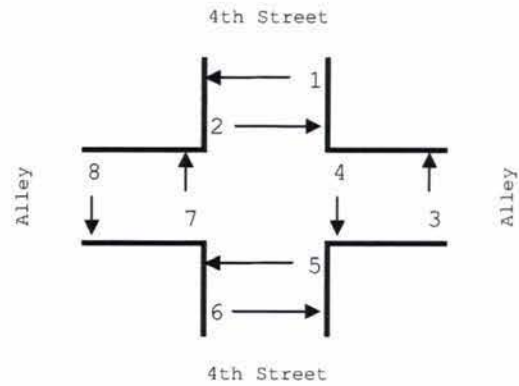
| PROJECT: Square 776                |                       | DATE: 11/16/2005  |        | SOUTHBOUND ROAD: 4th Street |                 |        |        |       |                       |        |        |       |                 |         |         |       |               |             |       |     |                        |
|------------------------------------|-----------------------|-------------------|--------|-----------------------------|-----------------|--------|--------|-------|-----------------------|--------|--------|-------|-----------------|---------|---------|-------|---------------|-------------|-------|-----|------------------------|
| W & A JOB NO.: 3013                |                       | DAY: Wednesday    |        | NORTHBOUND ROAD: 4th Street |                 |        |        |       |                       |        |        |       |                 |         |         |       |               |             |       |     |                        |
| INTERSECTION: 4th Street and Alley |                       | WEATHER: Clear    |        | WESTBOUND ROAD: Alley       |                 |        |        |       |                       |        |        |       |                 |         |         |       |               |             |       |     |                        |
| LOCATION: Washington, DC           |                       | COUNTED BY: Daryl |        | EASTBOUND ROAD: Alley       |                 |        |        |       |                       |        |        |       |                 |         |         |       |               |             |       |     |                        |
|                                    |                       | INPUTED BY: CP    |        |                             |                 |        |        |       |                       |        |        |       |                 |         |         |       |               |             |       |     |                        |
| Time Period                        | Turning Movements     |                   |        |                             |                 |        |        |       |                       |        |        |       |                 |         |         |       |               |             | Total | PHF | Time Period            |
|                                    | Southbound 4th Street |                   |        |                             | Westbound Alley |        |        |       | Northbound 4th Street |        |        |       | Eastbound Alley |         |         |       | North & South | East & West |       |     |                        |
|                                    | 1 Right               | 2 Thru            | 3 Left | Total                       | 4 Right         | 5 Thru | 6 Left | Total | 7 Right               | 8 Thru | 9 Left | Total | 10 Right        | 11 Thru | 12 Left | Total |               |             |       |     |                        |
| AM                                 |                       |                   |        |                             |                 |        |        |       |                       |        |        |       |                 |         |         |       |               |             |       |     |                        |
| 6:00-6:15                          | 0                     | 9                 | 0      | 9                           | 0               | 0      | 0      | 0     | 0                     | 0      | 0      | 0     | 0               | 0       | 0       | 0     | 0             | 9           | 0     | 9   | 6:00-6:15              |
| 6:15-6:30                          | 0                     | 19                | 0      | 19                          | 0               | 0      | 0      | 0     | 0                     | 0      | 0      | 0     | 0               | 0       | 0       | 0     | 0             | 19          | 0     | 19  | 6:15-6:30              |
| 6:30-6:45                          | 0                     | 29                | 0      | 29                          | 0               | 0      | 0      | 0     | 0                     | 0      | 0      | 0     | 0               | 0       | 0       | 0     | 0             | 29          | 0     | 29  | 6:30-6:45              |
| 6:45-7:00                          | 0                     | 40                | 0      | 40                          | 0               | 0      | 0      | 0     | 0                     | 0      | 0      | 0     | 0               | 0       | 0       | 0     | 0             | 40          | 0     | 40  | 6:45-7:00              |
| 7:00-7:15                          | 1                     | 38                | 1      | 40                          | 0               | 0      | 0      | 0     | 0                     | 0      | 0      | 0     | 0               | 0       | 0       | 0     | 0             | 40          | 0     | 40  | 7:00-7:15              |
| 7:15-7:30                          | 0                     | 47                | 1      | 48                          | 0               | 0      | 0      | 0     | 0                     | 0      | 0      | 0     | 0               | 0       | 0       | 0     | 0             | 48          | 0     | 48  | 7:15-7:30              |
| 7:30-7:45                          | 0                     | 52                | 0      | 52                          | 0               | 0      | 0      | 0     | 0                     | 0      | 0      | 0     | 0               | 0       | 0       | 0     | 0             | 52          | 0     | 52  | 7:30-7:45              |
| 7:45-8:00                          | 0                     | 81                | 0      | 81                          | 0               | 0      | 1      | 1     | 1                     | 0      | 0      | 0     | 0               | 0       | 0       | 0     | 0             | 81          | 1     | 82  | 7:45-8:00              |
| 8:00-8:15                          | 0                     | 69                | 0      | 69                          | 0               | 0      | 0      | 0     | 0                     | 0      | 0      | 0     | 0               | 0       | 0       | 0     | 0             | 69          | 0     | 69  | 8:00-8:15              |
| 8:15-8:30                          | 0                     | 93                | 0      | 93                          | 0               | 0      | 1      | 1     | 1                     | 0      | 0      | 0     | 0               | 0       | 0       | 0     | 0             | 93          | 1     | 94  | 8:15-8:30              |
| 8:30-8:45                          | 0                     | 90                | 0      | 90                          | 0               | 0      | 0      | 0     | 0                     | 0      | 0      | 0     | 0               | 0       | 0       | 0     | 0             | 90          | 0     | 90  | 8:30-8:45              |
| 8:45-9:00                          | 0                     | 91                | 0      | 91                          | 0               | 0      | 0      | 0     | 0                     | 0      | 0      | 0     | 0               | 0       | 0       | 0     | 0             | 91          | 0     | 91  | 8:45-9:00              |
| 3 Hour Totals                      | 1                     | 658               | 2      | 661                         | 0               | 0      | 2      | 2     | 0                     | 0      | 0      | 0     | 0               | 0       | 0       | 0     | 0             | 661         | 2     | 663 |                        |
| 1 Hour Totals                      |                       |                   |        |                             |                 |        |        |       |                       |        |        |       |                 |         |         |       |               |             |       |     |                        |
| 6:00-7:00                          | 0                     | 97                | 0      | 97                          | 0               | 0      | 0      | 0     | 0                     | 0      | 0      | 0     | 0               | 0       | 0       | 0     | 0             | 97          | 0     | 97  | 0.61 6:00-7:00         |
| 6:15-7:15                          | 1                     | 126               | 1      | 128                         | 0               | 0      | 0      | 0     | 0                     | 0      | 0      | 0     | 0               | 0       | 0       | 0     | 0             | 128         | 0     | 128 | 0.80 6:15-7:15         |
| 6:30-7:30                          | 1                     | 154               | 2      | 157                         | 0               | 0      | 0      | 0     | 0                     | 0      | 0      | 0     | 0               | 0       | 0       | 0     | 0             | 157         | 0     | 157 | 0.82 6:30-7:30         |
| 6:45-7:45                          | 1                     | 177               | 2      | 180                         | 0               | 0      | 0      | 0     | 0                     | 0      | 0      | 0     | 0               | 0       | 0       | 0     | 0             | 180         | 0     | 180 | 0.87 6:45-7:45         |
| 7:00-8:00                          | 1                     | 218               | 2      | 221                         | 0               | 0      | 1      | 1     | 1                     | 0      | 0      | 0     | 0               | 0       | 0       | 0     | 0             | 221         | 1     | 222 | 0.68 7:00-8:00         |
| 7:15-8:15                          | 0                     | 249               | 1      | 250                         | 0               | 0      | 1      | 1     | 1                     | 0      | 0      | 0     | 0               | 0       | 0       | 0     | 0             | 250         | 1     | 251 | 0.77 7:15-8:15         |
| 7:30-8:30                          | 0                     | 295               | 0      | 295                         | 0               | 0      | 2      | 2     | 2                     | 0      | 0      | 0     | 0               | 0       | 0       | 0     | 0             | 295         | 2     | 297 | 0.79 7:30-8:30         |
| 7:45-8:45                          | 0                     | 333               | 0      | 333                         | 0               | 0      | 2      | 2     | 0                     | 0      | 0      | 0     | 0               | 0       | 0       | 0     | 0             | 333         | 2     | 335 | 0.89 7:45-8:45         |
| 8:00-9:00                          | 0                     | 343               | 0      | 343                         | 0               | 0      | 1      | 1     | 0                     | 0      | 0      | 0     | 0               | 0       | 0       | 0     | 0             | 343         | 1     | 344 | 0.91 8:00-9:00         |
| AM Peak 8:00-9:00                  | 0                     | 343               | 0      | 343                         | 0               | 0      | 1      | 1     | 0                     | 0      | 0      | 0     | 0               | 0       | 0       | 0     | 0             | 343         | 1     | 344 | 0.91 AM Peak 8:00-9:00 |
| PM                                 |                       |                   |        |                             |                 |        |        |       |                       |        |        |       |                 |         |         |       |               |             |       |     |                        |
| 4:00-4:15                          | 0                     | 91                | 0      | 91                          | 0               | 0      | 1      | 1     | 0                     | 0      | 0      | 0     | 0               | 0       | 0       | 0     | 0             | 91          | 1     | 92  | 4:00-4:15              |
| 4:15-4:30                          | 2                     | 82                | 0      | 84                          | 0               | 0      | 0      | 0     | 0                     | 0      | 0      | 0     | 0               | 0       | 0       | 0     | 0             | 84          | 0     | 84  | 4:15-4:30              |
| 4:30-4:45                          | 0                     | 78                | 0      | 78                          | 0               | 0      | 0      | 0     | 0                     | 0      | 0      | 0     | 0               | 0       | 0       | 0     | 0             | 78          | 0     | 78  | 4:30-4:45              |
| 4:45-5:00                          | 0                     | 82                | 0      | 82                          | 0               | 0      | 2      | 2     | 0                     | 0      | 0      | 0     | 0               | 0       | 0       | 0     | 0             | 82          | 2     | 84  | 4:45-5:00              |
| 5:00-5:15                          | 0                     | 82                | 0      | 82                          | 0               | 0      | 0      | 0     | 0                     | 0      | 0      | 0     | 0               | 0       | 0       | 0     | 0             | 82          | 0     | 82  | 5:00-5:15              |
| 5:15-5:30                          | 0                     | 92                | 0      | 92                          | 0               | 0      | 0      | 0     | 0                     | 0      | 0      | 0     | 0               | 0       | 0       | 0     | 0             | 92          | 0     | 92  | 5:15-5:30              |
| 5:30-5:45                          | 0                     | 92                | 1      | 93                          | 0               | 0      | 1      | 1     | 1                     | 0      | 0      | 0     | 0               | 0       | 0       | 0     | 0             | 93          | 1     | 94  | 5:30-5:45              |
| 5:45-6:00                          | 0                     | 78                | 0      | 78                          | 0               | 0      | 0      | 0     | 0                     | 0      | 0      | 0     | 0               | 0       | 0       | 0     | 0             | 78          | 0     | 78  | 5:45-6:00              |
| 6:00-6:15                          | 0                     | 87                | 0      | 87                          | 0               | 0      | 0      | 0     | 0                     | 0      | 0      | 0     | 0               | 0       | 0       | 0     | 0             | 87          | 0     | 87  | 6:00-6:15              |
| 6:15-6:30                          | 0                     | 57                | 0      | 57                          | 0               | 0      | 0      | 0     | 0                     | 0      | 0      | 0     | 0               | 0       | 0       | 0     | 0             | 57          | 0     | 57  | 6:15-6:30              |
| 6:30-6:45                          | 0                     | 76                | 1      | 77                          | 0               | 0      | 0      | 0     | 0                     | 0      | 0      | 0     | 0               | 0       | 0       | 0     | 0             | 77          | 0     | 77  | 6:30-6:45              |
| 6:45-7:00                          | 0                     | 40                | 0      | 40                          | 0               | 0      | 0      | 0     | 0                     | 0      | 0      | 0     | 0               | 0       | 0       | 0     | 0             | 40          | 0     | 40  | 6:45-7:00              |
| 3 Hour Totals                      | 2                     | 937               | 2      | 941                         | 0               | 0      | 4      | 4     | 0                     | 0      | 0      | 0     | 0               | 0       | 0       | 0     | 0             | 941         | 4     | 945 |                        |
| 1 Hour Totals                      |                       |                   |        |                             |                 |        |        |       |                       |        |        |       |                 |         |         |       |               |             |       |     |                        |
| 4:00-5:00                          | 2                     | 333               | 0      | 335                         | 0               | 0      | 3      | 3     | 0                     | 0      | 0      | 0     | 0               | 0       | 0       | 0     | 0             | 335         | 3     | 338 | 0.92 4:00-5:00         |
| 4:15-5:15                          | 2                     | 324               | 0      | 326                         | 0               | 0      | 2      | 2     | 0                     | 0      | 0      | 0     | 0               | 0       | 0       | 0     | 0             | 326         | 2     | 328 | 0.98 4:15-5:15         |
| 4:30-5:30                          | 0                     | 334               | 0      | 334                         | 0               | 0      | 2      | 2     | 0                     | 0      | 0      | 0     | 0               | 0       | 0       | 0     | 0             | 334         | 2     | 336 | 0.91 4:30-5:30         |
| 4:45-5:45                          | 0                     | 348               | 1      | 349                         | 0               | 0      | 3      | 3     | 0                     | 0      | 0      | 0     | 0               | 0       | 0       | 0     | 0             | 349         | 3     | 352 | 0.94 4:45-5:45         |
| 5:00-6:00                          | 0                     | 344               | 1      | 345                         | 0               | 0      | 1      | 1     | 0                     | 0      | 0      | 0     | 0               | 0       | 0       | 0     | 0             | 345         | 1     | 346 | 0.92 5:00-6:00         |
| 5:15-6:15                          | 0                     | 349               | 1      | 350                         | 0               | 0      | 1      | 1     | 1                     | 0      | 0      | 0     | 0               | 0       | 0       | 0     | 0             | 350         | 1     | 351 | 0.93 5:15-6:15         |
| 5:30-6:30                          | 0                     | 314               | 1      | 315                         | 0               | 0      | 1      | 1     | 1                     | 0      | 0      | 0     | 0               | 0       | 0       | 0     | 0             | 315         | 1     | 316 | 0.84 5:30-6:30         |
| 5:45-6:45                          | 0                     | 298               | 1      | 299                         | 0               | 0      | 0      | 0     | 0                     | 0      | 0      | 0     | 0               | 0       | 0       | 0     | 0             | 299         | 0     | 299 | 0.86 5:45-6:45         |
| 6:00-7:00                          | 0                     | 260               | 1      | 261                         | 0               | 0      | 0      | 0     | 0                     | 0      | 0      | 0     | 0               | 0       | 0       | 0     | 0             | 261         | 0     | 261 | 0.75 6:00-7:00         |
| PM Peak 4:45-5:45                  | 0                     | 348               | 1      | 349                         | 0               | 0      | 3      | 3     | 0                     | 0      | 0      | 0     | 0               | 0       | 0       | 0     | 0             | 349         | 3     | 352 | 0.94 PM Peak 4:45-5:45 |

Wells & Associates, LLC  
McLean, Virginia

# Pedestrian Volume Survey



Project Name: Square 776  
Project Number: 3013  
Location: Washington DC  
Intersection: 4th Street and Alley  
Weather: Clear  
Date: 11/16/2005  
Surveyor: Daryl  
Hours: Mileage:



| TIME      | Movement |   |   |   |   |   |   |   |
|-----------|----------|---|---|---|---|---|---|---|
|           | 1        | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| AM        |          |   |   |   |   |   |   |   |
| 6:00-6:15 | 0        | 0 | 1 | 0 | 0 | 0 | 0 | 0 |
| 6:15-6:30 | 1        | 0 | 2 | 0 | 0 | 0 | 0 | 1 |
| 6:30-6:45 | 0        | 0 | 1 | 0 | 1 | 0 | 1 | 0 |
| 6:45-7:00 | 0        | 0 | 1 | 2 | 0 | 0 | 0 | 0 |
| 7:00-7:15 | 0        | 0 | 0 | 0 | 1 | 0 | 2 | 0 |
| 7:15-7:30 | 0        | 0 | 0 | 1 | 0 | 0 | 1 | 0 |
| 7:30-7:45 | 0        | 1 | 0 | 2 | 1 | 0 | 0 | 1 |
| 7:45-8:00 | 1        | 0 | 0 | 3 | 1 | 0 | 0 | 3 |
| 8:00-8:15 | 0        | 0 | 0 | 2 | 1 | 0 | 1 | 0 |
| 8:15-8:30 | 0        | 0 | 0 | 1 | 0 | 0 | 0 | 1 |
| 8:30-8:45 | 0        | 0 | 1 | 2 | 0 | 0 | 0 | 2 |
| 8:45-9:00 | 0        | 0 | 1 | 3 | 0 | 1 | 1 | 2 |
| PM        |          |   |   |   |   |   |   |   |
| 4:00-4:15 | 1        | 0 | 3 | 0 | 1 | 0 | 0 | 2 |
| 4:15-4:30 | 0        | 0 | 1 | 3 | 0 | 0 | 1 | 0 |
| 4:30-4:45 | 1        | 0 | 2 | 3 | 1 | 3 | 3 | 1 |
| 4:45-5:00 | 0        | 0 | 3 | 0 | 2 | 0 | 1 | 0 |
| 5:00-5:15 | 0        | 0 | 0 | 2 | 0 | 0 | 1 | 5 |
| 5:15-5:30 | 1        | 0 | 1 | 1 | 1 | 1 | 1 | 2 |
| 5:30-5:45 | 0        | 0 | 2 | 0 | 0 | 1 | 0 | 1 |
| 5:45-6:00 | 0        | 1 | 1 | 0 | 0 | 0 | 4 | 1 |
| 6:00-6:15 | 0        | 0 | 1 | 2 | 0 | 2 | 0 | 1 |
| 6:15-6:30 | 0        | 2 | 4 | 1 | 1 | 0 | 0 | 0 |
| 6:30-6:45 | 0        | 0 | 0 | 1 | 0 | 0 | 1 | 0 |
| 6:45-7:00 | 1        | 0 | 1 | 0 | 0 | 0 | 1 | 0 |

# Wells & Associates, LLC

McLean, Virginia

## Existing Traffic Count

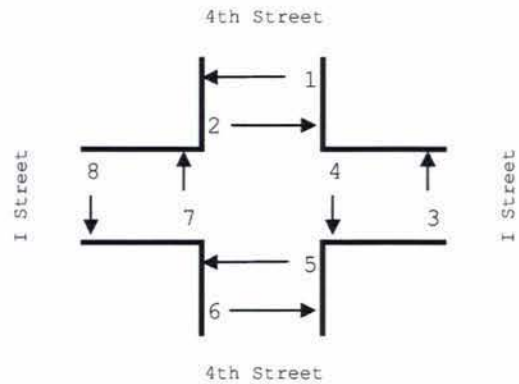
| PROJECT: Square 776                   |                       | DATE: 11/16/2005 |        | SOUTHBOUND ROAD: 4th Street |                    |        |        |       |                       |        |        |       |                    |         |         |       |               |             |       |      |                   |
|---------------------------------------|-----------------------|------------------|--------|-----------------------------|--------------------|--------|--------|-------|-----------------------|--------|--------|-------|--------------------|---------|---------|-------|---------------|-------------|-------|------|-------------------|
| W & A JOB NO.: 3013                   |                       | DAY: Wednesday   |        | NORTHBOUND ROAD: 4th Street |                    |        |        |       |                       |        |        |       |                    |         |         |       |               |             |       |      |                   |
| INTERSECTION: 4th Street and I Street |                       | WEATHER: Clear   |        | WESTBOUND ROAD: I Street    |                    |        |        |       |                       |        |        |       |                    |         |         |       |               |             |       |      |                   |
| LOCATION: Washington, DC              |                       | COUNTED BY: Jose |        | EASTBOUND ROAD: I Street    |                    |        |        |       |                       |        |        |       |                    |         |         |       |               |             |       |      |                   |
|                                       |                       | INPUTED BY: CP   |        |                             |                    |        |        |       |                       |        |        |       |                    |         |         |       |               |             |       |      |                   |
| Time Period                           | Turning Movements     |                  |        |                             |                    |        |        |       |                       |        |        |       |                    |         |         |       |               |             | Total | PHF  | Time Period       |
|                                       | Southbound 4th Street |                  |        |                             | Westbound I Street |        |        |       | Northbound 4th Street |        |        |       | Eastbound I Street |         |         |       | North & South | East & West |       |      |                   |
|                                       | 1 Right               | 2 Thru           | 3 Left | Total                       | 4 Right            | 5 Thru | 6 Left | Total | 7 Right               | 8 Thru | 9 Left | Total | 10 Right           | 11 Thru | 12 Left | Total |               |             |       |      |                   |
| AM                                    |                       |                  |        |                             |                    |        |        |       |                       |        |        |       |                    |         |         |       |               |             |       |      |                   |
| 6:00-6:15                             | 0                     | 20               | 0      | 20                          | 0                  | 0      | 0      | 0     | 0                     | 0      | 0      | 0     | 1                  | 2       | 0       | 3     | 20            | 3           | 23    |      | 6:00-6:15         |
| 6:15-6:30                             | 0                     | 32               | 1      | 33                          | 0                  | 0      | 0      | 0     | 0                     | 0      | 0      | 0     | 0                  | 7       | 0       | 7     | 33            | 7           | 40    |      | 6:15-6:30         |
| 6:30-6:45                             | 0                     | 38               | 0      | 38                          | 0                  | 0      | 0      | 0     | 0                     | 0      | 0      | 0     | 0                  | 4       | 0       | 4     | 38            | 4           | 42    |      | 6:30-6:45         |
| 6:45-7:00                             | 0                     | 34               | 1      | 35                          | 0                  | 0      | 0      | 0     | 0                     | 0      | 0      | 0     | 2                  | 3       | 0       | 5     | 35            | 5           | 40    |      | 6:45-7:00         |
| 7:00-7:15                             | 0                     | 45               | 0      | 45                          | 0                  | 0      | 0      | 0     | 0                     | 0      | 0      | 0     | 0                  | 5       | 0       | 5     | 45            | 5           | 50    |      | 7:00-7:15         |
| 7:15-7:30                             | 0                     | 56               | 1      | 57                          | 0                  | 0      | 0      | 0     | 0                     | 0      | 0      | 0     | 3                  | 6       | 0       | 9     | 57            | 9           | 66    |      | 7:15-7:30         |
| 7:30-7:45                             | 0                     | 78               | 4      | 80                          | 0                  | 0      | 0      | 0     | 0                     | 0      | 0      | 0     | 2                  | 4       | 0       | 6     | 80            | 6           | 86    |      | 7:30-7:45         |
| 7:45-8:00                             | 0                     | 83               | 2      | 85                          | 0                  | 0      | 0      | 0     | 0                     | 0      | 0      | 0     | 2                  | 5       | 0       | 7     | 85            | 7           | 92    |      | 7:45-8:00         |
| 8:00-8:15                             | 0                     | 85               | 3      | 88                          | 0                  | 0      | 0      | 0     | 0                     | 0      | 0      | 0     | 1                  | 4       | 0       | 5     | 88            | 5           | 93    |      | 8:00-8:15         |
| 8:15-8:30                             | 0                     | 107              | 6      | 113                         | 0                  | 0      | 1      | 1     | 0                     | 0      | 0      | 0     | 3                  | 11      | 0       | 14    | 113           | 15          | 128   |      | 8:15-8:30         |
| 8:30-8:45                             | 0                     | 82               | 1      | 83                          | 0                  | 0      | 0      | 0     | 0                     | 0      | 0      | 0     | 5                  | 8       | 0       | 13    | 83            | 13          | 96    |      | 8:30-8:45         |
| 8:45-9:00                             | 0                     | 74               | 2      | 76                          | 0                  | 0      | 0      | 0     | 0                     | 0      | 0      | 0     | 0                  | 12      | 0       | 12    | 76            | 12          | 88    |      | 8:45-9:00         |
| 3 Hour Totals                         | 0                     | 732              | 21     | 753                         | 0                  | 0      | 1      | 1     | 0                     | 0      | 0      | 0     | 19                 | 71      | 0       | 90    | 753           | 91          | 844   |      |                   |
| 1 Hour Totals                         |                       |                  |        |                             |                    |        |        |       |                       |        |        |       |                    |         |         |       |               |             |       |      |                   |
| 6:00-7:00                             | 0                     | 124              | 2      | 126                         | 0                  | 0      | 0      | 0     | 0                     | 0      | 0      | 0     | 3                  | 16      | 0       | 19    | 126           | 19          | 145   | 0.86 | 6:00-7:00         |
| 6:15-7:15                             | 0                     | 149              | 2      | 151                         | 0                  | 0      | 0      | 0     | 0                     | 0      | 0      | 0     | 2                  | 19      | 0       | 21    | 151           | 21          | 172   | 0.86 | 6:15-7:15         |
| 6:30-7:30                             | 0                     | 173              | 2      | 175                         | 0                  | 0      | 0      | 0     | 0                     | 0      | 0      | 0     | 5                  | 18      | 0       | 23    | 175           | 23          | 198   | 0.75 | 6:30-7:30         |
| 6:45-7:45                             | 0                     | 211              | 6      | 217                         | 0                  | 0      | 0      | 0     | 0                     | 0      | 0      | 0     | 7                  | 18      | 0       | 25    | 217           | 25          | 242   | 0.70 | 6:45-7:45         |
| 7:00-8:00                             | 0                     | 260              | 7      | 267                         | 0                  | 0      | 0      | 0     | 0                     | 0      | 0      | 0     | 7                  | 20      | 0       | 27    | 267           | 27          | 294   | 0.80 | 7:00-8:00         |
| 7:15-8:15                             | 0                     | 300              | 10     | 310                         | 0                  | 0      | 0      | 0     | 0                     | 0      | 0      | 0     | 8                  | 19      | 0       | 27    | 310           | 27          | 337   | 0.91 | 7:15-8:15         |
| 7:30-8:30                             | 0                     | 351              | 15     | 366                         | 0                  | 0      | 1      | 1     | 0                     | 0      | 0      | 0     | 8                  | 24      | 0       | 32    | 366           | 33          | 399   | 0.78 | 7:30-8:30         |
| 7:45-8:45                             | 0                     | 357              | 12     | 369                         | 0                  | 0      | 1      | 1     | 0                     | 0      | 0      | 0     | 11                 | 28      | 0       | 39    | 369           | 40          | 409   | 0.80 | 7:45-8:45         |
| 8:00-9:00                             | 0                     | 348              | 12     | 360                         | 0                  | 0      | 1      | 1     | 0                     | 0      | 0      | 0     | 9                  | 35      | 0       | 44    | 360           | 45          | 405   | 0.79 | 8:00-9:00         |
| AM Peak 7:45-8:45                     | 0                     | 357              | 12     | 369                         | 0                  | 0      | 1      | 1     | 0                     | 0      | 0      | 0     | 11                 | 28      | 0       | 39    | 369           | 40          | 409   | 0.80 | AM Peak 7:45-8:45 |
| PM                                    |                       |                  |        |                             |                    |        |        |       |                       |        |        |       |                    |         |         |       |               |             |       |      |                   |
| 4:00-4:15                             | 0                     | 82               | 3      | 85                          | 0                  | 0      | 0      | 0     | 0                     | 0      | 0      | 0     | 4                  | 11      | 0       | 15    | 85            | 15          | 100   |      | 4:00-4:15         |
| 4:15-4:30                             | 0                     | 76               | 1      | 77                          | 0                  | 0      | 0      | 0     | 0                     | 0      | 0      | 0     | 5                  | 7       | 0       | 12    | 77            | 12          | 89    |      | 4:15-4:30         |
| 4:30-4:45                             | 0                     | 78               | 10     | 88                          | 0                  | 0      | 0      | 0     | 0                     | 0      | 0      | 0     | 9                  | 15      | 0       | 24    | 88            | 24          | 112   |      | 4:30-4:45         |
| 4:45-5:00                             | 0                     | 72               | 6      | 78                          | 0                  | 0      | 0      | 0     | 0                     | 0      | 0      | 0     | 2                  | 14      | 0       | 16    | 78            | 16          | 94    |      | 4:45-5:00         |
| 5:00-5:15                             | 0                     | 90               | 5      | 95                          | 0                  | 0      | 0      | 0     | 0                     | 0      | 0      | 0     | 4                  | 23      | 0       | 27    | 95            | 27          | 122   |      | 5:00-5:15         |
| 5:15-5:30                             | 0                     | 84               | 10     | 94                          | 0                  | 0      | 0      | 0     | 0                     | 0      | 0      | 0     | 3                  | 25      | 0       | 28    | 94            | 28          | 122   |      | 5:15-5:30         |
| 5:30-5:45                             | 0                     | 95               | 13     | 108                         | 0                  | 0      | 0      | 0     | 0                     | 0      | 0      | 0     | 1                  | 29      | 0       | 30    | 108           | 30          | 138   |      | 5:30-5:45         |
| 5:45-6:00                             | 0                     | 69               | 2      | 71                          | 0                  | 0      | 0      | 0     | 0                     | 0      | 0      | 0     | 7                  | 16      | 0       | 23    | 71            | 23          | 94    |      | 5:45-6:00         |
| 6:00-6:15                             | 0                     | 63               | 3      | 66                          | 0                  | 0      | 0      | 0     | 0                     | 0      | 0      | 0     | 9                  | 16      | 0       | 25    | 66            | 25          | 91    |      | 6:00-6:15         |
| 6:15-6:30                             | 0                     | 61               | 2      | 63                          | 0                  | 0      | 0      | 0     | 0                     | 0      | 0      | 0     | 3                  | 10      | 0       | 13    | 63            | 13          | 76    |      | 6:15-6:30         |
| 6:30-6:45                             | 0                     | 62               | 2      | 64                          | 0                  | 0      | 0      | 0     | 0                     | 0      | 0      | 0     | 6                  | 10      | 0       | 16    | 64            | 16          | 80    |      | 6:30-6:45         |
| 6:45-7:00                             | 0                     | 45               | 2      | 47                          | 0                  | 0      | 0      | 0     | 0                     | 0      | 0      | 0     | 4                  | 8       | 0       | 12    | 47            | 12          | 59    |      | 6:45-7:00         |
| 3 Hour Totals                         | 0                     | 877              | 59     | 936                         | 0                  | 0      | 0      | 0     | 0                     | 0      | 0      | 0     | 57                 | 184     | 0       | 241   | 936           | 241         | 1,177 |      |                   |
| 1 Hour Totals                         |                       |                  |        |                             |                    |        |        |       |                       |        |        |       |                    |         |         |       |               |             |       |      |                   |
| 4:00-5:00                             | 0                     | 308              | 20     | 328                         | 0                  | 0      | 0      | 0     | 0                     | 0      | 0      | 0     | 20                 | 47      | 0       | 67    | 328           | 67          | 395   | 0.88 | 4:00-5:00         |
| 4:15-5:15                             | 0                     | 316              | 22     | 338                         | 0                  | 0      | 0      | 0     | 0                     | 0      | 0      | 0     | 20                 | 59      | 0       | 79    | 338           | 79          | 417   | 0.85 | 4:15-5:15         |
| 4:30-5:30                             | 0                     | 324              | 31     | 355                         | 0                  | 0      | 0      | 0     | 0                     | 0      | 0      | 0     | 18                 | 77      | 0       | 95    | 355           | 95          | 450   | 0.92 | 4:30-5:30         |
| 4:45-5:45                             | 0                     | 341              | 34     | 375                         | 0                  | 0      | 0      | 0     | 0                     | 0      | 0      | 0     | 10                 | 91      | 0       | 101   | 375           | 101         | 476   | 0.86 | 4:45-5:45         |
| 5:00-6:00                             | 0                     | 338              | 30     | 368                         | 0                  | 0      | 0      | 0     | 0                     | 0      | 0      | 0     | 15                 | 93      | 0       | 108   | 368           | 108         | 476   | 0.86 | 5:00-6:00         |
| 5:15-6:15                             | 0                     | 311              | 28     | 339                         | 0                  | 0      | 0      | 0     | 0                     | 0      | 0      | 0     | 20                 | 86      | 0       | 106   | 339           | 106         | 445   | 0.81 | 5:15-6:15         |
| 5:30-6:30                             | 0                     | 288              | 20     | 308                         | 0                  | 0      | 0      | 0     | 0                     | 0      | 0      | 0     | 20                 | 71      | 0       | 91    | 308           | 91          | 399   | 0.72 | 5:30-6:30         |
| 5:45-6:45                             | 0                     | 255              | 9      | 264                         | 0                  | 0      | 0      | 0     | 0                     | 0      | 0      | 0     | 25                 | 52      | 0       | 77    | 264           | 77          | 341   | 0.91 | 5:45-6:45         |
| 6:00-7:00                             | 0                     | 231              | 9      | 240                         | 0                  | 0      | 0      | 0     | 0                     | 0      | 0      | 0     | 22                 | 44      | 0       | 66    | 240           | 66          | 306   | 0.84 | 6:00-7:00         |
| PM Peak 4:45-5:45                     | 0                     | 341              | 34     | 375                         | 0                  | 0      | 0      | 0     | 0                     | 0      | 0      | 0     | 10                 | 91      | 0       | 101   | 375           | 101         | 476   | 0.86 | PM Peak 4:45-5:45 |

Wells & Associates, LLC  
McLean, Virginia

# Pedestrian Volume Survey



Project Name: Square 776  
Project Number: 3013  
Location: Washington DC  
Intersection: 4th Street and I Street  
Weather: Clear  
Date: 11/16/2005  
Surveyor: Daryl  
Hours: Mileage:



| TIME      | Movement |   |   |   |   |   |   |   |
|-----------|----------|---|---|---|---|---|---|---|
|           | 1        | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| AM        |          |   |   |   |   |   |   |   |
| 6:00-6:15 | 0        | 0 | 0 | 0 | 1 | 1 | 0 | 1 |
| 6:15-6:30 | 0        | 0 | 0 | 0 | 1 | 0 | 0 | 1 |
| 6:30-6:45 | 0        | 0 | 0 | 1 | 1 | 1 | 0 | 0 |
| 6:45-7:00 | 0        | 4 | 0 | 0 | 1 | 0 | 0 | 0 |
| 7:00-7:15 | 1        | 0 | 0 | 1 | 2 | 0 | 0 | 0 |
| 7:15-7:30 | 1        | 0 | 0 | 0 | 0 | 0 | 1 | 0 |
| 7:30-7:45 | 1        | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 7:45-8:00 | 3        | 0 | 1 | 1 | 2 | 2 | 0 | 1 |
| 8:00-8:15 | 0        | 0 | 0 | 0 | 2 | 0 | 0 | 0 |
| 8:15-8:30 | 2        | 1 | 0 | 0 | 4 | 1 | 0 | 1 |
| 8:30-8:45 | 1        | 0 | 0 | 4 | 0 | 4 | 0 | 0 |
| 8:45-9:00 | 1        | 0 | 4 | 0 | 5 | 0 | 1 | 0 |
| PM        |          |   |   |   |   |   |   |   |
| 4:00-4:15 | 1        | 2 | 0 | 1 | 0 | 0 | 0 | 2 |
| 4:15-4:30 | 0        | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| 4:30-4:45 | 1        | 0 | 0 | 0 | 0 | 1 | 1 | 1 |
| 4:45-5:00 | 0        | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 5:00-5:15 | 0        | 0 | 0 | 1 | 0 | 0 | 0 | 2 |
| 5:15-5:30 | 1        | 1 | 0 | 0 | 0 | 1 | 0 | 1 |
| 5:30-5:45 | 0        | 0 | 2 | 0 | 1 | 1 | 0 | 0 |
| 5:45-6:00 | 1        | 0 | 0 | 0 | 2 | 1 | 0 | 0 |
| 6:00-6:15 | 0        | 0 | 2 | 0 | 0 | 2 | 0 | 0 |
| 6:15-6:30 | 0        | 1 | 0 | 0 | 0 | 0 | 1 | 0 |
| 6:30-6:45 | 1        | 2 | 0 | 0 | 0 | 1 | 0 | 1 |
| 6:45-7:00 | 0        | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

# Wells & Associates, LLC

McLean, Virginia

## Existing Traffic Count

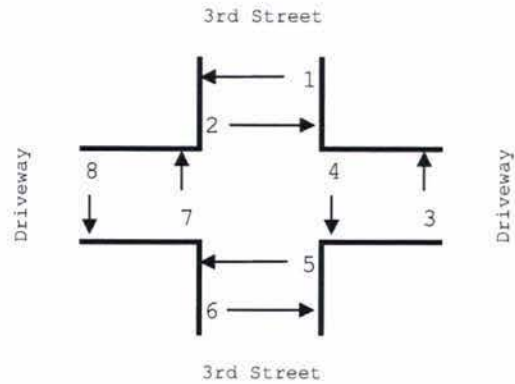
| PROJECT: Square 776                   |                       | DATE: 11/16/2005  |        | SOUTHBOUND ROAD: 3rd Street |                    |        |        |       |                       |        |        |       |                    |         |         |       |       |     |             |               |                   |
|---------------------------------------|-----------------------|-------------------|--------|-----------------------------|--------------------|--------|--------|-------|-----------------------|--------|--------|-------|--------------------|---------|---------|-------|-------|-----|-------------|---------------|-------------------|
| W & A JOB NO.: 3013                   |                       | DAY: Wednesday    |        | NORTHBOUND ROAD: 3rd Street |                    |        |        |       |                       |        |        |       |                    |         |         |       |       |     |             |               |                   |
| INTERSECTION: 3rd Street and Driveway |                       | WEATHER: Clear    |        | WESTBOUND ROAD: Driveway    |                    |        |        |       |                       |        |        |       |                    |         |         |       |       |     |             |               |                   |
| LOCATION: Washington, DC              |                       | COUNTED BY: Daryl |        | EASTBOUND ROAD: Driveway    |                    |        |        |       |                       |        |        |       |                    |         |         |       |       |     |             |               |                   |
|                                       |                       | INPUTED BY: CP    |        |                             |                    |        |        |       |                       |        |        |       |                    |         |         |       |       |     |             |               |                   |
| Time Period                           | Turning Movements     |                   |        |                             |                    |        |        |       |                       |        |        |       |                    |         |         |       | Total | PHF | Time Period |               |                   |
|                                       | Southbound 3rd Street |                   |        |                             | Westbound Driveway |        |        |       | Northbound 3rd Street |        |        |       | Eastbound Driveway |         |         |       |       |     |             | North & South | East & West       |
|                                       | 1 Right               | 2 Thru            | 3 Left | Total                       | 4 Right            | 5 Thru | 6 Left | Total | 7 Right               | 8 Thru | 9 Left | Total | 10 Right           | 11 Thru | 12 Left | Total |       |     |             |               |                   |
| AM                                    |                       |                   |        |                             |                    |        |        |       |                       |        |        |       |                    |         |         |       |       |     |             |               |                   |
| 6:00-6:15                             | 1                     | 9                 | 1      | 11                          | 1                  | 0      | 0      | 1     | 1                     | 7      | 0      | 8     | 0                  | 0       | 0       | 0     | 19    | 1   | 20          |               | 6:00-6:15         |
| 6:15-6:30                             | 0                     | 12                | 0      | 12                          | 0                  | 0      | 0      | 0     | 2                     | 6      | 0      | 8     | 0                  | 0       | 0       | 0     | 20    | 0   | 20          |               | 6:15-6:30         |
| 6:30-6:45                             | 0                     | 8                 | 0      | 8                           | 0                  | 0      | 0      | 0     | 0                     | 16     | 1      | 17    | 1                  | 0       | 0       | 1     | 25    | 1   | 26          |               | 6:30-6:45         |
| 6:45-7:00                             | 0                     | 12                | 1      | 13                          | 0                  | 0      | 0      | 0     | 4                     | 31     | 0      | 35    | 0                  | 0       | 0       | 0     | 48    | 0   | 48          |               | 6:45-7:00         |
| 7:00-7:15                             | 1                     | 15                | 2      | 18                          | 1                  | 0      | 0      | 1     | 1                     | 25     | 1      | 27    | 1                  | 0       | 0       | 1     | 45    | 2   | 47          |               | 7:00-7:15         |
| 7:15-7:30                             | 0                     | 16                | 0      | 16                          | 0                  | 0      | 0      | 0     | 1                     | 42     | 0      | 43    | 0                  | 0       | 0       | 0     | 59    | 0   | 59          |               | 7:15-7:30         |
| 7:30-7:45                             | 1                     | 18                | 2      | 21                          | 0                  | 0      | 0      | 0     | 0                     | 55     | 0      | 55    | 1                  | 0       | 0       | 1     | 76    | 1   | 77          |               | 7:30-7:45         |
| 7:45-8:00                             | 0                     | 27                | 3      | 30                          | 0                  | 0      | 0      | 0     | 2                     | 54     | 0      | 56    | 0                  | 0       | 0       | 0     | 86    | 0   | 86          |               | 7:45-8:00         |
| 8:00-8:15                             | 0                     | 32                | 0      | 32                          | 0                  | 0      | 0      | 0     | 0                     | 68     | 1      | 69    | 0                  | 0       | 0       | 0     | 101   | 0   | 101         |               | 8:00-8:15         |
| 8:15-8:30                             | 0                     | 31                | 0      | 31                          | 1                  | 0      | 0      | 1     | 2                     | 92     | 2      | 96    | 0                  | 0       | 1       | 1     | 127   | 2   | 129         |               | 8:15-8:30         |
| 8:30-8:45                             | 0                     | 30                | 0      | 30                          | 0                  | 0      | 2      | 2     | 0                     | 74     | 0      | 74    | 1                  | 0       | 0       | 1     | 104   | 3   | 107         |               | 8:30-8:45         |
| 8:45-9:00                             | 1                     | 37                | 0      | 38                          | 0                  | 0      | 0      | 0     | 0                     | 52     | 1      | 53    | 2                  | 0       | 1       | 3     | 91    | 3   | 94          |               | 8:45-9:00         |
| 3 Hour Totals                         | 4                     | 247               | 9      | 260                         | 3                  | 0      | 2      | 5     | 13                    | 522    | 6      | 541   | 6                  | 0       | 2       | 8     | 801   | 13  | 814         |               |                   |
| 1 Hour Totals                         |                       |                   |        |                             |                    |        |        |       |                       |        |        |       |                    |         |         |       |       |     |             |               |                   |
| 6:00-7:00                             | 1                     | 41                | 2      | 44                          | 1                  | 0      | 0      | 1     | 7                     | 60     | 1      | 68    | 1                  | 0       | 0       | 1     | 112   | 2   | 114         | 0.59          | 6:00-7:00         |
| 6:15-7:15                             | 1                     | 47                | 3      | 51                          | 1                  | 0      | 0      | 1     | 7                     | 78     | 2      | 87    | 2                  | 0       | 0       | 2     | 138   | 3   | 141         | 0.73          | 6:15-7:15         |
| 6:30-7:30                             | 1                     | 51                | 3      | 55                          | 1                  | 0      | 0      | 1     | 6                     | 114    | 2      | 122   | 2                  | 0       | 0       | 2     | 177   | 3   | 180         | 0.76          | 6:30-7:30         |
| 6:45-7:45                             | 2                     | 61                | 5      | 68                          | 1                  | 0      | 0      | 1     | 6                     | 153    | 1      | 160   | 2                  | 0       | 0       | 2     | 228   | 3   | 231         | 0.75          | 6:45-7:45         |
| 7:00-8:00                             | 2                     | 76                | 7      | 85                          | 1                  | 0      | 0      | 1     | 4                     | 176    | 1      | 181   | 2                  | 0       | 0       | 2     | 266   | 3   | 269         | 0.78          | 7:00-8:00         |
| 7:15-8:15                             | 1                     | 93                | 5      | 99                          | 0                  | 0      | 0      | 0     | 3                     | 219    | 1      | 223   | 1                  | 0       | 0       | 1     | 322   | 1   | 323         | 0.80          | 7:15-8:15         |
| 7:30-8:30                             | 1                     | 108               | 5      | 114                         | 1                  | 0      | 0      | 1     | 4                     | 269    | 3      | 276   | 1                  | 0       | 1       | 2     | 390   | 3   | 393         | 0.76          | 7:30-8:30         |
| 7:45-8:45                             | 0                     | 120               | 3      | 123                         | 1                  | 0      | 2      | 3     | 4                     | 288    | 3      | 295   | 1                  | 0       | 1       | 2     | 418   | 5   | 423         | 0.82          | 7:45-8:45         |
| 8:00-9:00                             | 1                     | 130               | 0      | 131                         | 1                  | 0      | 2      | 3     | 2                     | 286    | 4      | 292   | 3                  | 0       | 2       | 5     | 423   | 8   | 431         | 0.84          | 8:00-9:00         |
| AM Peak 8:00-9:00                     | 1                     | 130               | 0      | 131                         | 1                  | 0      | 2      | 3     | 2                     | 286    | 4      | 292   | 3                  | 0       | 2       | 5     | 423   | 8   | 431         | 0.84          | AM Peak 8:00-9:00 |
| PM                                    |                       |                   |        |                             |                    |        |        |       |                       |        |        |       |                    |         |         |       |       |     |             |               |                   |
| 4:00-4:15                             | 0                     | 44                | 0      | 44                          | 2                  | 0      | 0      | 2     | 0                     | 54     | 0      | 54    | 1                  | 0       | 0       | 1     | 98    | 3   | 101         |               | 4:00-4:15         |
| 4:15-4:30                             | 0                     | 49                | 0      | 49                          | 0                  | 0      | 0      | 0     | 0                     | 40     | 1      | 41    | 0                  | 0       | 0       | 0     | 90    | 0   | 90          |               | 4:15-4:30         |
| 4:30-4:45                             | 0                     | 61                | 0      | 61                          | 0                  | 0      | 0      | 0     | 1                     | 55     | 0      | 56    | 0                  | 0       | 0       | 0     | 117   | 0   | 117         |               | 4:30-4:45         |
| 4:45-5:00                             | 0                     | 54                | 0      | 54                          | 0                  | 0      | 1      | 1     | 0                     | 29     | 0      | 29    | 0                  | 0       | 0       | 0     | 83    | 1   | 84          |               | 4:45-5:00         |
| 5:00-5:15                             | 0                     | 63                | 0      | 63                          | 0                  | 0      | 0      | 0     | 0                     | 60     | 0      | 60    | 0                  | 0       | 0       | 0     | 123   | 0   | 123         |               | 5:00-5:15         |
| 5:15-5:30                             | 0                     | 53                | 0      | 53                          | 0                  | 0      | 0      | 0     | 0                     | 57     | 0      | 57    | 0                  | 0       | 0       | 0     | 110   | 0   | 110         |               | 5:15-5:30         |
| 5:30-5:45                             | 0                     | 45                | 0      | 45                          | 0                  | 0      | 0      | 0     | 0                     | 48     | 0      | 48    | 0                  | 0       | 0       | 0     | 93    | 0   | 93          |               | 5:30-5:45         |
| 5:45-6:00                             | 0                     | 44                | 0      | 44                          | 0                  | 0      | 0      | 0     | 0                     | 38     | 0      | 38    | 0                  | 0       | 0       | 0     | 82    | 0   | 82          |               | 5:45-6:00         |
| 6:00-6:15                             | 2                     | 27                | 0      | 29                          | 0                  | 0      | 0      | 0     | 0                     | 43     | 0      | 43    | 2                  | 0       | 0       | 2     | 72    | 2   | 74          |               | 6:00-6:15         |
| 6:15-6:30                             | 0                     | 20                | 0      | 20                          | 0                  | 0      | 1      | 1     | 2                     | 35     | 0      | 37    | 0                  | 0       | 0       | 0     | 57    | 1   | 58          |               | 6:15-6:30         |
| 6:30-6:45                             | 0                     | 18                | 0      | 18                          | 0                  | 0      | 0      | 0     | 0                     | 18     | 0      | 18    | 0                  | 0       | 0       | 0     | 36    | 0   | 36          |               | 6:30-6:45         |
| 6:45-7:00                             | 0                     | 9                 | 0      | 9                           | 0                  | 0      | 0      | 0     | 1                     | 34     | 0      | 35    | 0                  | 0       | 0       | 0     | 44    | 0   | 44          |               | 6:45-7:00         |
| 3 Hour Totals                         | 2                     | 467               | 0      | 469                         | 2                  | 0      | 2      | 4     | 4                     | 511    | 1      | 516   | 3                  | 0       | 0       | 3     | 1,005 | 7   | 1,012       |               |                   |
| 1 Hour Totals                         |                       |                   |        |                             |                    |        |        |       |                       |        |        |       |                    |         |         |       |       |     |             |               |                   |
| 4:00-5:00                             | 0                     | 208               | 0      | 208                         | 2                  | 0      | 1      | 3     | 1                     | 178    | 1      | 180   | 1                  | 0       | 0       | 1     | 388   | 4   | 392         | 0.84          | 4:00-5:00         |
| 4:15-5:15                             | 0                     | 227               | 0      | 227                         | 0                  | 0      | 1      | 1     | 1                     | 184    | 1      | 186   | 0                  | 0       | 0       | 0     | 413   | 1   | 414         | 0.84          | 4:15-5:15         |
| 4:30-5:30                             | 0                     | 231               | 0      | 231                         | 0                  | 0      | 1      | 1     | 1                     | 201    | 0      | 202   | 0                  | 0       | 0       | 0     | 433   | 1   | 434         | 0.88          | 4:30-5:30         |
| 4:45-5:45                             | 0                     | 215               | 0      | 215                         | 0                  | 0      | 1      | 1     | 0                     | 194    | 0      | 194   | 0                  | 0       | 0       | 0     | 409   | 1   | 410         | 0.83          | 4:45-5:45         |
| 5:00-6:00                             | 0                     | 205               | 0      | 205                         | 0                  | 0      | 0      | 0     | 0                     | 203    | 0      | 203   | 0                  | 0       | 0       | 0     | 408   | 0   | 408         | 0.83          | 5:00-6:00         |
| 5:15-6:15                             | 2                     | 169               | 0      | 171                         | 0                  | 0      | 0      | 0     | 0                     | 186    | 0      | 186   | 2                  | 0       | 0       | 2     | 357   | 2   | 359         | 0.82          | 5:15-6:15         |
| 5:30-6:30                             | 2                     | 136               | 0      | 138                         | 0                  | 0      | 1      | 1     | 2                     | 164    | 0      | 166   | 2                  | 0       | 0       | 2     | 304   | 3   | 307         | 0.83          | 5:30-6:30         |
| 5:45-6:45                             | 2                     | 109               | 0      | 111                         | 0                  | 0      | 1      | 1     | 2                     | 134    | 0      | 136   | 2                  | 0       | 0       | 2     | 247   | 3   | 250         | 0.76          | 5:45-6:45         |
| 6:00-7:00                             | 2                     | 74                | 0      | 76                          | 0                  | 0      | 1      | 1     | 3                     | 130    | 0      | 133   | 2                  | 0       | 0       | 2     | 209   | 3   | 212         | 0.72          | 6:00-7:00         |
| PM Peak 4:30-5:30                     | 0                     | 231               | 0      | 231                         | 0                  | 0      | 1      | 1     | 1                     | 201    | 0      | 202   | 0                  | 0       | 0       | 0     | 433   | 1   | 434         | 0.88          | PM Peak 4:30-5:30 |

Wells & Associates, LLC  
McLean, Virginia

# Pedestrian Volume Survey



Project Name: Square 776  
Project Number: 3013  
Location: Washington DC  
Intersection: 3rd Street and Driveway  
Weather: Clear  
Date: 11/16/2005  
Surveyor: Daryl  
Hours: Mileage:



| TIME      | Movement |   |   |   |    |   |   |   |
|-----------|----------|---|---|---|----|---|---|---|
|           | 1        | 2 | 3 | 4 | 5  | 6 | 7 | 8 |
| AM        |          |   |   |   |    |   |   |   |
| 6:00-6:15 | 1        | 0 | 0 | 1 | 1  | 0 | 0 | 0 |
| 6:15-6:30 | 0        | 2 | 0 | 7 | 2  | 0 | 1 | 0 |
| 6:30-6:45 | 0        | 0 | 1 | 1 | 0  | 0 | 0 | 2 |
| 6:45-7:00 | 0        | 2 | 4 | 0 | 10 | 2 | 0 | 0 |
| 7:00-7:15 | 3        | 2 | 1 | 2 | 5  | 2 | 1 | 2 |
| 7:15-7:30 | 1        | 1 | 3 | 4 | 3  | 6 | 0 | 0 |
| 7:30-7:45 | 1        | 1 | 2 | 1 | 2  | 1 | 2 | 1 |
| 7:45-8:00 | 2        | 3 | 4 | 2 | 1  | 0 | 2 | 0 |
| 8:00-8:15 | 1        | 0 | 5 | 8 | 1  | 2 | 2 | 0 |
| 8:15-8:30 | 2        | 2 | 4 | 5 | 1  | 0 | 2 | 0 |
| 8:30-8:45 | 2        | 1 | 8 | 4 | 0  | 0 | 3 | 0 |
| 8:45-9:00 | 5        | 3 | 7 | 5 | 8  | 8 | 0 | 2 |
| PM        |          |   |   |   |    |   |   |   |
| 4:00-4:15 | 2        | 0 | 5 | 3 | 0  | 0 | 0 | 0 |
| 4:15-4:30 | 0        | 0 | 0 | 4 | 3  | 0 | 0 | 1 |
| 4:30-4:45 | 0        | 0 | 2 | 0 | 1  | 0 | 0 | 1 |
| 4:45-5:00 | 0        | 0 | 0 | 1 | 0  | 0 | 0 | 0 |
| 5:00-5:15 | 0        | 0 | 2 | 4 | 0  | 0 | 0 | 1 |
| 5:15-5:30 | 0        | 0 | 4 | 5 | 0  | 0 | 0 | 1 |
| 5:30-5:45 | 0        | 0 | 2 | 1 | 0  | 0 | 0 | 0 |
| 5:45-6:00 | 0        | 0 | 2 | 5 | 0  | 0 | 0 | 0 |
| 6:00-6:15 | 0        | 0 | 1 | 2 | 0  | 0 | 0 | 1 |
| 6:15-6:30 | 0        | 0 | 2 | 2 | 0  | 0 | 3 | 0 |
| 6:30-6:45 | 0        | 0 | 0 | 3 | 0  | 0 | 1 | 0 |
| 6:45-7:00 | 0        | 0 | 1 | 0 | 0  | 0 | 0 | 1 |

# Wells & Associates, LLC

McLean, Virginia

## Existing Traffic Count

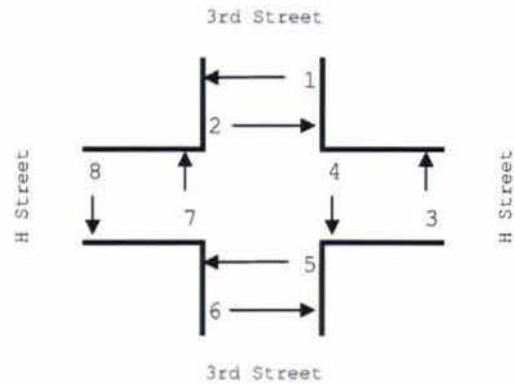
| PROJECT: Square 776                   |                       |        |        | DATE: 11/16/2005 |                    |        |        | SOUTHBOUND ROAD: 3rd Street |                       |        |        | 3rd Street |                    |         |         |       |       |       |             |               |                   |  |
|---------------------------------------|-----------------------|--------|--------|------------------|--------------------|--------|--------|-----------------------------|-----------------------|--------|--------|------------|--------------------|---------|---------|-------|-------|-------|-------------|---------------|-------------------|--|
| W & A JOB NO.: 3013                   |                       |        |        | DAY: Wednesday   |                    |        |        | NORTHBOUND ROAD: 3rd Street |                       |        |        | 3rd Street |                    |         |         |       |       |       |             |               |                   |  |
| INTERSECTION: 3rd Street and H Street |                       |        |        | WEATHER: Clear   |                    |        |        | WESTBOUND ROAD: H Street    |                       |        |        | H Street   |                    |         |         |       |       |       |             |               |                   |  |
| LOCATION: Washington, DC              |                       |        |        | COUNTED BY: Matt |                    |        |        | EASTBOUND ROAD: H Street    |                       |        |        | H Street   |                    |         |         |       |       |       |             |               |                   |  |
|                                       |                       |        |        | INPUTED BY: CP   |                    |        |        |                             |                       |        |        |            |                    |         |         |       |       |       |             |               |                   |  |
| Time Period                           | Turning Movements     |        |        |                  |                    |        |        |                             |                       |        |        |            |                    |         |         |       | Total | PHF   | Time Period |               |                   |  |
|                                       | Southbound 3rd Street |        |        |                  | Westbound H Street |        |        |                             | Northbound 3rd Street |        |        |            | Eastbound H Street |         |         |       |       |       |             | North & South | East & West       |  |
|                                       | 1 Right               | 2 Thru | 3 Left | Total            | 4 Right            | 5 Thru | 6 Left | Total                       | 7 Right               | 8 Thru | 9 Left | Total      | 10 Right           | 11 Thru | 12 Left | Total |       |       |             |               |                   |  |
| AM                                    |                       |        |        |                  |                    |        |        |                             |                       |        |        |            |                    |         |         |       |       |       |             |               |                   |  |
| 6:00-6:15                             | 8                     | 3      | 2      | 13               | 1                  | 170    | 1      | 172                         | 0                     | 7      | 4      | 11         | 14                 | 31      | 9       | 54    | 24    | 226   | 250         |               | 6:00-6:15         |  |
| 6:15-6:30                             | 9                     | 6      | 0      | 15               | 9                  | 223    | 4      | 236                         | 1                     | 11     | 2      | 14         | 7                  | 37      | 5       | 49    | 29    | 285   | 314         |               | 6:15-6:30         |  |
| 6:30-6:45                             | 3                     | 3      | 2      | 8                | 5                  | 270    | 0      | 275                         | 2                     | 15     | 5      | 22         | 2                  | 36      | 3       | 41    | 30    | 316   | 346         |               | 6:30-6:45         |  |
| 6:45-7:00                             | 5                     | 6      | 1      | 12               | 13                 | 331    | 5      | 349                         | 2                     | 14     | 7      | 23         | 1                  | 58      | 12      | 71    | 35    | 420   | 455         |               | 6:45-7:00         |  |
| 7:00-7:15                             | 6                     | 2      | 4      | 12               | 9                  | 377    | 8      | 394                         | 4                     | 13     | 4      | 21         | 8                  | 73      | 5       | 86    | 33    | 480   | 513         |               | 7:00-7:15         |  |
| 7:15-7:30                             | 3                     | 7      | 5      | 15               | 25                 | 417    | 9      | 451                         | 2                     | 22     | 9      | 33         | 6                  | 76      | 4       | 86    | 48    | 537   | 585         |               | 7:15-7:30         |  |
| 7:30-7:45                             | 9                     | 8      | 3      | 20               | 30                 | 383    | 12     | 425                         | 6                     | 14     | 15     | 35         | 5                  | 40      | 6       | 51    | 55    | 476   | 531         |               | 7:30-7:45         |  |
| 7:45-8:00                             | 11                    | 9      | 8      | 28               | 26                 | 396    | 12     | 434                         | 5                     | 20     | 11     | 36         | 12                 | 61      | 8       | 81    | 64    | 515   | 579         |               | 7:45-8:00         |  |
| 8:00-8:15                             | 8                     | 17     | 5      | 30               | 40                 | 364    | 8      | 412                         | 12                    | 24     | 17     | 53         | 10                 | 102     | 14      | 126   | 83    | 538   | 621         |               | 8:00-8:15         |  |
| 8:15-8:30                             | 5                     | 19     | 7      | 31               | 34                 | 380    | 9      | 423                         | 6                     | 40     | 20     | 66         | 11                 | 70      | 13      | 94    | 97    | 517   | 614         |               | 8:15-8:30         |  |
| 8:30-8:45                             | 4                     | 21     | 5      | 30               | 31                 | 356    | 16     | 403                         | 4                     | 38     | 17     | 59         | 12                 | 79      | 11      | 102   | 89    | 505   | 594         |               | 8:30-8:45         |  |
| 8:45-9:00                             | 18                    | 13     | 7      | 38               | 21                 | 339    | 7      | 367                         | 6                     | 29     | 17     | 52         | 11                 | 64      | 9       | 84    | 90    | 451   | 541         |               | 8:45-9:00         |  |
| 3 Hour Totals                         | 89                    | 114    | 49     | 252              | 244                | 4,006  | 91     | 4,341                       | 50                    | 247    | 128    | 425        | 99                 | 727     | 99      | 925   | 677   | 5,266 | 5,943       |               |                   |  |
| 1 Hour Totals                         |                       |        |        |                  |                    |        |        |                             |                       |        |        |            |                    |         |         |       |       |       |             |               |                   |  |
| 6:00-7:00                             | 25                    | 18     | 5      | 48               | 28                 | 994    | 10     | 1,032                       | 5                     | 47     | 18     | 70         | 24                 | 162     | 29      | 215   | 118   | 1,247 | 1,365       | 0.75          | 6:00-7:00         |  |
| 6:15-7:15                             | 23                    | 17     | 7      | 47               | 36                 | 1,201  | 17     | 1,254                       | 9                     | 53     | 18     | 80         | 18                 | 204     | 25      | 247   | 127   | 1,501 | 1,628       | 0.79          | 6:15-7:15         |  |
| 6:30-7:30                             | 17                    | 18     | 12     | 47               | 52                 | 1,395  | 22     | 1,469                       | 10                    | 64     | 25     | 99         | 17                 | 243     | 24      | 284   | 146   | 1,753 | 1,899       | 0.81          | 6:30-7:30         |  |
| 6:45-7:45                             | 23                    | 23     | 13     | 59               | 77                 | 1,508  | 34     | 1,619                       | 14                    | 63     | 35     | 112        | 20                 | 247     | 27      | 294   | 171   | 1,913 | 2,084       | 0.89          | 6:45-7:45         |  |
| 7:00-8:00                             | 29                    | 26     | 20     | 75               | 90                 | 1,573  | 41     | 1,704                       | 17                    | 69     | 39     | 125        | 31                 | 250     | 23      | 304   | 200   | 2,008 | 2,208       | 0.94          | 7:00-8:00         |  |
| 7:15-8:15                             | 31                    | 41     | 21     | 93               | 121                | 1,560  | 41     | 1,722                       | 25                    | 80     | 52     | 157        | 33                 | 279     | 32      | 344   | 250   | 2,066 | 2,316       | 0.93          | 7:15-8:15         |  |
| 7:30-8:30                             | 33                    | 53     | 23     | 109              | 130                | 1,523  | 41     | 1,694                       | 29                    | 98     | 63     | 190        | 38                 | 273     | 41      | 352   | 299   | 2,046 | 2,345       | 0.94          | 7:30-8:30         |  |
| 7:45-8:45                             | 28                    | 66     | 25     | 119              | 131                | 1,496  | 45     | 1,672                       | 27                    | 122    | 65     | 214        | 45                 | 312     | 46      | 403   | 333   | 2,075 | 2,408       | 0.97          | 7:45-8:45         |  |
| 8:00-9:00                             | 35                    | 70     | 24     | 129              | 126                | 1,439  | 40     | 1,605                       | 28                    | 131    | 71     | 230        | 44                 | 315     | 47      | 406   | 359   | 2,011 | 2,370       | 0.95          | 8:00-9:00         |  |
| AM Peak 7:45-8:45                     | 28                    | 66     | 25     | 119              | 131                | 1,496  | 45     | 1,672                       | 27                    | 122    | 65     | 214        | 45                 | 312     | 46      | 403   | 333   | 2,075 | 2,408       | 0.97          | AM Peak 7:45-8:45 |  |
| PM                                    |                       |        |        |                  |                    |        |        |                             |                       |        |        |            |                    |         |         |       |       |       |             |               |                   |  |
| 4:00-4:15                             | 10                    | 17     | 16     | 43               | 23                 | 133    | 4      | 160                         | 4                     | 21     | 10     | 35         | 21                 | 299     | 19      | 339   | 78    | 499   | 577         |               | 4:00-4:15         |  |
| 4:15-4:30                             | 10                    | 24     | 17     | 51               | 10                 | 117    | 6      | 133                         | 6                     | 16     | 7      | 29         | 12                 | 285     | 12      | 309   | 80    | 442   | 522         |               | 4:15-4:30         |  |
| 4:30-4:45                             | 5                     | 23     | 23     | 51               | 7                  | 110    | 4      | 121                         | 10                    | 30     | 6      | 46         | 14                 | 293     | 16      | 323   | 97    | 444   | 541         |               | 4:30-4:45         |  |
| 4:45-5:00                             | 6                     | 28     | 26     | 60               | 6                  | 117    | 6      | 129                         | 6                     | 15     | 11     | 32         | 15                 | 275     | 12      | 302   | 92    | 431   | 523         |               | 4:45-5:00         |  |
| 5:00-5:15                             | 10                    | 27     | 21     | 58               | 13                 | 144    | 6      | 163                         | 7                     | 32     | 12     | 51         | 16                 | 316     | 21      | 353   | 109   | 516   | 625         |               | 5:00-5:15         |  |
| 5:15-5:30                             | 11                    | 15     | 22     | 48               | 10                 | 124    | 6      | 140                         | 12                    | 33     | 10     | 55         | 21                 | 309     | 18      | 348   | 103   | 488   | 591         |               | 5:15-5:30         |  |
| 5:30-5:45                             | 9                     | 21     | 18     | 48               | 10                 | 119    | 4      | 133                         | 4                     | 21     | 9      | 34         | 12                 | 299     | 18      | 329   | 82    | 462   | 544         |               | 5:30-5:45         |  |
| 5:45-6:00                             | 15                    | 18     | 8      | 41               | 5                  | 114    | 0      | 119                         | 6                     | 19     | 9      | 34         | 13                 | 300     | 15      | 328   | 75    | 447   | 522         |               | 5:45-6:00         |  |
| 6:00-6:15                             | 8                     | 11     | 11     | 30               | 7                  | 103    | 4      | 114                         | 12                    | 19     | 11     | 42         | 12                 | 291     | 16      | 319   | 72    | 433   | 505         |               | 6:00-6:15         |  |
| 6:15-6:30                             | 4                     | 11     | 6      | 21               | 7                  | 100    | 3      | 110                         | 7                     | 23     | 13     | 43         | 20                 | 239     | 10      | 269   | 64    | 379   | 443         |               | 6:15-6:30         |  |
| 6:30-6:45                             | 3                     | 10     | 6      | 19               | 2                  | 106    | 4      | 112                         | 4                     | 10     | 6      | 20         | 9                  | 245     | 11      | 265   | 39    | 377   | 416         |               | 6:30-6:45         |  |
| 6:45-7:00                             | 3                     | 4      | 5      | 12               | 8                  | 90     | 3      | 101                         | 4                     | 21     | 12     | 37         | 12                 | 239     | 13      | 264   | 49    | 365   | 414         |               | 6:45-7:00         |  |
| 3 Hour Totals                         | 94                    | 209    | 179    | 482              | 108                | 1,377  | 50     | 1,535                       | 82                    | 260    | 116    | 458        | 177                | 3,390   | 181     | 3,748 | 940   | 5,283 | 6,223       |               |                   |  |
| 1 Hour Totals                         |                       |        |        |                  |                    |        |        |                             |                       |        |        |            |                    |         |         |       |       |       |             |               |                   |  |
| 4:00-5:00                             | 31                    | 92     | 82     | 205              | 46                 | 477    | 20     | 543                         | 26                    | 82     | 34     | 142        | 62                 | 1,152   | 59      | 1,273 | 347   | 1,816 | 2,163       | 0.94          | 4:00-5:00         |  |
| 4:15-5:15                             | 31                    | 102    | 87     | 220              | 36                 | 488    | 22     | 546                         | 29                    | 93     | 36     | 158        | 57                 | 1,169   | 61      | 1,287 | 378   | 1,833 | 2,211       | 0.88          | 4:15-5:15         |  |
| 4:30-5:30                             | 32                    | 93     | 92     | 217              | 36                 | 495    | 22     | 553                         | 35                    | 110    | 39     | 184        | 66                 | 1,193   | 67      | 1,326 | 401   | 1,879 | 2,280       | 0.91          | 4:30-5:30         |  |
| 4:45-5:45                             | 36                    | 91     | 87     | 214              | 39                 | 504    | 22     | 565                         | 29                    | 101    | 42     | 172        | 64                 | 1,199   | 69      | 1,332 | 386   | 1,897 | 2,283       | 0.91          | 4:45-5:45         |  |
| 5:00-6:00                             | 45                    | 81     | 69     | 195              | 38                 | 501    | 16     | 555                         | 29                    | 105    | 40     | 174        | 62                 | 1,224   | 72      | 1,358 | 369   | 1,913 | 2,282       | 0.91          | 5:00-6:00         |  |
| 5:15-6:15                             | 43                    | 65     | 59     | 167              | 32                 | 460    | 14     | 506                         | 34                    | 92     | 39     | 165        | 58                 | 1,199   | 67      | 1,324 | 332   | 1,830 | 2,162       | 0.91          | 5:15-6:15         |  |
| 5:30-6:30                             | 36                    | 61     | 43     | 140              | 29                 | 436    | 11     | 476                         | 29                    | 82     | 42     | 153        | 57                 | 1,129   | 59      | 1,245 | 293   | 1,721 | 2,014       | 0.93          | 5:30-6:30         |  |
| 5:45-6:45                             | 30                    | 50     | 31     | 111              | 21                 | 423    | 11     | 455                         | 29                    | 71     | 39     | 139        | 54                 | 1,075   | 52      | 1,181 | 250   | 1,636 | 1,886       | 0.90          | 5:45-6:45         |  |
| 6:00-7:00                             | 18                    | 36     | 28     | 82               | 24                 | 399    | 14     | 437                         | 27                    | 73     | 42     | 142        | 53                 | 1,014   | 50      | 1,117 | 224   | 1,554 | 1,778       | 0.88          | 6:00-7:00         |  |
| PM Peak 4:45-5:45                     | 36                    | 91     | 87     | 214              | 39                 | 504    | 22     | 565                         | 29                    | 101    | 42     | 172        | 64                 | 1,199   | 69      | 1,332 | 386   | 1,897 | 2,283       | 0.91          | PM Peak 4:45-5:45 |  |

Wells & Associates, LLC  
McLean, Virginia

# Pedestrian Volume Survey



Project Name: Square 776  
Project Number: 3013  
Location: Washington DC  
Intersection: 3rd Street and H Street  
Weather: Clear  
Date: 11/16/2005  
Surveyor: Daryl  
Hours: Mileage:



| TIME      | Movement |   |   |   |   |   |   |   |
|-----------|----------|---|---|---|---|---|---|---|
|           | 1        | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| AM        |          |   |   |   |   |   |   |   |
| 6:00-6:15 | 2        | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| 6:15-6:30 | 1        | 0 | 0 | 6 | 1 | 1 | 2 | 1 |
| 6:30-6:45 | 2        | 0 | 0 | 1 | 0 | 2 | 0 | 2 |
| 6:45-7:00 | 0        | 0 | 0 | 0 | 1 | 0 | 2 | 0 |
| 7:00-7:15 | 1        | 0 | 2 | 0 | 2 | 1 | 0 | 3 |
| 7:15-7:30 | 2        | 0 | 0 | 0 | 1 | 3 | 2 | 2 |
| 7:30-7:45 | 3        | 1 | 1 | 2 | 0 | 2 | 1 | 2 |
| 7:45-8:00 | 1        | 0 | 1 | 4 | 2 | 1 | 2 | 2 |
| 8:00-8:15 | 1        | 1 | 1 | 1 | 3 | 1 | 0 | 0 |
| 8:15-8:30 | 1        | 1 | 1 | 4 | 1 | 2 | 1 | 0 |
| 8:30-8:45 | 4        | 2 | 6 | 1 | 7 | 4 | 1 | 1 |
| 8:45-9:00 | 7        | 3 | 6 | 5 | 7 | 2 | 2 | 6 |
| PM        |          |   |   |   |   |   |   |   |
| 4:00-4:15 | 0        | 0 | 4 | 3 | 2 | 0 | 0 | 0 |
| 4:15-4:30 | 0        | 1 | 1 | 1 | 1 | 0 | 0 | 0 |
| 4:30-4:45 | 2        | 3 | 3 | 1 | 1 | 4 | 1 | 0 |
| 4:45-5:00 | 3        | 1 | 1 | 0 | 4 | 0 | 0 | 1 |
| 5:00-5:15 | 2        | 3 | 2 | 3 | 4 | 2 | 1 | 2 |
| 5:15-5:30 | 2        | 0 | 1 | 3 | 0 | 3 | 0 | 0 |
| 5:30-5:45 | 2        | 0 | 4 | 5 | 5 | 2 | 0 | 1 |
| 5:45-6:00 | 0        | 0 | 0 | 6 | 3 | 3 | 0 | 0 |
| 6:00-6:15 | 2        | 0 | 1 | 0 | 1 | 1 | 1 | 2 |
| 6:15-6:30 | 0        | 0 | 1 | 2 | 2 | 4 | 3 | 0 |
| 6:30-6:45 | 0        | 0 | 1 | 0 | 1 | 1 | 1 | 0 |
| 6:45-7:00 | 0        | 0 | 2 | 0 | 0 | 3 | 0 | 0 |

# Wells & Associates, LLC

McLean, Virginia

## Existing Traffic Count

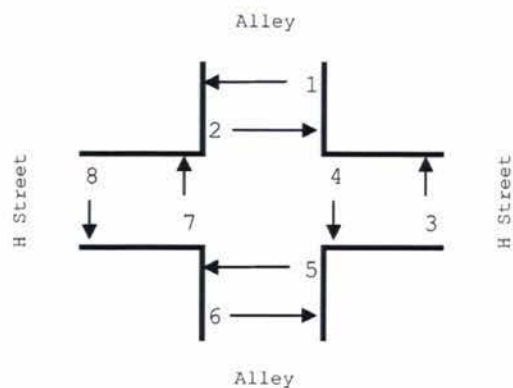
| PROJECT: Square 776              |                   |        |        | DATE: 11/16/2005 |                    |        |        | SOUTHBOUND ROAD: Alley   |                |        |        | Alley    |                    |         |         |       |       |       |             |               |             |
|----------------------------------|-------------------|--------|--------|------------------|--------------------|--------|--------|--------------------------|----------------|--------|--------|----------|--------------------|---------|---------|-------|-------|-------|-------------|---------------|-------------|
| W & A JOB NO.: 3013              |                   |        |        | DAY: Wednesday   |                    |        |        | NORTHBOUND ROAD: N/A     |                |        |        | N/A      |                    |         |         |       |       |       |             |               |             |
| INTERSECTION: H Street and Alley |                   |        |        | WEATHER: Clear   |                    |        |        | WESTBOUND ROAD: H Street |                |        |        | H Street |                    |         |         |       |       |       |             |               |             |
| LOCATION: Washington, DC         |                   |        |        | COUNTED BY: Roy  |                    |        |        | EASTBOUND ROAD: H Street |                |        |        | H Street |                    |         |         |       |       |       |             |               |             |
|                                  |                   |        |        | INPUTED BY: CP   |                    |        |        |                          |                |        |        |          |                    |         |         |       |       |       |             |               |             |
| Time Period                      | Turning Movements |        |        |                  |                    |        |        |                          |                |        |        |          |                    |         |         |       | Total | PHF   | Time Period |               |             |
|                                  | Southbound Alley  |        |        |                  | Westbound H Street |        |        |                          | Northbound N/A |        |        |          | Eastbound H Street |         |         |       |       |       |             | North & South | East & West |
|                                  | 1 Right           | 2 Thru | 3 Left | Total            | 4 Right            | 5 Thru | 6 Left | Total                    | 7 Right        | 8 Thru | 9 Left | Total    | 10 Right           | 11 Thru | 12 Left | Total |       |       |             |               |             |
| AM                               |                   |        |        |                  |                    |        |        |                          |                |        |        |          |                    |         |         |       |       |       |             |               |             |
| 6:00-6:15                        | 0                 | 0      | 0      | 0                | 0                  | 168    | 0      | 168                      | 0              | 0      | 0      | 0        | 0                  | 34      | 0       | 34    | 0     | 202   | 202         |               | 6:00-6:15   |
| 6:15-6:30                        | 0                 | 0      | 0      | 0                | 0                  | 238    | 0      | 238                      | 0              | 0      | 0      | 0        | 0                  | 43      | 0       | 43    | 0     | 281   | 281         |               | 6:15-6:30   |
| 6:30-6:45                        | 0                 | 0      | 0      | 0                | 1                  | 278    | 0      | 279                      | 0              | 0      | 0      | 0        | 0                  | 47      | 0       | 47    | 0     | 326   | 326         |               | 6:30-6:45   |
| 6:45-7:00                        | 0                 | 0      | 0      | 0                | 0                  | 339    | 0      | 339                      | 0              | 0      | 0      | 0        | 0                  | 68      | 0       | 68    | 0     | 407   | 407         |               | 6:45-7:00   |
| 7:00-7:15                        | 1                 | 0      | 0      | 1                | 0                  | 404    | 0      | 404                      | 0              | 0      | 0      | 0        | 0                  | 85      | 0       | 85    | 1     | 489   | 490         |               | 7:00-7:15   |
| 7:15-7:30                        | 0                 | 0      | 0      | 0                | 0                  | 460    | 0      | 460                      | 0              | 0      | 0      | 0        | 0                  | 88      | 0       | 88    | 0     | 548   | 548         |               | 7:15-7:30   |
| 7:30-7:45                        | 0                 | 0      | 0      | 0                | 0                  | 420    | 0      | 420                      | 0              | 0      | 0      | 0        | 0                  | 59      | 0       | 59    | 0     | 479   | 479         |               | 7:30-7:45   |
| 7:45-8:00                        | 0                 | 0      | 0      | 0                | 1                  | 419    | 0      | 420                      | 0              | 0      | 0      | 0        | 0                  | 87      | 0       | 87    | 0     | 507   | 507         |               | 7:45-8:00   |
| 8:00-8:15                        | 0                 | 0      | 0      | 0                | 0                  | 414    | 0      | 414                      | 0              | 0      | 0      | 0        | 0                  | 121     | 0       | 121   | 0     | 535   | 535         |               | 8:00-8:15   |
| 8:15-8:30                        | 0                 | 0      | 0      | 0                | 1                  | 437    | 0      | 438                      | 0              | 0      | 0      | 0        | 0                  | 96      | 0       | 96    | 0     | 534   | 534         |               | 8:15-8:30   |
| 8:30-8:45                        | 0                 | 0      | 0      | 0                | 1                  | 398    | 0      | 399                      | 0              | 0      | 0      | 0        | 0                  | 100     | 0       | 100   | 0     | 499   | 499         |               | 8:30-8:45   |
| 8:45-9:00                        | 0                 | 0      | 0      | 0                | 0                  | 382    | 0      | 382                      | 0              | 0      | 0      | 0        | 0                  | 83      | 0       | 83    | 0     | 465   | 465         |               | 8:45-9:00   |
| 3 Hour Totals                    | 1                 | 0      | 0      | 1                | 4                  | 4,357  | 0      | 4,361                    | 0              | 0      | 0      | 0        | 0                  | 911     | 0       | 911   | 1     | 5,272 | 5,273       |               |             |
| 1 Hour Totals                    |                   |        |        |                  |                    |        |        |                          |                |        |        |          |                    |         |         |       |       |       |             |               |             |
| 6:00-7:00                        | 0                 | 0      | 0      | 0                | 1                  | 1,023  | 0      | 1,024                    | 0              | 0      | 0      | 0        | 0                  | 192     | 0       | 192   | 0     | 1,216 | 1,216       | 0.75          | 6:00-7:00   |
| 6:15-7:15                        | 1                 | 0      | 0      | 1                | 1                  | 1,259  | 0      | 1,260                    | 0              | 0      | 0      | 0        | 0                  | 243     | 0       | 243   | 1     | 1,503 | 1,504       | 0.77          | 6:15-7:15   |
| 6:30-7:30                        | 1                 | 0      | 0      | 1                | 1                  | 1,481  | 0      | 1,482                    | 0              | 0      | 0      | 0        | 0                  | 288     | 0       | 288   | 1     | 1,770 | 1,771       | 0.81          | 6:30-7:30   |
| 6:45-7:45                        | 1                 | 0      | 0      | 1                | 0                  | 1,623  | 0      | 1,623                    | 0              | 0      | 0      | 0        | 0                  | 300     | 0       | 300   | 1     | 1,923 | 1,924       | 0.88          | 6:45-7:45   |
| 7:00-8:00                        | 1                 | 0      | 0      | 1                | 1                  | 1,703  | 0      | 1,704                    | 0              | 0      | 0      | 0        | 0                  | 319     | 0       | 319   | 1     | 2,023 | 2,024       | 0.92          | 7:00-8:00   |
| 7:15-8:15                        | 0                 | 0      | 0      | 0                | 1                  | 1,713  | 0      | 1,714                    | 0              | 0      | 0      | 0        | 0                  | 355     | 0       | 355   | 0     | 2,069 | 2,069       | 0.94          | 7:15-8:15   |
| 7:30-8:30                        | 0                 | 0      | 0      | 0                | 2                  | 1,690  | 0      | 1,692                    | 0              | 0      | 0      | 0        | 0                  | 363     | 0       | 363   | 0     | 2,055 | 2,055       | 0.96          | 7:30-8:30   |
| 7:45-8:45                        | 0                 | 0      | 0      | 0                | 3                  | 1,668  | 0      | 1,671                    | 0              | 0      | 0      | 0        | 0                  | 404     | 0       | 404   | 0     | 2,075 | 2,075       | 0.97          | 7:45-8:45   |
| 8:00-9:00                        | 0                 | 0      | 0      | 0                | 2                  | 1,631  | 0      | 1,633                    | 0              | 0      | 0      | 0        | 0                  | 400     | 0       | 400   | 0     | 2,033 | 2,033       | 0.95          | 8:00-9:00   |
| AM Peak                          |                   |        |        |                  |                    |        |        |                          |                |        |        |          |                    |         |         |       |       |       |             |               | AM Peak     |
| 7:45-8:45                        | 0                 | 0      | 0      | 0                | 3                  | 1,668  | 0      | 1,671                    | 0              | 0      | 0      | 0        | 0                  | 404     | 0       | 404   | 0     | 2,075 | 2,075       | 0.97          | 7:45-8:45   |
| PM                               |                   |        |        |                  |                    |        |        |                          |                |        |        |          |                    |         |         |       |       |       |             |               |             |
| 4:00-4:15                        | 0                 | 0      | 0      | 0                | 0                  | 165    | 0      | 165                      | 0              | 0      | 0      | 0        | 0                  | 323     | 0       | 323   | 0     | 488   | 488         |               | 4:00-4:15   |
| 4:15-4:30                        | 0                 | 0      | 0      | 0                | 1                  | 138    | 0      | 139                      | 0              | 0      | 0      | 0        | 0                  | 319     | 0       | 319   | 0     | 458   | 458         |               | 4:15-4:30   |
| 4:30-4:45                        | 0                 | 0      | 0      | 0                | 1                  | 124    | 0      | 125                      | 0              | 0      | 0      | 0        | 0                  | 337     | 0       | 337   | 0     | 462   | 462         |               | 4:30-4:45   |
| 4:45-5:00                        | 1                 | 0      | 0      | 1                | 0                  | 131    | 0      | 131                      | 0              | 0      | 0      | 0        | 0                  | 315     | 0       | 315   | 1     | 446   | 447         |               | 4:45-5:00   |
| 5:00-5:15                        | 1                 | 0      | 0      | 1                | 0                  | 170    | 0      | 170                      | 0              | 0      | 0      | 0        | 0                  | 353     | 0       | 353   | 1     | 523   | 524         |               | 5:00-5:15   |
| 5:15-5:30                        | 2                 | 0      | 1      | 3                | 0                  | 134    | 0      | 134                      | 0              | 0      | 0      | 0        | 0                  | 359     | 0       | 359   | 3     | 493   | 496         |               | 5:15-5:30   |
| 5:30-5:45                        | 0                 | 0      | 0      | 0                | 0                  | 133    | 0      | 133                      | 0              | 0      | 0      | 0        | 0                  | 334     | 0       | 334   | 0     | 467   | 467         |               | 5:30-5:45   |
| 5:45-6:00                        | 0                 | 0      | 0      | 0                | 0                  | 124    | 0      | 124                      | 0              | 0      | 0      | 0        | 0                  | 319     | 0       | 319   | 0     | 443   | 443         |               | 5:45-6:00   |
| 6:00-6:15                        | 1                 | 0      | 1      | 2                | 0                  | 111    | 0      | 111                      | 0              | 0      | 0      | 0        | 0                  | 309     | 0       | 309   | 2     | 420   | 422         |               | 6:00-6:15   |
| 6:15-6:30                        | 0                 | 0      | 0      | 0                | 0                  | 105    | 0      | 105                      | 0              | 0      | 0      | 0        | 0                  | 244     | 0       | 244   | 0     | 349   | 349         |               | 6:15-6:30   |
| 6:30-6:45                        | 0                 | 0      | 0      | 0                | 0                  | 101    | 0      | 101                      | 0              | 0      | 0      | 0        | 0                  | 253     | 1       | 254   | 0     | 355   | 355         |               | 6:30-6:45   |
| 6:45-7:00                        | 3                 | 0      | 0      | 3                | 0                  | 97     | 0      | 97                       | 0              | 0      | 0      | 0        | 0                  | 244     | 0       | 244   | 3     | 341   | 344         |               | 6:45-7:00   |
| 3 Hour Totals                    | 8                 | 0      | 2      | 10               | 2                  | 1,533  | 0      | 1,535                    | 0              | 0      | 0      | 0        | 0                  | 3,709   | 1       | 3,710 | 10    | 5,245 | 5,255       |               |             |
| 1 Hour Totals                    |                   |        |        |                  |                    |        |        |                          |                |        |        |          |                    |         |         |       |       |       |             |               |             |
| 4:00-5:00                        | 1                 | 0      | 0      | 1                | 2                  | 558    | 0      | 560                      | 0              | 0      | 0      | 0        | 0                  | 1,294   | 0       | 1,294 | 1     | 1,854 | 1,855       | 0.95          | 4:00-5:00   |
| 4:15-5:15                        | 2                 | 0      | 0      | 2                | 2                  | 563    | 0      | 565                      | 0              | 0      | 0      | 0        | 0                  | 1,324   | 0       | 1,324 | 2     | 1,889 | 1,891       | 0.90          | 4:15-5:15   |
| 4:30-5:30                        | 4                 | 0      | 1      | 5                | 1                  | 559    | 0      | 560                      | 0              | 0      | 0      | 0        | 0                  | 1,364   | 0       | 1,364 | 5     | 1,924 | 1,929       | 0.92          | 4:30-5:30   |
| 4:45-5:45                        | 4                 | 0      | 1      | 5                | 0                  | 568    | 0      | 568                      | 0              | 0      | 0      | 0        | 0                  | 1,361   | 0       | 1,361 | 5     | 1,929 | 1,934       | 0.92          | 4:45-5:45   |
| 5:00-6:00                        | 3                 | 0      | 1      | 4                | 0                  | 561    | 0      | 561                      | 0              | 0      | 0      | 0        | 0                  | 1,365   | 0       | 1,365 | 4     | 1,926 | 1,930       | 0.92          | 5:00-6:00   |
| 5:15-6:15                        | 3                 | 0      | 2      | 5                | 0                  | 502    | 0      | 502                      | 0              | 0      | 0      | 0        | 0                  | 1,321   | 0       | 1,321 | 5     | 1,823 | 1,828       | 0.92          | 5:15-6:15   |
| 5:30-6:30                        | 1                 | 0      | 1      | 2                | 0                  | 473    | 0      | 473                      | 0              | 0      | 0      | 0        | 0                  | 1,206   | 0       | 1,206 | 2     | 1,679 | 1,681       | 0.90          | 5:30-6:30   |
| 5:45-6:45                        | 1                 | 0      | 1      | 2                | 0                  | 441    | 0      | 441                      | 0              | 0      | 0      | 0        | 0                  | 1,125   | 1       | 1,126 | 2     | 1,567 | 1,569       | 0.89          | 5:45-6:45   |
| 6:00-7:00                        | 4                 | 0      | 1      | 5                | 0                  | 414    | 0      | 414                      | 0              | 0      | 0      | 0        | 0                  | 1,050   | 1       | 1,051 | 5     | 1,465 | 1,470       | 0.87          | 6:00-7:00   |
| PM Peak                          |                   |        |        |                  |                    |        |        |                          |                |        |        |          |                    |         |         |       |       |       |             |               | PM Peak     |
| 4:45-5:45                        | 4                 | 0      | 1      | 5                | 0                  | 568    | 0      | 568                      | 0              | 0      | 0      | 0        | 0                  | 1,361   | 0       | 1,361 | 5     | 1,929 | 1,934       | 0.92          | 4:45-5:45   |

Wells & Associates, LLC  
McLean, Virginia

# Pedestrian Volume Survey



|                 |                    |
|-----------------|--------------------|
| Project Name:   | Square 776         |
| Project Number: | 3013               |
| Location:       | Washington DC      |
| Intersection:   | H Street and Alley |
| Weather:        | Clear              |
| Date:           | 11/16/2005         |
| Surveyor:       | Daryl              |
| Hours:          | Mileage:           |



| TIME      | Movement |   |   |   |    |   |   |   |
|-----------|----------|---|---|---|----|---|---|---|
|           | 1        | 2 | 3 | 4 | 5  | 6 | 7 | 8 |
| AM        |          |   |   |   |    |   |   |   |
| 6:00-6:15 | 2        | 0 | 0 | 0 | 1  | 1 | 0 | 0 |
| 6:15-6:30 | 1        | 0 | 0 | 0 | 1  | 1 | 0 | 0 |
| 6:30-6:45 | 1        | 0 | 0 | 0 | 1  | 2 | 0 | 0 |
| 6:45-7:00 | 1        | 0 | 0 | 0 | 1  | 0 | 0 | 0 |
| 7:00-7:15 | 1        | 2 | 0 | 0 | 5  | 3 | 0 | 0 |
| 7:15-7:30 | 2        | 4 | 0 | 0 | 2  | 2 | 0 | 0 |
| 7:30-7:45 | 3        | 0 | 0 | 0 | 0  | 2 | 0 | 0 |
| 7:45-8:00 | 5        | 0 | 0 | 0 | 2  | 0 | 0 | 0 |
| 8:00-8:15 | 3        | 4 | 0 | 0 | 8  | 5 | 0 | 0 |
| 8:15-8:30 | 5        | 2 | 0 | 0 | 1  | 2 | 0 | 0 |
| 8:30-8:45 | 6        | 1 | 0 | 0 | 11 | 6 | 0 | 0 |
| 8:45-9:00 | 7        | 3 | 0 | 0 | 3  | 2 | 0 | 0 |
| PM        |          |   |   |   |    |   |   |   |
| 4:00-4:15 | 4        | 1 | 0 | 0 | 8  | 2 | 0 | 0 |
| 4:15-4:30 | 0        | 2 | 0 | 0 | 4  | 2 | 0 | 0 |
| 4:30-4:45 | 3        | 3 | 0 | 0 | 1  | 4 | 0 | 0 |
| 4:45-5:00 | 3        | 4 | 0 | 0 | 2  | 5 | 0 | 0 |
| 5:00-5:15 | 1        | 4 | 0 | 0 | 8  | 2 | 0 | 0 |
| 5:15-5:30 | 2        | 2 | 0 | 0 | 3  | 3 | 0 | 0 |
| 5:30-5:45 | 2        | 1 | 0 | 0 | 2  | 5 | 0 | 0 |
| 5:45-6:00 | 1        | 0 | 0 | 0 | 6  | 2 | 0 | 0 |
| 6:00-6:15 | 0        | 1 | 0 | 0 | 1  | 1 | 0 | 0 |
| 6:15-6:30 | 0        | 0 | 0 | 0 | 2  | 3 | 0 | 0 |
| 6:30-6:45 | 0        | 0 | 0 | 0 | 1  | 1 | 0 | 0 |
| 6:45-7:00 | 0        | 0 | 0 | 0 | 0  | 2 | 0 | 0 |

## Appendix B

### Existing Levels of Service

Existing Conditions  
1: I Street & 3rd Street

AM Peak Period  
1/5/2006

|                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
|-----------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|                                   |  |  |  |  |  |  |  |  |  |  |  |  |
| Movement                          | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 | SBR                                                                                 |
| Lane Configurations               |                                                                                   |  |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |  |                                                                                     |                                                                                     |  |                                                                                     |
| Sign Control                      |                                                                                   | Stop                                                                              |                                                                                   |                                                                                   | Yield                                                                             |                                                                                   |                                                                                    | Stop                                                                                |                                                                                     |                                                                                     | Stop                                                                                |                                                                                     |
| Volume (vph)                      | 8                                                                                 | 23                                                                                | 26                                                                                | 0                                                                                 | 0                                                                                 | 0                                                                                 | 60                                                                                 | 214                                                                                 | 15                                                                                  | 13                                                                                  | 113                                                                                 | 20                                                                                  |
| Peak Hour Factor                  | 0.92                                                                              | 0.92                                                                              | 0.92                                                                              | 0.92                                                                              | 0.92                                                                              | 0.92                                                                              | 0.92                                                                               | 0.92                                                                                | 0.92                                                                                | 0.92                                                                                | 0.92                                                                                | 0.92                                                                                |
| Hourly flow rate (vph)            | 9                                                                                 | 25                                                                                | 28                                                                                | 0                                                                                 | 0                                                                                 | 0                                                                                 | 65                                                                                 | 233                                                                                 | 16                                                                                  | 14                                                                                  | 123                                                                                 | 22                                                                                  |
| Direction, Lane #                 | EB 1                                                                              | NB 1                                                                              | SB 1                                                                              |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Volume Total (vph)                | 62                                                                                | 314                                                                               | 159                                                                               |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Volume Left (vph)                 | 9                                                                                 | 65                                                                                | 14                                                                                |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Volume Right (vph)                | 28                                                                                | 16                                                                                | 22                                                                                |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Hadj (s)                          | -0.21                                                                             | 0.04                                                                              | -0.03                                                                             |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Departure Headway (s)             | 4.7                                                                               | 4.3                                                                               | 4.3                                                                               |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Degree Utilization, x             | 0.08                                                                              | 0.37                                                                              | 0.19                                                                              |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Capacity (veh/h)                  | 689                                                                               | 825                                                                               | 797                                                                               |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Control Delay (s)                 | 8.1                                                                               | 9.8                                                                               | 8.4                                                                               |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Approach Delay (s)                | 8.1                                                                               | 9.8                                                                               | 8.4                                                                               |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Approach LOS                      | A                                                                                 | A                                                                                 | A                                                                                 |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Intersection Summary              |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Delay                             |                                                                                   |                                                                                   | 9.2                                                                               |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| HCM Level of Service              |                                                                                   |                                                                                   | A                                                                                 |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Intersection Capacity Utilization |                                                                                   | 36.7%                                                                             |                                                                                   | ICU Level of Service                                                              |                                                                                   | A                                                                                 |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Analysis Period (min)             |                                                                                   | 15                                                                                |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |

Existing Conditions  
2: I Street & North Alley

AM Peak Period  
1/5/2006

|                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
|-----------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|                                   |  |  |  |  |  |  |  |  |  |  |  |  |
| Movement                          | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 | SBR                                                                                 |
| Lane Configurations               |                                                                                   |  |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |  |                                                                                     |                                                                                     |  |                                                                                     |
| Sign Control                      |                                                                                   | Free                                                                              |                                                                                   |                                                                                   | Free                                                                              |                                                                                   |                                                                                    | Stop                                                                                |                                                                                     |                                                                                     | Stop                                                                                |                                                                                     |
| Grade                             |                                                                                   | 0%                                                                                |                                                                                   |                                                                                   | 0%                                                                                |                                                                                   |                                                                                    | 0%                                                                                  |                                                                                     |                                                                                     | 0%                                                                                  |                                                                                     |
| Volume (veh/h)                    | 6                                                                                 | 45                                                                                | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                  | 1                                                                                   | 1                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   |
| Peak Hour Factor                  | 0.92                                                                              | 0.92                                                                              | 0.92                                                                              | 0.92                                                                              | 0.92                                                                              | 0.92                                                                              | 0.92                                                                               | 0.92                                                                                | 0.92                                                                                | 0.92                                                                                | 0.92                                                                                | 0.92                                                                                |
| Hourly flow rate (vph)            | 7                                                                                 | 49                                                                                | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                  | 1                                                                                   | 1                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   |
| Pedestrians                       |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lane Width (ft)                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Walking Speed (ft/s)              |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Percent Blockage                  |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Right turn flare (veh)            |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Median type                       |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    | None                                                                                |                                                                                     |                                                                                     | None                                                                                |                                                                                     |
| Median storage veh)               |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Upstream signal (ft)              |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| pX, platoon unblocked             |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| vC, conflicting volume            | 0                                                                                 |                                                                                   |                                                                                   | 49                                                                                |                                                                                   |                                                                                   | 62                                                                                 | 62                                                                                  | 49                                                                                  | 64                                                                                  | 62                                                                                  | 0                                                                                   |
| vC1, stage 1 conf vol             |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| vC2, stage 2 conf vol             |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| vCu, unblocked vol                | 0                                                                                 |                                                                                   |                                                                                   | 49                                                                                |                                                                                   |                                                                                   | 62                                                                                 | 62                                                                                  | 49                                                                                  | 64                                                                                  | 62                                                                                  | 0                                                                                   |
| tC, single (s)                    | 4.1                                                                               |                                                                                   |                                                                                   | 4.1                                                                               |                                                                                   |                                                                                   | 7.1                                                                                | 6.5                                                                                 | 6.2                                                                                 | 7.1                                                                                 | 6.5                                                                                 | 6.2                                                                                 |
| tC, 2 stage (s)                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| tF (s)                            | 2.2                                                                               |                                                                                   |                                                                                   | 2.2                                                                               |                                                                                   |                                                                                   | 3.5                                                                                | 4.0                                                                                 | 3.3                                                                                 | 3.5                                                                                 | 4.0                                                                                 | 3.3                                                                                 |
| p0 queue free %                   | 100                                                                               |                                                                                   |                                                                                   | 100                                                                               |                                                                                   |                                                                                   | 100                                                                                | 100                                                                                 | 100                                                                                 | 100                                                                                 | 100                                                                                 | 100                                                                                 |
| cM capacity (veh/h)               | 1623                                                                              |                                                                                   |                                                                                   | 1558                                                                              |                                                                                   |                                                                                   | 930                                                                                | 826                                                                                 | 1020                                                                                | 926                                                                                 | 826                                                                                 | 1085                                                                                |
| Direction, Lane #                 | EB 1                                                                              | NB 1                                                                              | SB 1                                                                              |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Volume Total                      | 55                                                                                | 2                                                                                 | 0                                                                                 |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Volume Left                       | 7                                                                                 | 0                                                                                 | 0                                                                                 |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Volume Right                      | 0                                                                                 | 1                                                                                 | 0                                                                                 |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| cSH                               | 1623                                                                              | 912                                                                               | 1700                                                                              |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Volume to Capacity                | 0.00                                                                              | 0.00                                                                              | 0.00                                                                              |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Queue Length 95th (ft)            | 0                                                                                 | 0                                                                                 | 0                                                                                 |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Control Delay (s)                 | 0.9                                                                               | 9.0                                                                               | 0.0                                                                               |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lane LOS                          | A                                                                                 | A                                                                                 | A                                                                                 |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Approach Delay (s)                | 0.9                                                                               | 9.0                                                                               | 0.0                                                                               |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Approach LOS                      |                                                                                   | A                                                                                 | A                                                                                 |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Intersection Summary              |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Average Delay                     |                                                                                   |                                                                                   | 1.2                                                                               |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Intersection Capacity Utilization |                                                                                   | 13.3%                                                                             |                                                                                   | ICU Level of Service                                                              |                                                                                   |                                                                                   |                                                                                    |                                                                                     | A                                                                                   |                                                                                     |                                                                                     |                                                                                     |
| Analysis Period (min)             |                                                                                   |                                                                                   | 15                                                                                |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
|                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |

Existing Conditions  
3: I Street & 4th Street

AM Peak Period  
1/5/2006

|                                   |  |  |  |  |  |  |  |  |  |  |  |  |
|-----------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Movement                          | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 | SBR                                                                                 |
| Lane Configurations               |                                                                                   |  |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |  |                                                                                     |
| Sign Control                      |                                                                                   | Stop                                                                              |                                                                                   |                                                                                   | Yield                                                                             |                                                                                   |                                                                                    | Free                                                                                |                                                                                     |                                                                                     | Free                                                                                |                                                                                     |
| Grade                             |                                                                                   | 0%                                                                                |                                                                                   |                                                                                   | 0%                                                                                |                                                                                   |                                                                                    | 0%                                                                                  |                                                                                     |                                                                                     | 0%                                                                                  |                                                                                     |
| Volume (veh/h)                    | 0                                                                                 | 32                                                                                | 14                                                                                | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                  | 0                                                                                   | 0                                                                                   | 12                                                                                  | 357                                                                                 | 0                                                                                   |
| Peak Hour Factor                  | 0.92                                                                              | 0.92                                                                              | 0.92                                                                              | 0.92                                                                              | 0.92                                                                              | 0.92                                                                              | 0.92                                                                               | 0.92                                                                                | 0.92                                                                                | 0.92                                                                                | 0.92                                                                                | 0.92                                                                                |
| Hourly flow rate (vph)            | 0                                                                                 | 35                                                                                | 15                                                                                | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                  | 0                                                                                   | 0                                                                                   | 13                                                                                  | 388                                                                                 | 0                                                                                   |
| Pedestrians                       |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lane Width (ft)                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Walking Speed (ft/s)              |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Percent Blockage                  |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Right turn flare (veh)            |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Median type                       |                                                                                   | None                                                                              |                                                                                   |                                                                                   | None                                                                              |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Median storage veh                |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Upstream signal (ft)              |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    | 450                                                                                 |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| pX, platoon unblocked             |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| vC, conflicting volume            | 414                                                                               | 414                                                                               | 388                                                                               | 447                                                                               | 414                                                                               | 0                                                                                 | 388                                                                                |                                                                                     |                                                                                     | 0                                                                                   |                                                                                     |                                                                                     |
| vC1, stage 1 conf vol             |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| vC2, stage 2 conf vol             |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| vCu, unblocked vol                | 414                                                                               | 414                                                                               | 388                                                                               | 447                                                                               | 414                                                                               | 0                                                                                 | 388                                                                                |                                                                                     |                                                                                     | 0                                                                                   |                                                                                     |                                                                                     |
| tC, single (s)                    | 7.1                                                                               | 6.5                                                                               | 6.2                                                                               | 7.1                                                                               | 6.5                                                                               | 6.2                                                                               | 4.1                                                                                |                                                                                     |                                                                                     | 4.1                                                                                 |                                                                                     |                                                                                     |
| tC, 2 stage (s)                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| tF (s)                            | 3.5                                                                               | 4.0                                                                               | 3.3                                                                               | 3.5                                                                               | 4.0                                                                               | 3.3                                                                               | 2.2                                                                                |                                                                                     |                                                                                     | 2.2                                                                                 |                                                                                     |                                                                                     |
| p0 queue free %                   | 100                                                                               | 93                                                                                | 98                                                                                | 100                                                                               | 100                                                                               | 100                                                                               | 100                                                                                |                                                                                     |                                                                                     | 99                                                                                  |                                                                                     |                                                                                     |
| cM capacity (veh/h)               | 545                                                                               | 524                                                                               | 660                                                                               | 481                                                                               | 524                                                                               | 1085                                                                              | 1170                                                                               |                                                                                     |                                                                                     | 1623                                                                                |                                                                                     |                                                                                     |
| Direction, Lane #                 | EB 1                                                                              | SB 1                                                                              |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Volume Total                      | 50                                                                                | 401                                                                               |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Volume Left                       | 0                                                                                 | 13                                                                                |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Volume Right                      | 15                                                                                | 0                                                                                 |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| cSH                               | 559                                                                               | 1623                                                                              |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Volume to Capacity                | 0.09                                                                              | 0.01                                                                              |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Queue Length 95th (ft)            | 7                                                                                 | 1                                                                                 |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Control Delay (s)                 | 12.1                                                                              | 0.3                                                                               |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lane LOS                          | B                                                                                 | A                                                                                 |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Approach Delay (s)                | 12.1                                                                              | 0.3                                                                               |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Approach LOS                      | B                                                                                 |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Intersection Summary              |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Average Delay                     |                                                                                   | 1.6                                                                               |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Intersection Capacity Utilization |                                                                                   | 29.5%                                                                             |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| ICU Level of Service              |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     | A                                                                                   |                                                                                     |                                                                                     |
| Analysis Period (min)             |                                                                                   | 15                                                                                |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |

Existing Conditions  
4: East Alley & 4th Street

AM Peak Period  
1/5/2006

|                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
|-----------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|                                   |  |  |  |  |  |  |  |  |  |  |  |  |
| Movement                          | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                               | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 | SBR                                                                                 |
| Lane Configurations               |                                                                                   |                                                                                   |  |                                                                                   |  |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |  |                                                                                     |
| Sign Control                      |                                                                                   | Stop                                                                              |                                                                                   |                                                                                   | Stop                                                                              |                                                                                   |                                                                                   | Free                                                                                |                                                                                     |                                                                                     | Free                                                                                |                                                                                     |
| Grade                             |                                                                                   | 0%                                                                                |                                                                                   |                                                                                   | 0%                                                                                |                                                                                   |                                                                                   | 0%                                                                                  |                                                                                     |                                                                                     | 0%                                                                                  |                                                                                     |
| Volume (veh/h)                    | 0                                                                                 | 0                                                                                 | 0                                                                                 | 1                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                   | 0                                                                                   | 0                                                                                   | 370                                                                                 | 1                                                                                   |
| Peak Hour Factor                  | 0.92                                                                              | 0.92                                                                              | 0.92                                                                              | 0.92                                                                              | 0.92                                                                              | 0.92                                                                              | 0.92                                                                              | 0.92                                                                                | 0.92                                                                                | 0.92                                                                                | 0.92                                                                                | 0.92                                                                                |
| Hourly flow rate (vph)            | 0                                                                                 | 0                                                                                 | 0                                                                                 | 1                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                   | 0                                                                                   | 0                                                                                   | 402                                                                                 | 1                                                                                   |
| Pedestrians                       |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lane Width (ft)                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Walking Speed (ft/s)              |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Percent Blockage                  |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Right turn flare (veh)            |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Median type                       |                                                                                   | None                                                                              |                                                                                   |                                                                                   | None                                                                              |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Median storage veh                |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Upstream signal (ft)              |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   | 140                                                                                 |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| pX, platoon unblocked             |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| vC, conflicting volume            | 403                                                                               | 403                                                                               | 403                                                                               | 403                                                                               | 403                                                                               | 0                                                                                 | 403                                                                               |                                                                                     |                                                                                     | 0                                                                                   |                                                                                     |                                                                                     |
| vC1, stage 1 conf vol             |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| vC2, stage 2 conf vol             |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| vCu, unblocked vol                | 403                                                                               | 403                                                                               | 403                                                                               | 403                                                                               | 403                                                                               | 0                                                                                 | 403                                                                               |                                                                                     |                                                                                     | 0                                                                                   |                                                                                     |                                                                                     |
| tC, single (s)                    | 7.1                                                                               | 6.5                                                                               | 6.2                                                                               | 7.1                                                                               | 6.5                                                                               | 6.2                                                                               | 4.1                                                                               |                                                                                     |                                                                                     | 4.1                                                                                 |                                                                                     |                                                                                     |
| tC, 2 stage (s)                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| tF (s)                            | 3.5                                                                               | 4.0                                                                               | 3.3                                                                               | 3.5                                                                               | 4.0                                                                               | 3.3                                                                               | 2.2                                                                               |                                                                                     |                                                                                     | 2.2                                                                                 |                                                                                     |                                                                                     |
| p0 queue free %                   | 100                                                                               | 100                                                                               | 100                                                                               | 100                                                                               | 100                                                                               | 100                                                                               | 100                                                                               |                                                                                     |                                                                                     | 100                                                                                 |                                                                                     |                                                                                     |
| cM capacity (veh/h)               | 558                                                                               | 536                                                                               | 648                                                                               | 558                                                                               | 536                                                                               | 1085                                                                              | 1155                                                                              |                                                                                     |                                                                                     | 1623                                                                                |                                                                                     |                                                                                     |
| Direction, Lane #                 | EB 1                                                                              | WB 1                                                                              | SB 1                                                                              |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Volume Total                      | 0                                                                                 | 1                                                                                 | 403                                                                               |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Volume Left                       | 0                                                                                 | 1                                                                                 | 0                                                                                 |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Volume Right                      | 0                                                                                 | 0                                                                                 | 1                                                                                 |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| cSH                               | 1700                                                                              | 558                                                                               | 1623                                                                              |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Volume to Capacity                | 0.00                                                                              | 0.00                                                                              | 0.00                                                                              |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Queue Length 95th (ft)            | 0                                                                                 | 0                                                                                 | 0                                                                                 |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Control Delay (s)                 | 0.0                                                                               | 11.5                                                                              | 0.0                                                                               |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lane LOS                          | A                                                                                 | B                                                                                 |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Approach Delay (s)                | 0.0                                                                               | 11.5                                                                              | 0.0                                                                               |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Approach LOS                      | A                                                                                 | B                                                                                 |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Intersection Summary              |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Average Delay                     |                                                                                   |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Intersection Capacity Utilization |                                                                                   | 29.5%                                                                             |                                                                                   | ICU Level of Service                                                              |                                                                                   |                                                                                   |                                                                                   | A                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Analysis Period (min)             |                                                                                   | 15                                                                                |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |

Existing Conditions  
5: H Street & 4th Street

AM Peak Period  
1/5/2006

|                                   |  |  |  |  |  |  |  |  |  |  |  |  |      |
|-----------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|------|
| Movement                          | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                               | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 | SBR                                                                                 |      |
| Lane Configurations               |                                                                                   | ↑↑↑                                                                               |                                                                                   |                                                                                   | ↑↑↑                                                                               |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     | ↑↓                                                                                  |                                                                                     |      |
| Ideal Flow (vphpl)                | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                |      |
| Total Lost time (s)               |                                                                                   | 4.0                                                                               |                                                                                   |                                                                                   | 4.0                                                                               |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     | 4.0                                                                                 |                                                                                     |      |
| Lane Util. Factor                 |                                                                                   | 0.91                                                                              |                                                                                   |                                                                                   | 0.91                                                                              |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     | 1.00                                                                                |                                                                                     |      |
| Frt                               |                                                                                   | 0.99                                                                              |                                                                                   |                                                                                   | 1.00                                                                              |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     | 0.98                                                                                |                                                                                     |      |
| Flt Protected                     |                                                                                   | 1.00                                                                              |                                                                                   |                                                                                   | 1.00                                                                              |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     | 0.99                                                                                |                                                                                     |      |
| Satd. Flow (prot)                 |                                                                                   | 5047                                                                              |                                                                                   |                                                                                   | 5081                                                                              |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     | 1806                                                                                |                                                                                     |      |
| Flt Permitted                     |                                                                                   | 1.00                                                                              |                                                                                   |                                                                                   | 0.93                                                                              |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     | 0.99                                                                                |                                                                                     |      |
| Satd. Flow (perm)                 |                                                                                   | 5047                                                                              |                                                                                   |                                                                                   | 4708                                                                              |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     | 1806                                                                                |                                                                                     |      |
| Volume (vph)                      | 0                                                                                 | 385                                                                               | 20                                                                                | 27                                                                                | 1608                                                                              | 0                                                                                 | 0                                                                                 | 0                                                                                   | 0                                                                                   | 58                                                                                  | 250                                                                                 | 63                                                                                  |      |
| Peak-hour factor, PHF             | 0.92                                                                              | 0.92                                                                              | 0.92                                                                              | 0.92                                                                              | 0.92                                                                              | 0.92                                                                              | 0.92                                                                              | 0.92                                                                                | 0.92                                                                                | 0.92                                                                                | 0.92                                                                                | 0.92                                                                                |      |
| Adj. Flow (vph)                   | 0                                                                                 | 418                                                                               | 22                                                                                | 29                                                                                | 1748                                                                              | 0                                                                                 | 0                                                                                 | 0                                                                                   | 0                                                                                   | 63                                                                                  | 272                                                                                 | 68                                                                                  |      |
| RTOR Reduction (vph)              | 0                                                                                 | 6                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                   | 0                                                                                   | 0                                                                                   | 7                                                                                   | 0                                                                                   |      |
| Lane Group Flow (vph)             | 0                                                                                 | 434                                                                               | 0                                                                                 | 0                                                                                 | 1777                                                                              | 0                                                                                 | 0                                                                                 | 0                                                                                   | 0                                                                                   | 0                                                                                   | 396                                                                                 | 0                                                                                   |      |
| Turn Type                         | Perm                                                                              |                                                                                   |                                                                                   |                                                                                   |                                                                                   | Perm                                                                              |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |      |
| Protected Phases                  | 4                                                                                 |                                                                                   |                                                                                   |                                                                                   |                                                                                   | 8                                                                                 |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |      |
| Permitted Phases                  |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   | 6                                                                                 |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |      |
| Actuated Green, G (s)             | 60.0                                                                              |                                                                                   |                                                                                   |                                                                                   |                                                                                   | 60.0                                                                              |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |      |
| Effective Green, g (s)            | 60.0                                                                              |                                                                                   |                                                                                   |                                                                                   |                                                                                   | 60.0                                                                              |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |      |
| Actuated g/C Ratio                | 0.60                                                                              |                                                                                   |                                                                                   |                                                                                   |                                                                                   | 0.60                                                                              |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |      |
| Clearance Time (s)                | 4.0                                                                               |                                                                                   |                                                                                   |                                                                                   |                                                                                   | 4.0                                                                               |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |      |
| Lane Grp Cap (vph)                | 3028                                                                              |                                                                                   |                                                                                   |                                                                                   |                                                                                   | 2825                                                                              |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |      |
| v/s Ratio Prot                    | 0.09                                                                              |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |      |
| v/s Ratio Perm                    |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   | c0.38                                                                             |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |      |
| v/c Ratio                         | 0.14                                                                              |                                                                                   |                                                                                   |                                                                                   |                                                                                   | 0.63                                                                              |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |      |
| Uniform Delay, d1                 | 8.8                                                                               |                                                                                   |                                                                                   |                                                                                   |                                                                                   | 12.8                                                                              |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |      |
| Progression Factor                | 0.68                                                                              |                                                                                   |                                                                                   |                                                                                   |                                                                                   | 1.00                                                                              |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |      |
| Incremental Delay, d2             | 0.1                                                                               |                                                                                   |                                                                                   |                                                                                   |                                                                                   | 1.1                                                                               |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |      |
| Delay (s)                         | 6.1                                                                               |                                                                                   |                                                                                   |                                                                                   |                                                                                   | 13.9                                                                              |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |      |
| Level of Service                  | A                                                                                 |                                                                                   |                                                                                   |                                                                                   |                                                                                   | B                                                                                 |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |      |
| Approach Delay (s)                | 6.1                                                                               |                                                                                   |                                                                                   |                                                                                   |                                                                                   | 13.9                                                                              |                                                                                   |                                                                                     |                                                                                     |                                                                                     | 0.0                                                                                 |                                                                                     | 36.1 |
| Approach LOS                      | A                                                                                 |                                                                                   |                                                                                   |                                                                                   |                                                                                   | B                                                                                 |                                                                                   |                                                                                     |                                                                                     |                                                                                     | A                                                                                   |                                                                                     | D    |
| Intersection Summary              |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |      |
| HCM Average Control Delay         | 16.0                                                                              |                                                                                   |                                                                                   |                                                                                   |                                                                                   | HCM Level of Service                                                              |                                                                                   |                                                                                     | B                                                                                   |                                                                                     |                                                                                     |                                                                                     |      |
| HCM Volume to Capacity ratio      | 0.65                                                                              |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |      |
| Actuated Cycle Length (s)         | 100.0                                                                             |                                                                                   |                                                                                   |                                                                                   |                                                                                   | Sum of lost time (s)                                                              |                                                                                   |                                                                                     | 8.0                                                                                 |                                                                                     |                                                                                     |                                                                                     |      |
| Intersection Capacity Utilization | 69.7%                                                                             |                                                                                   |                                                                                   |                                                                                   |                                                                                   | ICU Level of Service                                                              |                                                                                   |                                                                                     | C                                                                                   |                                                                                     |                                                                                     |                                                                                     |      |
| Analysis Period (min)             | 15                                                                                |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |      |
| c Critical Lane Group             |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |      |

c Critical Lane Group



| Movement                          | EBL  | EBT  | WBT   | WBR  | SBL                  | SBR  |      |
|-----------------------------------|------|------|-------|------|----------------------|------|------|
| Lane Configurations               |      | ↑↑↑  | ↑↑↑   |      | ↑                    |      |      |
| Sign Control                      |      | Free | Free  |      | Stop                 |      |      |
| Grade                             |      | 0%   | 0%    |      | 0%                   |      |      |
| Volume (veh/h)                    | 0    | 404  | 1668  | 3    | 0                    | 1    |      |
| Peak Hour Factor                  | 0.92 | 0.92 | 0.92  | 0.92 | 0.92                 | 0.92 |      |
| Hourly flow rate (vph)            | 0    | 439  | 1813  | 3    | 0                    | 1    |      |
| Pedestrians                       |      |      |       |      |                      |      |      |
| Lane Width (ft)                   |      |      |       |      |                      |      |      |
| Walking Speed (ft/s)              |      |      |       |      |                      |      |      |
| Percent Blockage                  |      |      |       |      |                      |      |      |
| Right turn flare (veh)            |      |      |       |      |                      |      |      |
| Median type                       |      |      |       | None |                      |      |      |
| Median storage veh                |      |      |       |      |                      |      |      |
| Upstream signal (ft)              |      | 216  | 198   |      |                      |      |      |
| pX, platoon unblocked             | 0.78 |      |       |      | 0.79                 | 0.78 |      |
| vC, conflicting volume            | 1816 |      |       |      | 1961                 | 606  |      |
| vC1, stage 1 conf vol             |      |      |       |      |                      |      |      |
| vC2, stage 2 conf vol             |      |      |       |      |                      |      |      |
| vCu, unblocked vol                | 1490 |      |       |      | 1642                 | 0    |      |
| tC, single (s)                    | 4.1  |      |       |      | 6.8                  | 6.9  |      |
| tC, 2 stage (s)                   |      |      |       |      |                      |      |      |
| tF (s)                            | 2.2  |      |       |      | 3.5                  | 3.3  |      |
| p0 queue free %                   | 100  |      |       |      | 100                  | 100  |      |
| cM capacity (veh/h)               | 350  |      |       |      | 71                   | 850  |      |
| Direction, Lane #                 | EB 1 | EB 2 | EB 3  | WB 1 | WB 2                 | WB 3 | SB 1 |
| Volume Total                      | 88   | 176  | 176   | 725  | 725                  | 366  | 1    |
| Volume Left                       | 0    | 0    | 0     | 0    | 0                    | 0    | 0    |
| Volume Right                      | 0    | 0    | 0     | 0    | 0                    | 3    | 1    |
| cSH                               | 350  | 1700 | 1700  | 1700 | 1700                 | 1700 | 850  |
| Volume to Capacity                | 0.00 | 0.10 | 0.10  | 0.43 | 0.43                 | 0.22 | 0.00 |
| Queue Length 95th (ft)            | 0    | 0    | 0     | 0    | 0                    | 0    | 0    |
| Control Delay (s)                 | 0.0  | 0.0  | 0.0   | 0.0  | 0.0                  | 0.0  | 9.2  |
| Lane LOS                          |      |      |       |      |                      |      | A    |
| Approach Delay (s)                | 0.0  |      |       | 0.0  |                      |      | 9.2  |
| Approach LOS                      |      |      |       |      |                      |      | A    |
| Intersection Summary              |      |      |       |      |                      |      |      |
| Average Delay                     |      |      | 0.0   |      |                      |      |      |
| Intersection Capacity Utilization |      |      | 42.3% |      | ICU Level of Service |      | A    |
| Analysis Period (min)             |      |      | 15    |      |                      |      |      |

Existing Conditions  
7: H Street & 3rd Street

AM Peak Period  
1/5/2006

|                                   |  |                                                                                                                                                                      |  |  |                                                                                                                                                                      |  |  |                                                                                                                                                                          |  |  |                                                                                                                                                                          |  |
|-----------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Movement                          | EBL                                                                               | EBT                                                                                                                                                                                                                                                   | EBR                                                                               | WBL                                                                               | WBT                                                                                                                                                                                                                                                   | WBR                                                                               | NBL                                                                                | NBT                                                                                                                                                                                                                                                         | NBR                                                                                 | SBL                                                                                 | SBT                                                                                                                                                                                                                                                         | SBR                                                                                 |
| Lane Configurations               |                                                                                   |    |                                                                                   |                                                                                   |    |                                                                                   |                                                                                    |    |                                                                                     |                                                                                     |    |                                                                                     |
| Ideal Flow (vphpl)                | 1900                                                                              | 1900                                                                                                                                                                                                                                                  | 1900                                                                              | 1900                                                                              | 1900                                                                                                                                                                                                                                                  | 1900                                                                              | 1900                                                                               | 1900                                                                                                                                                                                                                                                        | 1900                                                                                | 1900                                                                                | 1900                                                                                                                                                                                                                                                        | 1900                                                                                |
| Total Lost time (s)               |                                                                                   | 4.0                                                                                                                                                                                                                                                   |                                                                                   |                                                                                   | 4.0                                                                                                                                                                                                                                                   |                                                                                   |                                                                                    | 4.0                                                                                                                                                                                                                                                         |                                                                                     |                                                                                     | 4.0                                                                                                                                                                                                                                                         |                                                                                     |
| Lane Util. Factor                 |                                                                                   | 0.91                                                                                                                                                                                                                                                  |                                                                                   |                                                                                   | 0.91                                                                                                                                                                                                                                                  |                                                                                   |                                                                                    | 1.00                                                                                                                                                                                                                                                        |                                                                                     |                                                                                     | 1.00                                                                                                                                                                                                                                                        |                                                                                     |
| Fr <sub>t</sub>                   |                                                                                   | 0.98                                                                                                                                                                                                                                                  |                                                                                   |                                                                                   | 0.99                                                                                                                                                                                                                                                  |                                                                                   |                                                                                    | 0.98                                                                                                                                                                                                                                                        |                                                                                     |                                                                                     | 0.97                                                                                                                                                                                                                                                        |                                                                                     |
| Fl <sub>t</sub> Protected         |                                                                                   | 1.00                                                                                                                                                                                                                                                  |                                                                                   |                                                                                   | 1.00                                                                                                                                                                                                                                                  |                                                                                   |                                                                                    | 0.98                                                                                                                                                                                                                                                        |                                                                                     |                                                                                     | 0.99                                                                                                                                                                                                                                                        |                                                                                     |
| Satd. Flow (prot)                 |                                                                                   | 4982                                                                                                                                                                                                                                                  |                                                                                   |                                                                                   | 5019                                                                                                                                                                                                                                                  |                                                                                   |                                                                                    | 1800                                                                                                                                                                                                                                                        |                                                                                     |                                                                                     | 1784                                                                                                                                                                                                                                                        |                                                                                     |
| Fl <sub>t</sub> Permitted         |                                                                                   | 0.75                                                                                                                                                                                                                                                  |                                                                                   |                                                                                   | 0.91                                                                                                                                                                                                                                                  |                                                                                   |                                                                                    | 0.85                                                                                                                                                                                                                                                        |                                                                                     |                                                                                     | 0.92                                                                                                                                                                                                                                                        |                                                                                     |
| Satd. Flow (perm)                 |                                                                                   | 3740                                                                                                                                                                                                                                                  |                                                                                   |                                                                                   | 4582                                                                                                                                                                                                                                                  |                                                                                   |                                                                                    | 1546                                                                                                                                                                                                                                                        |                                                                                     |                                                                                     | 1651                                                                                                                                                                                                                                                        |                                                                                     |
| Volume (vph)                      | 43                                                                                | 347                                                                                                                                                                                                                                                   | 45                                                                                | 41                                                                                | 1496                                                                                                                                                                                                                                                  | 131                                                                               | 65                                                                                 | 118                                                                                                                                                                                                                                                         | 29                                                                                  | 28                                                                                  | 80                                                                                                                                                                                                                                                          | 35                                                                                  |
| Peak-hour factor, PHF             | 0.92                                                                              | 0.92                                                                                                                                                                                                                                                  | 0.92                                                                              | 0.92                                                                              | 0.92                                                                                                                                                                                                                                                  | 0.92                                                                              | 0.92                                                                               | 0.92                                                                                                                                                                                                                                                        | 0.92                                                                                | 0.92                                                                                | 0.92                                                                                                                                                                                                                                                        | 0.92                                                                                |
| Adj. Flow (vph)                   | 47                                                                                | 377                                                                                                                                                                                                                                                   | 49                                                                                | 45                                                                                | 1626                                                                                                                                                                                                                                                  | 142                                                                               | 71                                                                                 | 128                                                                                                                                                                                                                                                         | 32                                                                                  | 30                                                                                  | 87                                                                                                                                                                                                                                                          | 38                                                                                  |
| RTOR Reduction (vph)              | 0                                                                                 | 14                                                                                                                                                                                                                                                    | 0                                                                                 | 0                                                                                 | 10                                                                                                                                                                                                                                                    | 0                                                                                 | 0                                                                                  | 6                                                                                                                                                                                                                                                           | 0                                                                                   | 0                                                                                   | 12                                                                                                                                                                                                                                                          | 0                                                                                   |
| Lane Group Flow (vph)             | 0                                                                                 | 459                                                                                                                                                                                                                                                   | 0                                                                                 | 0                                                                                 | 1803                                                                                                                                                                                                                                                  | 0                                                                                 | 0                                                                                  | 225                                                                                                                                                                                                                                                         | 0                                                                                   | 0                                                                                   | 143                                                                                                                                                                                                                                                         | 0                                                                                   |
| Turn Type                         | Prot                                                                              |                                                                                                                                                                                                                                                       | Perm                                                                              |                                                                                   | Perm                                                                                                                                                                                                                                                  |                                                                                   | Perm                                                                               |                                                                                                                                                                                                                                                             | Perm                                                                                |                                                                                     | Perm                                                                                                                                                                                                                                                        |                                                                                     |
| Protected Phases                  | 7                                                                                 | 4                                                                                                                                                                                                                                                     |                                                                                   |                                                                                   | 8                                                                                                                                                                                                                                                     |                                                                                   |                                                                                    | 2                                                                                                                                                                                                                                                           |                                                                                     |                                                                                     | 6                                                                                                                                                                                                                                                           |                                                                                     |
| Permitted Phases                  |                                                                                   |                                                                                                                                                                                                                                                       |                                                                                   | 8                                                                                 |                                                                                                                                                                                                                                                       |                                                                                   | 2                                                                                  |                                                                                                                                                                                                                                                             |                                                                                     | 6                                                                                   |                                                                                                                                                                                                                                                             |                                                                                     |
| Actuated Green, G (s)             |                                                                                   | 67.0                                                                                                                                                                                                                                                  |                                                                                   |                                                                                   | 55.0                                                                                                                                                                                                                                                  |                                                                                   |                                                                                    | 25.0                                                                                                                                                                                                                                                        |                                                                                     |                                                                                     | 25.0                                                                                                                                                                                                                                                        |                                                                                     |
| Effective Green, g (s)            |                                                                                   | 67.0                                                                                                                                                                                                                                                  |                                                                                   |                                                                                   | 55.0                                                                                                                                                                                                                                                  |                                                                                   |                                                                                    | 25.0                                                                                                                                                                                                                                                        |                                                                                     |                                                                                     | 25.0                                                                                                                                                                                                                                                        |                                                                                     |
| Actuated g/C Ratio                |                                                                                   | 0.67                                                                                                                                                                                                                                                  |                                                                                   |                                                                                   | 0.55                                                                                                                                                                                                                                                  |                                                                                   |                                                                                    | 0.25                                                                                                                                                                                                                                                        |                                                                                     |                                                                                     | 0.25                                                                                                                                                                                                                                                        |                                                                                     |
| Clearance Time (s)                |                                                                                   | 4.0                                                                                                                                                                                                                                                   |                                                                                   |                                                                                   | 4.0                                                                                                                                                                                                                                                   |                                                                                   |                                                                                    | 4.0                                                                                                                                                                                                                                                         |                                                                                     |                                                                                     | 4.0                                                                                                                                                                                                                                                         |                                                                                     |
| Lane Grp Cap (vph)                |                                                                                   | 2605                                                                                                                                                                                                                                                  |                                                                                   |                                                                                   | 2520                                                                                                                                                                                                                                                  |                                                                                   |                                                                                    | 387                                                                                                                                                                                                                                                         |                                                                                     |                                                                                     | 413                                                                                                                                                                                                                                                         |                                                                                     |
| v/s Ratio Prot                    |                                                                                   | c0.01                                                                                                                                                                                                                                                 |                                                                                   |                                                                                   |                                                                                                                                                                                                                                                       |                                                                                   |                                                                                    |                                                                                                                                                                                                                                                             |                                                                                     |                                                                                     |                                                                                                                                                                                                                                                             |                                                                                     |
| v/s Ratio Perm                    |                                                                                   | 0.10                                                                                                                                                                                                                                                  |                                                                                   |                                                                                   | c0.39                                                                                                                                                                                                                                                 |                                                                                   |                                                                                    | c0.15                                                                                                                                                                                                                                                       |                                                                                     |                                                                                     | 0.09                                                                                                                                                                                                                                                        |                                                                                     |
| v/c Ratio                         |                                                                                   | 0.18                                                                                                                                                                                                                                                  |                                                                                   |                                                                                   | 0.72                                                                                                                                                                                                                                                  |                                                                                   |                                                                                    | 0.58                                                                                                                                                                                                                                                        |                                                                                     |                                                                                     | 0.35                                                                                                                                                                                                                                                        |                                                                                     |
| Uniform Delay, d <sub>1</sub>     |                                                                                   | 6.2                                                                                                                                                                                                                                                   |                                                                                   |                                                                                   | 16.7                                                                                                                                                                                                                                                  |                                                                                   |                                                                                    | 32.9                                                                                                                                                                                                                                                        |                                                                                     |                                                                                     | 30.8                                                                                                                                                                                                                                                        |                                                                                     |
| Progression Factor                |                                                                                   | 1.00                                                                                                                                                                                                                                                  |                                                                                   |                                                                                   | 0.30                                                                                                                                                                                                                                                  |                                                                                   |                                                                                    | 1.00                                                                                                                                                                                                                                                        |                                                                                     |                                                                                     | 1.00                                                                                                                                                                                                                                                        |                                                                                     |
| Incremental Delay, d <sub>2</sub> |                                                                                   | 0.1                                                                                                                                                                                                                                                   |                                                                                   |                                                                                   | 1.4                                                                                                                                                                                                                                                   |                                                                                   |                                                                                    | 6.3                                                                                                                                                                                                                                                         |                                                                                     |                                                                                     | 2.3                                                                                                                                                                                                                                                         |                                                                                     |
| Delay (s)                         |                                                                                   | 6.3                                                                                                                                                                                                                                                   |                                                                                   |                                                                                   | 6.4                                                                                                                                                                                                                                                   |                                                                                   |                                                                                    | 39.2                                                                                                                                                                                                                                                        |                                                                                     |                                                                                     | 33.1                                                                                                                                                                                                                                                        |                                                                                     |
| Level of Service                  |                                                                                   | A                                                                                                                                                                                                                                                     |                                                                                   |                                                                                   | A                                                                                                                                                                                                                                                     |                                                                                   |                                                                                    | D                                                                                                                                                                                                                                                           |                                                                                     |                                                                                     | C                                                                                                                                                                                                                                                           |                                                                                     |
| Approach Delay (s)                |                                                                                   | 6.3                                                                                                                                                                                                                                                   |                                                                                   |                                                                                   | 6.4                                                                                                                                                                                                                                                   |                                                                                   |                                                                                    | 39.2                                                                                                                                                                                                                                                        |                                                                                     |                                                                                     | 33.1                                                                                                                                                                                                                                                        |                                                                                     |
| Approach LOS                      |                                                                                   | A                                                                                                                                                                                                                                                     |                                                                                   |                                                                                   | A                                                                                                                                                                                                                                                     |                                                                                   |                                                                                    | D                                                                                                                                                                                                                                                           |                                                                                     |                                                                                     | C                                                                                                                                                                                                                                                           |                                                                                     |
| <b>Intersection Summary</b>       |                                                                                   |                                                                                                                                                                                                                                                       |                                                                                   |                                                                                   |                                                                                                                                                                                                                                                       |                                                                                   |                                                                                    |                                                                                                                                                                                                                                                             |                                                                                     |                                                                                     |                                                                                                                                                                                                                                                             |                                                                                     |
| HCM Average Control Delay         |                                                                                   | 10.8                                                                                                                                                                                                                                                  |                                                                                   |                                                                                   | HCM Level of Service                                                                                                                                                                                                                                  |                                                                                   |                                                                                    | B                                                                                                                                                                                                                                                           |                                                                                     |                                                                                     |                                                                                                                                                                                                                                                             |                                                                                     |
| HCM Volume to Capacity ratio      |                                                                                   | 0.63                                                                                                                                                                                                                                                  |                                                                                   |                                                                                   |                                                                                                                                                                                                                                                       |                                                                                   |                                                                                    |                                                                                                                                                                                                                                                             |                                                                                     |                                                                                     |                                                                                                                                                                                                                                                             |                                                                                     |
| Actuated Cycle Length (s)         |                                                                                   | 100.0                                                                                                                                                                                                                                                 |                                                                                   |                                                                                   | Sum of lost time (s)                                                                                                                                                                                                                                  |                                                                                   |                                                                                    | 12.0                                                                                                                                                                                                                                                        |                                                                                     |                                                                                     |                                                                                                                                                                                                                                                             |                                                                                     |
| Intersection Capacity Utilization |                                                                                   | 69.5%                                                                                                                                                                                                                                                 |                                                                                   |                                                                                   | ICU Level of Service                                                                                                                                                                                                                                  |                                                                                   |                                                                                    | C                                                                                                                                                                                                                                                           |                                                                                     |                                                                                     |                                                                                                                                                                                                                                                             |                                                                                     |
| Analysis Period (min)             |                                                                                   | 15                                                                                                                                                                                                                                                    |                                                                                   |                                                                                   |                                                                                                                                                                                                                                                       |                                                                                   |                                                                                    |                                                                                                                                                                                                                                                             |                                                                                     |                                                                                     |                                                                                                                                                                                                                                                             |                                                                                     |

c Critical Lane Group

Existing Conditions  
8: West Alley & 3rd Street

AM Peak Period  
1/5/2006

|                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
|-----------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|                                   |  |  |  |  |  |  |  |  |  |  |  |  |
| Movement                          | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 | SBR                                                                                 |
| Lane Configurations               |                                                                                   |  |                                                                                   |                                                                                   |  |                                                                                   |                                                                                    |  |                                                                                     |                                                                                     |  |                                                                                     |
| Sign Control                      |                                                                                   | Stop                                                                              |                                                                                   |                                                                                   | Stop                                                                              |                                                                                   |                                                                                    | Free                                                                                |                                                                                     |                                                                                     | Free                                                                                |                                                                                     |
| Grade                             |                                                                                   | 0%                                                                                |                                                                                   |                                                                                   | 0%                                                                                |                                                                                   |                                                                                    | 0%                                                                                  |                                                                                     |                                                                                     | 0%                                                                                  |                                                                                     |
| Volume (veh/h)                    | 2                                                                                 | 0                                                                                 | 3                                                                                 | 2                                                                                 | 0                                                                                 | 1                                                                                 | 4                                                                                  | 286                                                                                 | 2                                                                                   | 0                                                                                   | 138                                                                                 | 1                                                                                   |
| Peak Hour Factor                  | 0.92                                                                              | 0.92                                                                              | 0.92                                                                              | 0.92                                                                              | 0.92                                                                              | 0.92                                                                              | 0.92                                                                               | 0.92                                                                                | 0.92                                                                                | 0.92                                                                                | 0.92                                                                                | 0.92                                                                                |
| Hourly flow rate (vph)            | 2                                                                                 | 0                                                                                 | 3                                                                                 | 2                                                                                 | 0                                                                                 | 1                                                                                 | 4                                                                                  | 311                                                                                 | 2                                                                                   | 0                                                                                   | 150                                                                                 | 1                                                                                   |
| Pedestrians                       |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lane Width (ft)                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Walking Speed (ft/s)              |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Percent Blockage                  |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Right turn flare (veh)            |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Median type                       |                                                                                   | None                                                                              |                                                                                   |                                                                                   | None                                                                              |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Median storage (veh)              |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Upstream signal (ft)              |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    | 260                                                                                 |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| pX, platoon unblocked             |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| vC, conflicting volume            | 472                                                                               | 472                                                                               | 151                                                                               | 474                                                                               | 472                                                                               | 312                                                                               | 151                                                                                |                                                                                     |                                                                                     | 313                                                                                 |                                                                                     |                                                                                     |
| vC1, stage 1 conf vol             |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| vC2, stage 2 conf vol             |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| vCu, unblocked vol                | 472                                                                               | 472                                                                               | 151                                                                               | 474                                                                               | 472                                                                               | 312                                                                               | 151                                                                                |                                                                                     |                                                                                     | 313                                                                                 |                                                                                     |                                                                                     |
| tC, single (s)                    | 7.1                                                                               | 6.5                                                                               | 6.2                                                                               | 7.1                                                                               | 6.5                                                                               | 6.2                                                                               | 4.1                                                                                |                                                                                     |                                                                                     | 4.1                                                                                 |                                                                                     |                                                                                     |
| tC, 2 stage (s)                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| tF (s)                            | 3.5                                                                               | 4.0                                                                               | 3.3                                                                               | 3.5                                                                               | 4.0                                                                               | 3.3                                                                               | 2.2                                                                                |                                                                                     |                                                                                     | 2.2                                                                                 |                                                                                     |                                                                                     |
| p0 queue free %                   | 100                                                                               | 100                                                                               | 100                                                                               | 100                                                                               | 100                                                                               | 100                                                                               | 100                                                                                |                                                                                     |                                                                                     | 100                                                                                 |                                                                                     |                                                                                     |
| cM capacity (veh/h)               | 500                                                                               | 489                                                                               | 896                                                                               | 497                                                                               | 489                                                                               | 728                                                                               | 1430                                                                               |                                                                                     |                                                                                     | 1247                                                                                |                                                                                     |                                                                                     |
| Direction, Lane #                 | EB 1                                                                              | WB 1                                                                              | NB 1                                                                              | SB 1                                                                              |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Volume Total                      | 5                                                                                 | 3                                                                                 | 317                                                                               | 151                                                                               |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Volume Left                       | 2                                                                                 | 2                                                                                 | 4                                                                                 | 0                                                                                 |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Volume Right                      | 3                                                                                 | 1                                                                                 | 2                                                                                 | 1                                                                                 |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| cSH                               | 680                                                                               | 556                                                                               | 1430                                                                              | 1247                                                                              |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Volume to Capacity                | 0.01                                                                              | 0.01                                                                              | 0.00                                                                              | 0.00                                                                              |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Queue Length 95th (ft)            | 1                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Control Delay (s)                 | 10.3                                                                              | 11.5                                                                              | 0.1                                                                               | 0.0                                                                               |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lane LOS                          | B                                                                                 | B                                                                                 | A                                                                                 |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Approach Delay (s)                | 10.3                                                                              | 11.5                                                                              | 0.1                                                                               | 0.0                                                                               |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Approach LOS                      | B                                                                                 | B                                                                                 |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Intersection Summary              |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Average Delay                     |                                                                                   |                                                                                   | 0.3                                                                               |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Intersection Capacity Utilization |                                                                                   |                                                                                   | 28.4%                                                                             | ICU Level of Service                                                              |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     | A                                                                                   |                                                                                     |                                                                                     |
| Analysis Period (min)             |                                                                                   |                                                                                   | 15                                                                                |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |

Existing Conditions  
1: I Street & 3rd Street

PM Peak Period  
1/5/2006

|                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
|-----------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|                                   |  |  |  |  |  |  |  |  |  |  |  |  |
| Movement                          | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                               | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 | SBR                                                                                 |
| Lane Configurations               |                                                                                   |  |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |  |                                                                                     |                                                                                     |  |                                                                                     |
| Sign Control                      |                                                                                   | Stop                                                                              |                                                                                   |                                                                                   | Yield                                                                             |                                                                                   |                                                                                   | Stop                                                                                |                                                                                     |                                                                                     | Stop                                                                                |                                                                                     |
| Volume (vph)                      | 15                                                                                | 59                                                                                | 65                                                                                | 0                                                                                 | 0                                                                                 | 0                                                                                 | 16                                                                                | 167                                                                                 | 23                                                                                  | 28                                                                                  | 166                                                                                 | 15                                                                                  |
| Peak Hour Factor                  | 0.92                                                                              | 0.92                                                                              | 0.92                                                                              | 0.92                                                                              | 0.92                                                                              | 0.92                                                                              | 0.92                                                                              | 0.92                                                                                | 0.92                                                                                | 0.92                                                                                | 0.92                                                                                | 0.92                                                                                |
| Hourly flow rate (vph)            | 16                                                                                | 64                                                                                | 71                                                                                | 0                                                                                 | 0                                                                                 | 0                                                                                 | 17                                                                                | 182                                                                                 | 25                                                                                  | 30                                                                                  | 180                                                                                 | 16                                                                                  |
| Direction, Lane #                 | EB 1                                                                              | NB 1                                                                              | SB 1                                                                              |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Volume Total (vph)                | 151                                                                               | 224                                                                               | 227                                                                               |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Volume Left (vph)                 | 16                                                                                | 17                                                                                | 30                                                                                |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Volume Right (vph)                | 71                                                                                | 25                                                                                | 16                                                                                |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Hadj (s)                          | -0.22                                                                             | -0.02                                                                             | 0.02                                                                              |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Departure Headway (s)             | 4.7                                                                               | 4.5                                                                               | 4.6                                                                               |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Degree Utilization, x             | 0.20                                                                              | 0.28                                                                              | 0.29                                                                              |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Capacity (veh/h)                  | 701                                                                               | 762                                                                               | 754                                                                               |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Control Delay (s)                 | 8.9                                                                               | 9.3                                                                               | 9.4                                                                               |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Approach Delay (s)                | 8.9                                                                               | 9.3                                                                               | 9.4                                                                               |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Approach LOS                      | A                                                                                 | A                                                                                 | A                                                                                 |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Intersection Summary              |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Delay                             |                                                                                   |                                                                                   | 9.2                                                                               |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| HCM Level of Service              |                                                                                   |                                                                                   | A                                                                                 |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Intersection Capacity Utilization |                                                                                   | 32.1%                                                                             |                                                                                   | ICU Level of Service                                                              |                                                                                   | A                                                                                 |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Analysis Period (min)             |                                                                                   | 15                                                                                |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |

Existing Conditions  
2: I Street & North Alley

PM Peak Period  
1/5/2006

|                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
|-----------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|                                   |  |  |  |  |  |  |  |  |  |  |  |  |
| Movement                          | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                               | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 | SBR                                                                                 |
| Lane Configurations               |                                                                                   |  |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |  |                                                                                     |                                                                                     |  |                                                                                     |
| Sign Control                      |                                                                                   | Free                                                                              |                                                                                   |                                                                                   | Free                                                                              |                                                                                   |                                                                                   | Stop                                                                                |                                                                                     |                                                                                     | Stop                                                                                |                                                                                     |
| Grade                             |                                                                                   | 0%                                                                                |                                                                                   |                                                                                   | 0%                                                                                |                                                                                   |                                                                                   | 0%                                                                                  |                                                                                     |                                                                                     | 0%                                                                                  |                                                                                     |
| Volume (veh/h)                    | 2                                                                                 | 106                                                                               | 2                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                   | 0                                                                                   | 2                                                                                   | 3                                                                                   | 0                                                                                   |
| Peak Hour Factor                  | 0.92                                                                              | 0.92                                                                              | 0.92                                                                              | 0.92                                                                              | 0.92                                                                              | 0.92                                                                              | 0.92                                                                              | 0.92                                                                                | 0.92                                                                                | 0.92                                                                                | 0.92                                                                                | 0.92                                                                                |
| Hourly flow rate (vph)            | 2                                                                                 | 115                                                                               | 2                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                   | 0                                                                                   | 2                                                                                   | 3                                                                                   | 0                                                                                   |
| Pedestrians                       |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lane Width (ft)                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Walking Speed (ft/s)              |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Percent Blockage                  |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Right turn flare (veh)            |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Median type                       |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   | None                                                                                |                                                                                     |                                                                                     | None                                                                                |                                                                                     |
| Median storage veh                |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Upstream signal (ft)              |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| pX, platoon unblocked             |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| vC, conflicting volume            | 0                                                                                 |                                                                                   |                                                                                   | 117                                                                               |                                                                                   |                                                                                   | 122                                                                               | 121                                                                                 | 116                                                                                 | 121                                                                                 | 122                                                                                 | 0                                                                                   |
| vC1, stage 1 conf vol             |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| vC2, stage 2 conf vol             |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| vCu, unblocked vol                | 0                                                                                 |                                                                                   |                                                                                   | 117                                                                               |                                                                                   |                                                                                   | 122                                                                               | 121                                                                                 | 116                                                                                 | 121                                                                                 | 122                                                                                 | 0                                                                                   |
| tC, single (s)                    | 4.1                                                                               |                                                                                   |                                                                                   | 4.1                                                                               |                                                                                   |                                                                                   | 7.1                                                                               | 6.5                                                                                 | 6.2                                                                                 | 7.1                                                                                 | 6.5                                                                                 | 6.2                                                                                 |
| tC, 2 stage (s)                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| tF (s)                            | 2.2                                                                               |                                                                                   |                                                                                   | 2.2                                                                               |                                                                                   |                                                                                   | 3.5                                                                               | 4.0                                                                                 | 3.3                                                                                 | 3.5                                                                                 | 4.0                                                                                 | 3.3                                                                                 |
| p0 queue free %                   | 100                                                                               |                                                                                   |                                                                                   | 100                                                                               |                                                                                   |                                                                                   | 100                                                                               | 100                                                                                 | 100                                                                                 | 100                                                                                 | 100                                                                                 | 100                                                                                 |
| cM capacity (veh/h)               | 1623                                                                              |                                                                                   |                                                                                   | 1471                                                                              |                                                                                   |                                                                                   | 849                                                                               | 769                                                                                 | 936                                                                                 | 854                                                                                 | 768                                                                                 | 1085                                                                                |
| Direction, Lane #                 | EB 1                                                                              | NB 1                                                                              | SB 1                                                                              |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Volume Total                      | 120                                                                               | 0                                                                                 | 5                                                                                 |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Volume Left                       | 2                                                                                 | 0                                                                                 | 2                                                                                 |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Volume Right                      | 2                                                                                 | 0                                                                                 | 0                                                                                 |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| cSH                               | 1623                                                                              | 1700                                                                              | 800                                                                               |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Volume to Capacity                | 0.00                                                                              | 0.00                                                                              | 0.01                                                                              |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Queue Length 95th (ft)            | 0                                                                                 | 0                                                                                 | 1                                                                                 |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Control Delay (s)                 | 0.1                                                                               | 0.0                                                                               | 9.5                                                                               |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lane LOS                          | A                                                                                 | A                                                                                 | A                                                                                 |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Approach Delay (s)                | 0.1                                                                               | 0.0                                                                               | 9.5                                                                               |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Approach LOS                      |                                                                                   | A                                                                                 | A                                                                                 |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Intersection Summary              |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Average Delay                     |                                                                                   |                                                                                   | 0.5                                                                               |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Intersection Capacity Utilization |                                                                                   |                                                                                   | 15.8%                                                                             | ICU Level of Service                                                              |                                                                                   |                                                                                   |                                                                                   | A                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Analysis Period (min)             |                                                                                   |                                                                                   | 15                                                                                |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |

Existing Conditions  
3: I Street & 4th Street

PM Peak Period  
1/5/2006

|                                   |  |  |  |  |  |  |  |  |  |  |  |  |
|-----------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Movement                          | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 | SBR                                                                                 |
| Lane Configurations               |                                                                                   |  |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |  |                                                                                     |
| Sign Control                      |                                                                                   | Stop                                                                              |                                                                                   |                                                                                   | Yield                                                                             |                                                                                   |                                                                                    | Free                                                                                |                                                                                     |                                                                                     | Free                                                                                |                                                                                     |
| Grade                             |                                                                                   | 0%                                                                                |                                                                                   |                                                                                   | 0%                                                                                |                                                                                   |                                                                                    | 0%                                                                                  |                                                                                     |                                                                                     | 0%                                                                                  |                                                                                     |
| Volume (veh/h)                    | 0                                                                                 | 96                                                                                | 12                                                                                | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                  | 0                                                                                   | 0                                                                                   | 34                                                                                  | 341                                                                                 | 0                                                                                   |
| Peak Hour Factor                  | 0.92                                                                              | 0.92                                                                              | 0.92                                                                              | 0.92                                                                              | 0.92                                                                              | 0.92                                                                              | 0.92                                                                               | 0.92                                                                                | 0.92                                                                                | 0.92                                                                                | 0.92                                                                                | 0.92                                                                                |
| Hourly flow rate (vph)            | 0                                                                                 | 104                                                                               | 13                                                                                | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                  | 0                                                                                   | 0                                                                                   | 37                                                                                  | 371                                                                                 | 0                                                                                   |
| Pedestrians                       |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lane Width (ft)                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Walking Speed (ft/s)              |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Percent Blockage                  |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Right turn flare (veh)            |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Median type                       |                                                                                   | None                                                                              |                                                                                   |                                                                                   | None                                                                              |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Median storage veh                |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Upstream signal (ft)              |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    | 450                                                                                 |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| pX, platoon unblocked             |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| vC, conflicting volume            | 445                                                                               | 445                                                                               | 371                                                                               | 510                                                                               | 445                                                                               | 0                                                                                 | 371                                                                                |                                                                                     |                                                                                     | 0                                                                                   |                                                                                     |                                                                                     |
| vC1, stage 1 conf vol             |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| vC2, stage 2 conf vol             |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| vCu, unblocked vol                | 445                                                                               | 445                                                                               | 371                                                                               | 510                                                                               | 445                                                                               | 0                                                                                 | 371                                                                                |                                                                                     |                                                                                     | 0                                                                                   |                                                                                     |                                                                                     |
| tC, single (s)                    | 7.1                                                                               | 6.5                                                                               | 6.2                                                                               | 7.1                                                                               | 6.5                                                                               | 6.2                                                                               | 4.1                                                                                |                                                                                     |                                                                                     | 4.1                                                                                 |                                                                                     |                                                                                     |
| tC, 2 stage (s)                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| tF (s)                            | 3.5                                                                               | 4.0                                                                               | 3.3                                                                               | 3.5                                                                               | 4.0                                                                               | 3.3                                                                               | 2.2                                                                                |                                                                                     |                                                                                     | 2.2                                                                                 |                                                                                     |                                                                                     |
| p0 queue free %                   | 100                                                                               | 79                                                                                | 98                                                                                | 100                                                                               | 100                                                                               | 100                                                                               | 100                                                                                |                                                                                     |                                                                                     | 98                                                                                  |                                                                                     |                                                                                     |
| cM capacity (veh/h)               | 515                                                                               | 496                                                                               | 675                                                                               | 383                                                                               | 496                                                                               | 1085                                                                              | 1188                                                                               |                                                                                     |                                                                                     | 1623                                                                                |                                                                                     |                                                                                     |
| Direction, Lane #                 | EB 1                                                                              | SB 1                                                                              |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Volume Total                      | 117                                                                               | 408                                                                               |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Volume Left                       | 0                                                                                 | 37                                                                                |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Volume Right                      | 13                                                                                | 0                                                                                 |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| cSH                               | 512                                                                               | 1623                                                                              |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Volume to Capacity                | 0.23                                                                              | 0.02                                                                              |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Queue Length 95th (ft)            | 22                                                                                | 2                                                                                 |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Control Delay (s)                 | 14.1                                                                              | 0.9                                                                               |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lane LOS                          | B                                                                                 | A                                                                                 |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Approach Delay (s)                | 14.1                                                                              | 0.9                                                                               |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Approach LOS                      | B                                                                                 |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Intersection Summary              |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Average Delay                     |                                                                                   |                                                                                   | 3.8                                                                               |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Intersection Capacity Utilization |                                                                                   |                                                                                   | 32.3%                                                                             |                                                                                   |                                                                                   | ICU Level of Service                                                              |                                                                                    |                                                                                     |                                                                                     | A                                                                                   |                                                                                     |                                                                                     |
| Analysis Period (min)             |                                                                                   |                                                                                   | 15                                                                                |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |

Existing Conditions  
4: East Alley & 4th Street

PM Peak Period  
1/5/2006

|                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
|-----------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|                                   |  |  |  |  |  |  |  |  |  |  |  |  |
| Movement                          | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 | SBR                                                                                 |
| Lane Configurations               |                                                                                   |                                                                                   |  |                                                                                   |  |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |  |                                                                                     |
| Sign Control                      |                                                                                   | Stop                                                                              |                                                                                   |                                                                                   | Stop                                                                              |                                                                                   |                                                                                    | Free                                                                                |                                                                                     |                                                                                     | Free                                                                                |                                                                                     |
| Grade                             |                                                                                   | 0%                                                                                |                                                                                   |                                                                                   | 0%                                                                                |                                                                                   |                                                                                    | 0%                                                                                  |                                                                                     |                                                                                     | 0%                                                                                  |                                                                                     |
| Volume (veh/h)                    | 0                                                                                 | 0                                                                                 | 0                                                                                 | 3                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                  | 0                                                                                   | 0                                                                                   | 1                                                                                   | 351                                                                                 | 1                                                                                   |
| Peak Hour Factor                  | 0.92                                                                              | 0.92                                                                              | 0.92                                                                              | 0.92                                                                              | 0.92                                                                              | 0.92                                                                              | 0.92                                                                               | 0.92                                                                                | 0.92                                                                                | 0.92                                                                                | 0.92                                                                                | 0.92                                                                                |
| Hourly flow rate (vph)            | 0                                                                                 | 0                                                                                 | 0                                                                                 | 3                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                  | 0                                                                                   | 0                                                                                   | 1                                                                                   | 382                                                                                 | 1                                                                                   |
| Pedestrians                       |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lane Width (ft)                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Walking Speed (ft/s)              |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Percent Blockage                  |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Right turn flare (veh)            |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Median type                       |                                                                                   | None                                                                              |                                                                                   |                                                                                   | None                                                                              |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Median storage veh                |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Upstream signal (ft)              |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    | 140                                                                                 |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| pX, platoon unblocked             |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| vC, conflicting volume            | 384                                                                               | 384                                                                               | 382                                                                               | 384                                                                               | 385                                                                               | 0                                                                                 | 383                                                                                |                                                                                     |                                                                                     | 0                                                                                   |                                                                                     |                                                                                     |
| vC1, stage 1 conf vol             |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| vC2, stage 2 conf vol             |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| vCu, unblocked vol                | 384                                                                               | 384                                                                               | 382                                                                               | 384                                                                               | 385                                                                               | 0                                                                                 | 383                                                                                |                                                                                     |                                                                                     | 0                                                                                   |                                                                                     |                                                                                     |
| tC, single (s)                    | 7.1                                                                               | 6.5                                                                               | 6.2                                                                               | 7.1                                                                               | 6.5                                                                               | 6.2                                                                               | 4.1                                                                                |                                                                                     |                                                                                     | 4.1                                                                                 |                                                                                     |                                                                                     |
| tC, 2 stage (s)                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| tF (s)                            | 3.5                                                                               | 4.0                                                                               | 3.3                                                                               | 3.5                                                                               | 4.0                                                                               | 3.3                                                                               | 2.2                                                                                |                                                                                     |                                                                                     | 2.2                                                                                 |                                                                                     |                                                                                     |
| p0 queue free %                   | 100                                                                               | 100                                                                               | 100                                                                               | 99                                                                                | 100                                                                               | 100                                                                               | 100                                                                                |                                                                                     |                                                                                     | 100                                                                                 |                                                                                     |                                                                                     |
| cM capacity (veh/h)               | 574                                                                               | 549                                                                               | 665                                                                               | 574                                                                               | 549                                                                               | 1085                                                                              | 1176                                                                               |                                                                                     |                                                                                     | 1623                                                                                |                                                                                     |                                                                                     |
| Direction, Lane #                 | EB 1                                                                              | WB 1                                                                              | SB 1                                                                              |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Volume Total                      | 0                                                                                 | 3                                                                                 | 384                                                                               |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Volume Left                       | 0                                                                                 | 3                                                                                 | 1                                                                                 |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Volume Right                      | 0                                                                                 | 0                                                                                 | 1                                                                                 |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| cSH                               | 1700                                                                              | 574                                                                               | 1623                                                                              |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Volume to Capacity                | 0.00                                                                              | 0.01                                                                              | 0.00                                                                              |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Queue Length 95th (ft)            | 0                                                                                 | 0                                                                                 | 0                                                                                 |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Control Delay (s)                 | 0.0                                                                               | 11.3                                                                              | 0.0                                                                               |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lane LOS                          | A                                                                                 | B                                                                                 | A                                                                                 |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Approach Delay (s)                | 0.0                                                                               | 11.3                                                                              | 0.0                                                                               |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Approach LOS                      | A                                                                                 | B                                                                                 |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Intersection Summary              |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Average Delay                     |                                                                                   |                                                                                   | 0.1                                                                               |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Intersection Capacity Utilization |                                                                                   | 28.6%                                                                             |                                                                                   | ICU Level of Service                                                              |                                                                                   |                                                                                   |                                                                                    |                                                                                     | A                                                                                   |                                                                                     |                                                                                     |                                                                                     |
| Analysis Period (min)             |                                                                                   | 15                                                                                |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |

Existing Conditions  
5: H Street & 4th Street

PM Peak Period  
1/5/2006

| Movement                          | EBL  | EBT   | EBR  | WBL  | WBT                  | WBR  | NBL  | NBT  | NBR  | SBL  | SBT  | SBR  |
|-----------------------------------|------|-------|------|------|----------------------|------|------|------|------|------|------|------|
| Lane Configurations               |      | ↑↑↑   |      |      | ↑↑↑                  |      |      |      |      |      | ↑↓   |      |
| Ideal Flow (vphpl)                | 1900 | 1900  | 1900 | 1900 | 1900                 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Total Lost time (s)               |      | 4.0   |      |      | 4.0                  |      |      |      |      |      | 4.0  |      |
| Lane Util. Factor                 |      | 0.91  |      |      | 0.91                 |      |      |      |      |      | 1.00 |      |
| Frt                               |      | 1.00  |      |      | 1.00                 |      |      |      |      |      | 0.98 |      |
| Flt Protected                     |      | 1.00  |      |      | 1.00                 |      |      |      |      |      | 0.99 |      |
| Satd. Flow (prot)                 |      | 5060  |      |      | 5073                 |      |      |      |      |      | 1809 |      |
| Flt Permitted                     |      | 1.00  |      |      | 0.83                 |      |      |      |      |      | 0.99 |      |
| Satd. Flow (perm)                 |      | 5060  |      |      | 4230                 |      |      |      |      |      | 1809 |      |
| Volume (vph)                      | 0    | 1317  | 45   | 26   | 518                  | 0    | 0    | 0    | 0    | 74   | 230  | 50   |
| Peak-hour factor, PHF             | 0.92 | 0.92  | 0.92 | 0.92 | 0.92                 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Adj. Flow (vph)                   | 0    | 1432  | 49   | 28   | 563                  | 0    | 0    | 0    | 0    | 80   | 250  | 54   |
| RTOR Reduction (vph)              | 0    | 4     | 0    | 0    | 0                    | 0    | 0    | 0    | 0    | 0    | 6    | 0    |
| Lane Group Flow (vph)             | 0    | 1477  | 0    | 0    | 591                  | 0    | 0    | 0    | 0    | 0    | 378  | 0    |
| Turn Type                         |      | Perm  |      |      |                      |      |      |      |      | Perm |      |      |
| Protected Phases                  |      | 4     |      |      | 8                    |      |      |      |      |      | 6    |      |
| Permitted Phases                  |      |       |      | 8    |                      |      |      |      |      |      | 6    |      |
| Actuated Green, G (s)             |      | 60.0  |      |      | 60.0                 |      |      |      |      |      | 32.0 |      |
| Effective Green, g (s)            |      | 60.0  |      |      | 60.0                 |      |      |      |      |      | 32.0 |      |
| Actuated g/C Ratio                |      | 0.60  |      |      | 0.60                 |      |      |      |      |      | 0.32 |      |
| Clearance Time (s)                |      | 4.0   |      |      | 4.0                  |      |      |      |      |      | 4.0  |      |
| Lane Grp Cap (vph)                |      | 3036  |      |      | 2538                 |      |      |      |      |      | 579  |      |
| v/s Ratio Prot                    |      | c0.29 |      |      |                      |      |      |      |      |      |      |      |
| v/s Ratio Perm                    |      |       |      |      | 0.14                 |      |      |      |      |      | 0.21 |      |
| v/c Ratio                         |      | 0.49  |      |      | 0.23                 |      |      |      |      |      | 0.65 |      |
| Uniform Delay, d1                 |      | 11.3  |      |      | 9.3                  |      |      |      |      |      | 29.2 |      |
| Progression Factor                |      | 0.50  |      |      | 1.00                 |      |      |      |      |      | 1.00 |      |
| Incremental Delay, d2             |      | 0.4   |      |      | 0.2                  |      |      |      |      |      | 5.6  |      |
| Delay (s)                         |      | 6.1   |      |      | 9.5                  |      |      |      |      |      | 34.9 |      |
| Level of Service                  |      | A     |      |      | A                    |      |      |      |      |      | C    |      |
| Approach Delay (s)                |      | 6.1   |      |      | 9.5                  |      |      | 0.0  |      |      | 34.9 |      |
| Approach LOS                      |      | A     |      |      | A                    |      |      | A    |      |      | C    |      |
| <b>Intersection Summary</b>       |      |       |      |      |                      |      |      |      |      |      |      |      |
| HCM Average Control Delay         |      | 11.4  |      |      | HCM Level of Service |      |      | B    |      |      |      |      |
| HCM Volume to Capacity ratio      |      | 0.54  |      |      |                      |      |      |      |      |      |      |      |
| Actuated Cycle Length (s)         |      | 100.0 |      |      | Sum of lost time (s) |      |      | 8.0  |      |      |      |      |
| Intersection Capacity Utilization |      | 55.5% |      |      | ICU Level of Service |      |      | B    |      |      |      |      |
| Analysis Period (min)             |      | 15    |      |      |                      |      |      |      |      |      |      |      |

c Critical Lane Group



| Movement                          | EBL  | EBT  | WBT   | WBR  | SBL                  | SBR  |      |
|-----------------------------------|------|------|-------|------|----------------------|------|------|
| Lane Configurations               |      | ↑↑↑  | ↑↑↑   |      | ↑                    |      |      |
| Sign Control                      |      | Free | Free  |      | Stop                 |      |      |
| Grade                             |      | 0%   | 0%    |      | 0%                   |      |      |
| Volume (veh/h)                    | 1    | 1361 | 568   | 0    | 1                    | 4    |      |
| Peak Hour Factor                  | 0.92 | 0.92 | 0.92  | 0.92 | 0.92                 | 0.92 |      |
| Hourly flow rate (vph)            | 1    | 1479 | 617   | 0    | 1                    | 4    |      |
| Pedestrians                       |      |      |       |      |                      |      |      |
| Lane Width (ft)                   |      |      |       |      |                      |      |      |
| Walking Speed (ft/s)              |      |      |       |      |                      |      |      |
| Percent Blockage                  |      |      |       |      |                      |      |      |
| Right turn flare (veh)            |      |      |       |      |                      |      |      |
| Median type                       |      |      |       | None |                      |      |      |
| Median storage veh                |      |      |       |      |                      |      |      |
| Upstream signal (ft)              |      | 216  | 198   |      |                      |      |      |
| pX, platoon unblocked             | 0.96 |      |       |      | 0.89                 | 0.96 |      |
| vC, conflicting volume            | 617  |      |       |      | 1113                 | 206  |      |
| vC1, stage 1 conf vol             |      |      |       |      |                      |      |      |
| vC2, stage 2 conf vol             |      |      |       |      |                      |      |      |
| vCu, unblocked vol                | 510  |      |       |      | 665                  | 80   |      |
| tC, single (s)                    | 4.1  |      |       |      | 6.8                  | 6.9  |      |
| tC, 2 stage (s)                   |      |      |       |      |                      |      |      |
| tF (s)                            | 2.2  |      |       |      | 3.5                  | 3.3  |      |
| p0 queue free %                   | 100  |      |       |      | 100                  | 100  |      |
| cM capacity (veh/h)               | 1006 |      |       |      | 350                  | 923  |      |
| Direction, Lane #                 | EB 1 | EB 2 | EB 3  | WB 1 | WB 2                 | WB 3 | SB 1 |
| Volume Total                      | 297  | 592  | 592   | 247  | 247                  | 123  | 5    |
| Volume Left                       | 1    | 0    | 0     | 0    | 0                    | 0    | 1    |
| Volume Right                      | 0    | 0    | 0     | 0    | 0                    | 0    | 4    |
| cSH                               | 1006 | 1700 | 1700  | 1700 | 1700                 | 1700 | 695  |
| Volume to Capacity                | 0.00 | 0.35 | 0.35  | 0.15 | 0.15                 | 0.07 | 0.01 |
| Queue Length 95th (ft)            | 0    | 0    | 0     | 0    | 0                    | 0    | 1    |
| Control Delay (s)                 | 0.0  | 0.0  | 0.0   | 0.0  | 0.0                  | 0.0  | 10.2 |
| Lane LOS                          | A    |      |       |      |                      |      | B    |
| Approach Delay (s)                | 0.0  |      |       | 0.0  |                      |      | 10.2 |
| Approach LOS                      |      |      |       |      |                      |      | B    |
| Intersection Summary              |      |      |       |      |                      |      |      |
| Average Delay                     |      |      | 0.0   |      |                      |      |      |
| Intersection Capacity Utilization |      |      | 37.0% |      | ICU Level of Service |      | A    |
| Analysis Period (min)             |      |      | 15    |      |                      |      |      |

Existing Conditions  
7: H Street & 3rd Street

PM Peak Period  
1/5/2006

|                                   |  |                                                                                                                                                                      |  |  |                                                                                                                                                                      |  |  |                                                                                                                                                                          |  |  |                                                                                                                                                                          |  |
|-----------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Movement                          | EBL                                                                               | EBT                                                                                                                                                                                                                                                   | EBR                                                                               | WBL                                                                               | WBT                                                                                                                                                                                                                                                   | WBR                                                                               | NBL                                                                                | NBT                                                                                                                                                                                                                                                         | NBR                                                                                 | SBL                                                                                 | SBT                                                                                                                                                                                                                                                         | SBR                                                                                 |
| Lane Configurations               |                                                                                   |    |                                                                                   |                                                                                   |    |                                                                                   |                                                                                    |    |                                                                                     |                                                                                     |    |                                                                                     |
| Ideal Flow (vphpl)                | 1900                                                                              | 1900                                                                                                                                                                                                                                                  | 1900                                                                              | 1900                                                                              | 1900                                                                                                                                                                                                                                                  | 1900                                                                              | 1900                                                                               | 1900                                                                                                                                                                                                                                                        | 1900                                                                                | 1900                                                                                | 1900                                                                                                                                                                                                                                                        | 1900                                                                                |
| Total Lost time (s)               |                                                                                   | 4.0                                                                                                                                                                                                                                                   |                                                                                   |                                                                                   | 4.0                                                                                                                                                                                                                                                   |                                                                                   |                                                                                    | 4.0                                                                                                                                                                                                                                                         |                                                                                     |                                                                                     | 4.0                                                                                                                                                                                                                                                         |                                                                                     |
| Lane Util. Factor                 |                                                                                   | 0.91                                                                                                                                                                                                                                                  |                                                                                   |                                                                                   | 0.91                                                                                                                                                                                                                                                  |                                                                                   |                                                                                    | 1.00                                                                                                                                                                                                                                                        |                                                                                     |                                                                                     | 1.00                                                                                                                                                                                                                                                        |                                                                                     |
| Frt                               |                                                                                   | 0.99                                                                                                                                                                                                                                                  |                                                                                   |                                                                                   | 0.99                                                                                                                                                                                                                                                  |                                                                                   |                                                                                    | 0.98                                                                                                                                                                                                                                                        |                                                                                     |                                                                                     | 0.98                                                                                                                                                                                                                                                        |                                                                                     |
| Flt Protected                     |                                                                                   | 1.00                                                                                                                                                                                                                                                  |                                                                                   |                                                                                   | 1.00                                                                                                                                                                                                                                                  |                                                                                   |                                                                                    | 0.99                                                                                                                                                                                                                                                        |                                                                                     |                                                                                     | 0.98                                                                                                                                                                                                                                                        |                                                                                     |
| Satd. Flow (prot)                 |                                                                                   | 5037                                                                                                                                                                                                                                                  |                                                                                   |                                                                                   | 5021                                                                                                                                                                                                                                                  |                                                                                   |                                                                                    | 1795                                                                                                                                                                                                                                                        |                                                                                     |                                                                                     | 1787                                                                                                                                                                                                                                                        |                                                                                     |
| Flt Permitted                     |                                                                                   | 0.87                                                                                                                                                                                                                                                  |                                                                                   |                                                                                   | 0.82                                                                                                                                                                                                                                                  |                                                                                   |                                                                                    | 0.86                                                                                                                                                                                                                                                        |                                                                                     |                                                                                     | 0.74                                                                                                                                                                                                                                                        |                                                                                     |
| Satd. Flow (perm)                 |                                                                                   | 4377                                                                                                                                                                                                                                                  |                                                                                   |                                                                                   | 4116                                                                                                                                                                                                                                                  |                                                                                   |                                                                                    | 1556                                                                                                                                                                                                                                                        |                                                                                     |                                                                                     | 1354                                                                                                                                                                                                                                                        |                                                                                     |
| Volume (vph)                      | 65                                                                                | 1241                                                                                                                                                                                                                                                  | 64                                                                                | 29                                                                                | 504                                                                                                                                                                                                                                                   | 39                                                                                | 42                                                                                 | 98                                                                                                                                                                                                                                                          | 31                                                                                  | 89                                                                                  | 105                                                                                                                                                                                                                                                         | 38                                                                                  |
| Peak-hour factor, PHF             | 0.92                                                                              | 0.92                                                                                                                                                                                                                                                  | 0.92                                                                              | 0.92                                                                              | 0.92                                                                                                                                                                                                                                                  | 0.92                                                                              | 0.92                                                                               | 0.92                                                                                                                                                                                                                                                        | 0.92                                                                                | 0.92                                                                                | 0.92                                                                                                                                                                                                                                                        | 0.92                                                                                |
| Adj. Flow (vph)                   | 71                                                                                | 1349                                                                                                                                                                                                                                                  | 70                                                                                | 32                                                                                | 548                                                                                                                                                                                                                                                   | 42                                                                                | 46                                                                                 | 107                                                                                                                                                                                                                                                         | 34                                                                                  | 97                                                                                  | 114                                                                                                                                                                                                                                                         | 41                                                                                  |
| RTOR Reduction (vph)              | 0                                                                                 | 5                                                                                                                                                                                                                                                     | 0                                                                                 | 0                                                                                 | 8                                                                                                                                                                                                                                                     | 0                                                                                 | 0                                                                                  | 8                                                                                                                                                                                                                                                           | 0                                                                                   | 0                                                                                   | 7                                                                                                                                                                                                                                                           | 0                                                                                   |
| Lane Group Flow (vph)             | 0                                                                                 | 1485                                                                                                                                                                                                                                                  | 0                                                                                 | 0                                                                                 | 614                                                                                                                                                                                                                                                   | 0                                                                                 | 0                                                                                  | 179                                                                                                                                                                                                                                                         | 0                                                                                   | 0                                                                                   | 245                                                                                                                                                                                                                                                         | 0                                                                                   |
| Turn Type                         | Prot                                                                              |                                                                                                                                                                                                                                                       |                                                                                   | Perm                                                                              |                                                                                                                                                                                                                                                       |                                                                                   | Perm                                                                               |                                                                                                                                                                                                                                                             |                                                                                     | Perm                                                                                |                                                                                                                                                                                                                                                             |                                                                                     |
| Protected Phases                  | 7                                                                                 | 4                                                                                                                                                                                                                                                     |                                                                                   |                                                                                   | 8                                                                                                                                                                                                                                                     |                                                                                   |                                                                                    | 2                                                                                                                                                                                                                                                           |                                                                                     |                                                                                     | 6                                                                                                                                                                                                                                                           |                                                                                     |
| Permitted Phases                  |                                                                                   |                                                                                                                                                                                                                                                       |                                                                                   | 8                                                                                 |                                                                                                                                                                                                                                                       |                                                                                   | 2                                                                                  |                                                                                                                                                                                                                                                             |                                                                                     | 6                                                                                   |                                                                                                                                                                                                                                                             |                                                                                     |
| Actuated Green, G (s)             |                                                                                   | 67.0                                                                                                                                                                                                                                                  |                                                                                   |                                                                                   | 55.0                                                                                                                                                                                                                                                  |                                                                                   |                                                                                    | 25.0                                                                                                                                                                                                                                                        |                                                                                     |                                                                                     | 25.0                                                                                                                                                                                                                                                        |                                                                                     |
| Effective Green, g (s)            |                                                                                   | 67.0                                                                                                                                                                                                                                                  |                                                                                   |                                                                                   | 55.0                                                                                                                                                                                                                                                  |                                                                                   |                                                                                    | 25.0                                                                                                                                                                                                                                                        |                                                                                     |                                                                                     | 25.0                                                                                                                                                                                                                                                        |                                                                                     |
| Actuated g/C Ratio                |                                                                                   | 0.67                                                                                                                                                                                                                                                  |                                                                                   |                                                                                   | 0.55                                                                                                                                                                                                                                                  |                                                                                   |                                                                                    | 0.25                                                                                                                                                                                                                                                        |                                                                                     |                                                                                     | 0.25                                                                                                                                                                                                                                                        |                                                                                     |
| Clearance Time (s)                |                                                                                   | 4.0                                                                                                                                                                                                                                                   |                                                                                   |                                                                                   | 4.0                                                                                                                                                                                                                                                   |                                                                                   |                                                                                    | 4.0                                                                                                                                                                                                                                                         |                                                                                     |                                                                                     | 4.0                                                                                                                                                                                                                                                         |                                                                                     |
| Lane Grp Cap (vph)                |                                                                                   | 2985                                                                                                                                                                                                                                                  |                                                                                   |                                                                                   | 2264                                                                                                                                                                                                                                                  |                                                                                   |                                                                                    | 389                                                                                                                                                                                                                                                         |                                                                                     |                                                                                     | 339                                                                                                                                                                                                                                                         |                                                                                     |
| v/s Ratio Prot                    |                                                                                   | c0.04                                                                                                                                                                                                                                                 |                                                                                   |                                                                                   |                                                                                                                                                                                                                                                       |                                                                                   |                                                                                    |                                                                                                                                                                                                                                                             |                                                                                     |                                                                                     |                                                                                                                                                                                                                                                             |                                                                                     |
| v/s Ratio Perm                    |                                                                                   | c0.29                                                                                                                                                                                                                                                 |                                                                                   |                                                                                   | 0.15                                                                                                                                                                                                                                                  |                                                                                   |                                                                                    | 0.11                                                                                                                                                                                                                                                        |                                                                                     |                                                                                     | c0.18                                                                                                                                                                                                                                                       |                                                                                     |
| v/c Ratio                         |                                                                                   | 0.50                                                                                                                                                                                                                                                  |                                                                                   |                                                                                   | 0.27                                                                                                                                                                                                                                                  |                                                                                   |                                                                                    | 0.46                                                                                                                                                                                                                                                        |                                                                                     |                                                                                     | 0.72                                                                                                                                                                                                                                                        |                                                                                     |
| Uniform Delay, d1                 |                                                                                   | 8.2                                                                                                                                                                                                                                                   |                                                                                   |                                                                                   | 11.9                                                                                                                                                                                                                                                  |                                                                                   |                                                                                    | 31.8                                                                                                                                                                                                                                                        |                                                                                     |                                                                                     | 34.3                                                                                                                                                                                                                                                        |                                                                                     |
| Progression Factor                |                                                                                   | 1.00                                                                                                                                                                                                                                                  |                                                                                   |                                                                                   | 0.44                                                                                                                                                                                                                                                  |                                                                                   |                                                                                    | 1.00                                                                                                                                                                                                                                                        |                                                                                     |                                                                                     | 1.00                                                                                                                                                                                                                                                        |                                                                                     |
| Incremental Delay, d2             |                                                                                   | 0.6                                                                                                                                                                                                                                                   |                                                                                   |                                                                                   | 0.3                                                                                                                                                                                                                                                   |                                                                                   |                                                                                    | 3.9                                                                                                                                                                                                                                                         |                                                                                     |                                                                                     | 12.6                                                                                                                                                                                                                                                        |                                                                                     |
| Delay (s)                         |                                                                                   | 8.8                                                                                                                                                                                                                                                   |                                                                                   |                                                                                   | 5.5                                                                                                                                                                                                                                                   |                                                                                   |                                                                                    | 35.6                                                                                                                                                                                                                                                        |                                                                                     |                                                                                     | 46.9                                                                                                                                                                                                                                                        |                                                                                     |
| Level of Service                  |                                                                                   | A                                                                                                                                                                                                                                                     |                                                                                   |                                                                                   | A                                                                                                                                                                                                                                                     |                                                                                   |                                                                                    | D                                                                                                                                                                                                                                                           |                                                                                     |                                                                                     | D                                                                                                                                                                                                                                                           |                                                                                     |
| Approach Delay (s)                |                                                                                   | 8.8                                                                                                                                                                                                                                                   |                                                                                   |                                                                                   | 5.5                                                                                                                                                                                                                                                   |                                                                                   |                                                                                    | 35.6                                                                                                                                                                                                                                                        |                                                                                     |                                                                                     | 46.9                                                                                                                                                                                                                                                        |                                                                                     |
| Approach LOS                      |                                                                                   | A                                                                                                                                                                                                                                                     |                                                                                   |                                                                                   | A                                                                                                                                                                                                                                                     |                                                                                   |                                                                                    | D                                                                                                                                                                                                                                                           |                                                                                     |                                                                                     | D                                                                                                                                                                                                                                                           |                                                                                     |
| <b>Intersection Summary</b>       |                                                                                   |                                                                                                                                                                                                                                                       |                                                                                   |                                                                                   |                                                                                                                                                                                                                                                       |                                                                                   |                                                                                    |                                                                                                                                                                                                                                                             |                                                                                     |                                                                                     |                                                                                                                                                                                                                                                             |                                                                                     |
| HCM Average Control Delay         |                                                                                   | 13.7                                                                                                                                                                                                                                                  |                                                                                   |                                                                                   | HCM Level of Service                                                                                                                                                                                                                                  |                                                                                   |                                                                                    | B                                                                                                                                                                                                                                                           |                                                                                     |                                                                                     |                                                                                                                                                                                                                                                             |                                                                                     |
| HCM Volume to Capacity ratio      |                                                                                   | 0.56                                                                                                                                                                                                                                                  |                                                                                   |                                                                                   |                                                                                                                                                                                                                                                       |                                                                                   |                                                                                    |                                                                                                                                                                                                                                                             |                                                                                     |                                                                                     |                                                                                                                                                                                                                                                             |                                                                                     |
| Actuated Cycle Length (s)         |                                                                                   | 100.0                                                                                                                                                                                                                                                 |                                                                                   |                                                                                   | Sum of lost time (s)                                                                                                                                                                                                                                  |                                                                                   |                                                                                    | 8.0                                                                                                                                                                                                                                                         |                                                                                     |                                                                                     |                                                                                                                                                                                                                                                             |                                                                                     |
| Intersection Capacity Utilization |                                                                                   | 68.6%                                                                                                                                                                                                                                                 |                                                                                   |                                                                                   | ICU Level of Service                                                                                                                                                                                                                                  |                                                                                   |                                                                                    | C                                                                                                                                                                                                                                                           |                                                                                     |                                                                                     |                                                                                                                                                                                                                                                             |                                                                                     |
| Analysis Period (min)             |                                                                                   | 15                                                                                                                                                                                                                                                    |                                                                                   |                                                                                   |                                                                                                                                                                                                                                                       |                                                                                   |                                                                                    |                                                                                                                                                                                                                                                             |                                                                                     |                                                                                     |                                                                                                                                                                                                                                                             |                                                                                     |

c Critical Lane Group

Existing Conditions  
8: West Alley & 3rd Street

PM Peak Period  
1/5/2006

|                                   |  |  |  |  |  |  |  |  |  |  |  |  |
|-----------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Movement                          | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 | SBR                                                                                 |
| Lane Configurations               |                                                                                   |  |                                                                                   |                                                                                   |  |                                                                                   |                                                                                    |  |                                                                                     |                                                                                     |  |                                                                                     |
| Sign Control                      |                                                                                   | Stop                                                                              |                                                                                   |                                                                                   | Stop                                                                              |                                                                                   |                                                                                    | Free                                                                                |                                                                                     |                                                                                     | Free                                                                                |                                                                                     |
| Grade                             |                                                                                   | 0%                                                                                |                                                                                   |                                                                                   | 0%                                                                                |                                                                                   |                                                                                    | 0%                                                                                  |                                                                                     |                                                                                     | 0%                                                                                  |                                                                                     |
| Volume (veh/h)                    | 0                                                                                 | 0                                                                                 | 0                                                                                 | 1                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                  | 201                                                                                 | 1                                                                                   | 0                                                                                   | 231                                                                                 | 0                                                                                   |
| Peak Hour Factor                  | 0.92                                                                              | 0.92                                                                              | 0.92                                                                              | 0.92                                                                              | 0.92                                                                              | 0.92                                                                              | 0.92                                                                               | 0.92                                                                                | 0.92                                                                                | 0.92                                                                                | 0.92                                                                                | 0.92                                                                                |
| Hourly flow rate (vph)            | 0                                                                                 | 0                                                                                 | 0                                                                                 | 1                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                  | 218                                                                                 | 1                                                                                   | 0                                                                                   | 251                                                                                 | 0                                                                                   |
| Pedestrians                       |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lane Width (ft)                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Walking Speed (ft/s)              |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Percent Blockage                  |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Right turn flare (veh)            |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Median type                       |                                                                                   | None                                                                              |                                                                                   |                                                                                   | None                                                                              |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Median storage veh                |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Upstream signal (ft)              |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    | 260                                                                                 |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| pX, platoon unblocked             |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| vC, conflicting volume            | 470                                                                               | 471                                                                               | 251                                                                               | 470                                                                               | 470                                                                               | 219                                                                               | 251                                                                                |                                                                                     |                                                                                     | 220                                                                                 |                                                                                     |                                                                                     |
| vC1, stage 1 conf vol             |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| vC2, stage 2 conf vol             |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| vCu, unblocked vol                | 470                                                                               | 471                                                                               | 251                                                                               | 470                                                                               | 470                                                                               | 219                                                                               | 251                                                                                |                                                                                     |                                                                                     | 220                                                                                 |                                                                                     |                                                                                     |
| tC, single (s)                    | 7.1                                                                               | 6.5                                                                               | 6.2                                                                               | 7.1                                                                               | 6.5                                                                               | 6.2                                                                               | 4.1                                                                                |                                                                                     |                                                                                     | 4.1                                                                                 |                                                                                     |                                                                                     |
| tC, 2 stage (s)                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| tF (s)                            | 3.5                                                                               | 4.0                                                                               | 3.3                                                                               | 3.5                                                                               | 4.0                                                                               | 3.3                                                                               | 2.2                                                                                |                                                                                     |                                                                                     | 2.2                                                                                 |                                                                                     |                                                                                     |
| p0 queue free %                   | 100                                                                               | 100                                                                               | 100                                                                               | 100                                                                               | 100                                                                               | 100                                                                               | 100                                                                                |                                                                                     |                                                                                     | 100                                                                                 |                                                                                     |                                                                                     |
| cM capacity (veh/h)               | 504                                                                               | 491                                                                               | 788                                                                               | 504                                                                               | 491                                                                               | 821                                                                               | 1314                                                                               |                                                                                     |                                                                                     | 1350                                                                                |                                                                                     |                                                                                     |
| Direction, Lane #                 | EB 1                                                                              | WB 1                                                                              | NB 1                                                                              | SB 1                                                                              |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Volume Total                      | 0                                                                                 | 1                                                                                 | 220                                                                               | 251                                                                               |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Volume Left                       | 0                                                                                 | 1                                                                                 | 0                                                                                 | 0                                                                                 |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Volume Right                      | 0                                                                                 | 0                                                                                 | 1                                                                                 | 0                                                                                 |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| cSH                               | 1700                                                                              | 504                                                                               | 1314                                                                              | 1350                                                                              |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Volume to Capacity                | 0.00                                                                              | 0.00                                                                              | 0.00                                                                              | 0.00                                                                              |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Queue Length 95th (ft)            | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Control Delay (s)                 | 0.0                                                                               | 12.2                                                                              | 0.0                                                                               | 0.0                                                                               |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lane LOS                          | A                                                                                 | B                                                                                 |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Approach Delay (s)                | 0.0                                                                               | 12.2                                                                              | 0.0                                                                               | 0.0                                                                               |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Approach LOS                      | A                                                                                 | B                                                                                 |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Intersection Summary              |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Average Delay                     |                                                                                   |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Intersection Capacity Utilization |                                                                                   |                                                                                   | 22.2%                                                                             |                                                                                   | ICU Level of Service                                                              |                                                                                   |                                                                                    |                                                                                     |                                                                                     | A                                                                                   |                                                                                     |                                                                                     |
| Analysis Period (min)             |                                                                                   |                                                                                   | 15                                                                                |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |

## Appendix C

### Background Future Levels of Service

Background Conditions  
1: I Street & 3rd Street

AM Peak Period  
1/5/2006

|                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
|-----------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|                                   |  |  |  |  |  |  |  |  |  |  |  |  |
| Movement                          | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 | SBR                                                                                 |
| Lane Configurations               |                                                                                   |  |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |  |                                                                                     |                                                                                     |  |                                                                                     |
| Sign Control                      |                                                                                   | Stop                                                                              |                                                                                   |                                                                                   | Yield                                                                             |                                                                                   |                                                                                    | Stop                                                                                |                                                                                     |                                                                                     | Stop                                                                                |                                                                                     |
| Volume (vph)                      | 15                                                                                | 59                                                                                | 65                                                                                | 0                                                                                 | 0                                                                                 | 0                                                                                 | 16                                                                                 | 167                                                                                 | 23                                                                                  | 28                                                                                  | 166                                                                                 | 15                                                                                  |
| Peak Hour Factor                  | 0.92                                                                              | 0.92                                                                              | 0.92                                                                              | 0.92                                                                              | 0.92                                                                              | 0.92                                                                              | 0.92                                                                               | 0.92                                                                                | 0.92                                                                                | 0.92                                                                                | 0.92                                                                                | 0.92                                                                                |
| Hourly flow rate (vph)            | 16                                                                                | 64                                                                                | 71                                                                                | 0                                                                                 | 0                                                                                 | 0                                                                                 | 17                                                                                 | 182                                                                                 | 25                                                                                  | 30                                                                                  | 180                                                                                 | 16                                                                                  |
| Direction, Lane #                 | EB 1                                                                              | NB 1                                                                              | SB 1                                                                              |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Volume Total (vph)                | 151                                                                               | 224                                                                               | 227                                                                               |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Volume Left (vph)                 | 16                                                                                | 17                                                                                | 30                                                                                |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Volume Right (vph)                | 71                                                                                | 25                                                                                | 16                                                                                |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Hadj (s)                          | -0.22                                                                             | -0.02                                                                             | 0.02                                                                              |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Departure Headway (s)             | 4.7                                                                               | 4.5                                                                               | 4.6                                                                               |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Degree Utilization, x             | 0.20                                                                              | 0.28                                                                              | 0.29                                                                              |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Capacity (veh/h)                  | 701                                                                               | 762                                                                               | 754                                                                               |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Control Delay (s)                 | 8.9                                                                               | 9.3                                                                               | 9.4                                                                               |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Approach Delay (s)                | 8.9                                                                               | 9.3                                                                               | 9.4                                                                               |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Approach LOS                      | A                                                                                 | A                                                                                 | A                                                                                 |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Intersection Summary              |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Delay                             |                                                                                   |                                                                                   | 9.2                                                                               |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| HCM Level of Service              |                                                                                   |                                                                                   | A                                                                                 |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Intersection Capacity Utilization |                                                                                   |                                                                                   | 32.1%                                                                             | ICU Level of Service                                                              |                                                                                   | A                                                                                 |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Analysis Period (min)             |                                                                                   |                                                                                   | 15                                                                                |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |

Background Conditions  
2: I Street & North Alley

AM Peak Period  
1/5/2006

|                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
|-----------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|                                   |  |  |  |  |  |  |  |  |  |  |  |  |
| Movement                          | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                               | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 | SBR                                                                                 |
| Lane Configurations               |                                                                                   |  |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |  |                                                                                     |                                                                                     |  |                                                                                     |
| Sign Control                      |                                                                                   | Free                                                                              |                                                                                   |                                                                                   | Free                                                                              |                                                                                   |                                                                                   | Stop                                                                                |                                                                                     |                                                                                     | Stop                                                                                |                                                                                     |
| Grade                             |                                                                                   | 0%                                                                                |                                                                                   |                                                                                   | 0%                                                                                |                                                                                   |                                                                                   | 0%                                                                                  |                                                                                     |                                                                                     | 0%                                                                                  |                                                                                     |
| Volume (veh/h)                    | 2                                                                                 | 106                                                                               | 2                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                   | 0                                                                                   | 2                                                                                   | 3                                                                                   | 0                                                                                   |
| Peak Hour Factor                  | 0.92                                                                              | 0.92                                                                              | 0.92                                                                              | 0.92                                                                              | 0.92                                                                              | 0.92                                                                              | 0.92                                                                              | 0.92                                                                                | 0.92                                                                                | 0.92                                                                                | 0.92                                                                                | 0.92                                                                                |
| Hourly flow rate (vph)            | 2                                                                                 | 115                                                                               | 2                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                   | 0                                                                                   | 2                                                                                   | 3                                                                                   | 0                                                                                   |
| Pedestrians                       |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lane Width (ft)                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Walking Speed (ft/s)              |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Percent Blockage                  |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Right turn flare (veh)            |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Median type                       |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   | None                                                                              |                                                                                     |                                                                                     | None                                                                                |                                                                                     |                                                                                     |
| Median storage veh                |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Upstream signal (ft)              |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| pX, platoon unblocked             |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| vC, conflicting volume            | 0                                                                                 |                                                                                   |                                                                                   | 117                                                                               |                                                                                   |                                                                                   | 122                                                                               | 121                                                                                 | 116                                                                                 | 121                                                                                 | 122                                                                                 | 0                                                                                   |
| vC1, stage 1 conf vol             |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| vC2, stage 2 conf vol             |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| vCu, unblocked vol                | 0                                                                                 |                                                                                   |                                                                                   | 117                                                                               |                                                                                   |                                                                                   | 122                                                                               | 121                                                                                 | 116                                                                                 | 121                                                                                 | 122                                                                                 | 0                                                                                   |
| tC, single (s)                    | 4.1                                                                               |                                                                                   |                                                                                   | 4.1                                                                               |                                                                                   |                                                                                   | 7.1                                                                               | 6.5                                                                                 | 6.2                                                                                 | 7.1                                                                                 | 6.5                                                                                 | 6.2                                                                                 |
| tC, 2 stage (s)                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| tF (s)                            | 2.2                                                                               |                                                                                   |                                                                                   | 2.2                                                                               |                                                                                   |                                                                                   | 3.5                                                                               | 4.0                                                                                 | 3.3                                                                                 | 3.5                                                                                 | 4.0                                                                                 | 3.3                                                                                 |
| p0 queue free %                   | 100                                                                               |                                                                                   |                                                                                   | 100                                                                               |                                                                                   |                                                                                   | 100                                                                               | 100                                                                                 | 100                                                                                 | 100                                                                                 | 100                                                                                 | 100                                                                                 |
| cM capacity (veh/h)               | 1623                                                                              |                                                                                   |                                                                                   | 1471                                                                              |                                                                                   |                                                                                   | 849                                                                               | 769                                                                                 | 936                                                                                 | 854                                                                                 | 768                                                                                 | 1085                                                                                |
| Direction, Lane #                 | EB 1                                                                              | NB 1                                                                              | SB 1                                                                              |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Volume Total                      | 120                                                                               | 0                                                                                 | 5                                                                                 |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Volume Left                       | 2                                                                                 | 0                                                                                 | 2                                                                                 |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Volume Right                      | 2                                                                                 | 0                                                                                 | 0                                                                                 |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| cSH                               | 1623                                                                              | 1700                                                                              | 800                                                                               |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Volume to Capacity                | 0.00                                                                              | 0.00                                                                              | 0.01                                                                              |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Queue Length 95th (ft)            | 0                                                                                 | 0                                                                                 | 1                                                                                 |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Control Delay (s)                 | 0.1                                                                               | 0.0                                                                               | 9.5                                                                               |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lane LOS                          | A                                                                                 | A                                                                                 | A                                                                                 |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Approach Delay (s)                | 0.1                                                                               | 0.0                                                                               | 9.5                                                                               |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Approach LOS                      |                                                                                   | A                                                                                 | A                                                                                 |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Intersection Summary              |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Average Delay                     |                                                                                   |                                                                                   | 0.5                                                                               |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Intersection Capacity Utilization |                                                                                   | 15.8%                                                                             |                                                                                   | ICU Level of Service                                                              |                                                                                   |                                                                                   |                                                                                   | A                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Analysis Period (min)             |                                                                                   | 15                                                                                |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |

Background Conditions  
3: I Street & 4th Street

AM Peak Period  
1/5/2006

|                                   |  |  |  |  |  |  |  |  |  |  |  |  |
|-----------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Movement                          | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                               | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 | SBR                                                                                 |
| Lane Configurations               |                                                                                   |  |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |  |                                                                                     |
| Sign Control                      |                                                                                   | Stop                                                                              |                                                                                   |                                                                                   | Yield                                                                             |                                                                                   |                                                                                   | Free                                                                                |                                                                                     |                                                                                     | Free                                                                                |                                                                                     |
| Grade                             |                                                                                   | 0%                                                                                |                                                                                   |                                                                                   | 0%                                                                                |                                                                                   |                                                                                   | 0%                                                                                  |                                                                                     |                                                                                     | 0%                                                                                  |                                                                                     |
| Volume (veh/h)                    | 0                                                                                 | 96                                                                                | 12                                                                                | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                   | 0                                                                                   | 34                                                                                  | 341                                                                                 | 0                                                                                   |
| Peak Hour Factor                  | 0.92                                                                              | 0.92                                                                              | 0.92                                                                              | 0.92                                                                              | 0.92                                                                              | 0.92                                                                              | 0.92                                                                              | 0.92                                                                                | 0.92                                                                                | 0.92                                                                                | 0.92                                                                                | 0.92                                                                                |
| Hourly flow rate (vph)            | 0                                                                                 | 104                                                                               | 13                                                                                | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                   | 0                                                                                   | 37                                                                                  | 371                                                                                 | 0                                                                                   |
| Pedestrians                       |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lane Width (ft)                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Walking Speed (ft/s)              |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Percent Blockage                  |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Right turn flare (veh)            |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Median type                       |                                                                                   | None                                                                              |                                                                                   |                                                                                   | None                                                                              |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Median storage (veh)              |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Upstream signal (ft)              |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   | 450                                                                                 |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| pX, platoon unblocked             |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| vC, conflicting volume            | 445                                                                               | 445                                                                               | 371                                                                               | 510                                                                               | 445                                                                               | 0                                                                                 | 371                                                                               |                                                                                     |                                                                                     | 0                                                                                   |                                                                                     |                                                                                     |
| vC1, stage 1 conf vol             |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| vC2, stage 2 conf vol             |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| vCu, unblocked vol                | 445                                                                               | 445                                                                               | 371                                                                               | 510                                                                               | 445                                                                               | 0                                                                                 | 371                                                                               |                                                                                     |                                                                                     | 0                                                                                   |                                                                                     |                                                                                     |
| tC, single (s)                    | 7.1                                                                               | 6.5                                                                               | 6.2                                                                               | 7.1                                                                               | 6.5                                                                               | 6.2                                                                               | 4.1                                                                               |                                                                                     |                                                                                     | 4.1                                                                                 |                                                                                     |                                                                                     |
| tC, 2 stage (s)                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| tF (s)                            | 3.5                                                                               | 4.0                                                                               | 3.3                                                                               | 3.5                                                                               | 4.0                                                                               | 3.3                                                                               | 2.2                                                                               |                                                                                     |                                                                                     | 2.2                                                                                 |                                                                                     |                                                                                     |
| p0 queue free %                   | 100                                                                               | 79                                                                                | 98                                                                                | 100                                                                               | 100                                                                               | 100                                                                               | 100                                                                               |                                                                                     |                                                                                     | 98                                                                                  |                                                                                     |                                                                                     |
| cM capacity (veh/h)               | 515                                                                               | 496                                                                               | 675                                                                               | 383                                                                               | 496                                                                               | 1085                                                                              | 1188                                                                              |                                                                                     |                                                                                     | 1623                                                                                |                                                                                     |                                                                                     |
| Direction, Lane #                 | EB 1                                                                              | SB 1                                                                              |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Volume Total                      | 117                                                                               | 408                                                                               |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Volume Left                       | 0                                                                                 | 37                                                                                |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Volume Right                      | 13                                                                                | 0                                                                                 |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| cSH                               | 512                                                                               | 1623                                                                              |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Volume to Capacity                | 0.23                                                                              | 0.02                                                                              |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Queue Length 95th (ft)            | 22                                                                                | 2                                                                                 |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Control Delay (s)                 | 14.1                                                                              | 0.9                                                                               |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lane LOS                          | B                                                                                 | A                                                                                 |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Approach Delay (s)                | 14.1                                                                              | 0.9                                                                               |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Approach LOS                      | B                                                                                 |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Intersection Summary              |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Average Delay                     |                                                                                   | 3.8                                                                               |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Intersection Capacity Utilization |                                                                                   | 32.3%                                                                             |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Analysis Period (min)             |                                                                                   | 15                                                                                |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| ICU Level of Service              |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     | A                                                                                   |                                                                                     |                                                                                     |

Background Conditions  
4: East Alley & 4th Street

AM Peak Period  
1/5/2006

|                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
|-----------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|                                   |  |  |  |  |  |  |  |  |  |  |  |  |
| Movement                          | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                               | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 | SBR                                                                                 |
| Lane Configurations               |                                                                                   |                                                                                   |  |                                                                                   |  |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |  |                                                                                     |
| Sign Control                      |                                                                                   | Stop                                                                              |                                                                                   |                                                                                   | Stop                                                                              |                                                                                   |                                                                                   | Free                                                                                |                                                                                     |                                                                                     | Free                                                                                |                                                                                     |
| Grade                             |                                                                                   | 0%                                                                                |                                                                                   |                                                                                   | 0%                                                                                |                                                                                   |                                                                                   | 0%                                                                                  |                                                                                     |                                                                                     | 0%                                                                                  |                                                                                     |
| Volume (veh/h)                    | 0                                                                                 | 0                                                                                 | 0                                                                                 | 3                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                   | 0                                                                                   | 1                                                                                   | 351                                                                                 | 1                                                                                   |
| Peak Hour Factor                  | 0.92                                                                              | 0.92                                                                              | 0.92                                                                              | 0.92                                                                              | 0.92                                                                              | 0.92                                                                              | 0.92                                                                              | 0.92                                                                                | 0.92                                                                                | 0.92                                                                                | 0.92                                                                                | 0.92                                                                                |
| Hourly flow rate (vph)            | 0                                                                                 | 0                                                                                 | 0                                                                                 | 3                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                   | 0                                                                                   | 1                                                                                   | 382                                                                                 | 1                                                                                   |
| Pedestrians                       |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lane Width (ft)                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Walking Speed (ft/s)              |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Percent Blockage                  |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Right turn flare (veh)            |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Median type                       |                                                                                   | None                                                                              |                                                                                   |                                                                                   | None                                                                              |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Median storage veh                |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Upstream signal (ft)              |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   | 140                                                                                 |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| pX, platoon unblocked             |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| vC, conflicting volume            | 384                                                                               | 384                                                                               | 382                                                                               | 384                                                                               | 385                                                                               | 0                                                                                 | 383                                                                               |                                                                                     |                                                                                     | 0                                                                                   |                                                                                     |                                                                                     |
| vC1, stage 1 conf vol             |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| vC2, stage 2 conf vol             |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| vCu, unblocked vol                | 384                                                                               | 384                                                                               | 382                                                                               | 384                                                                               | 385                                                                               | 0                                                                                 | 383                                                                               |                                                                                     |                                                                                     | 0                                                                                   |                                                                                     |                                                                                     |
| tC, single (s)                    | 7.1                                                                               | 6.5                                                                               | 6.2                                                                               | 7.1                                                                               | 6.5                                                                               | 6.2                                                                               | 4.1                                                                               |                                                                                     |                                                                                     | 4.1                                                                                 |                                                                                     |                                                                                     |
| tC, 2 stage (s)                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| tF (s)                            | 3.5                                                                               | 4.0                                                                               | 3.3                                                                               | 3.5                                                                               | 4.0                                                                               | 3.3                                                                               | 2.2                                                                               |                                                                                     |                                                                                     | 2.2                                                                                 |                                                                                     |                                                                                     |
| p0 queue free %                   | 100                                                                               | 100                                                                               | 100                                                                               | 99                                                                                | 100                                                                               | 100                                                                               | 100                                                                               |                                                                                     |                                                                                     | 100                                                                                 |                                                                                     |                                                                                     |
| cM capacity (veh/h)               | 574                                                                               | 549                                                                               | 665                                                                               | 574                                                                               | 549                                                                               | 1085                                                                              | 1176                                                                              |                                                                                     |                                                                                     | 1623                                                                                |                                                                                     |                                                                                     |
| Direction, Lane #                 | EB 1                                                                              | WB 1                                                                              | SB 1                                                                              |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Volume Total                      | 0                                                                                 | 3                                                                                 | 384                                                                               |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Volume Left                       | 0                                                                                 | 3                                                                                 | 1                                                                                 |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Volume Right                      | 0                                                                                 | 0                                                                                 | 1                                                                                 |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| cSH                               | 1700                                                                              | 574                                                                               | 1623                                                                              |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Volume to Capacity                | 0.00                                                                              | 0.01                                                                              | 0.00                                                                              |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Queue Length 95th (ft)            | 0                                                                                 | 0                                                                                 | 0                                                                                 |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Control Delay (s)                 | 0.0                                                                               | 11.3                                                                              | 0.0                                                                               |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lane LOS                          | A                                                                                 | B                                                                                 | A                                                                                 |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Approach Delay (s)                | 0.0                                                                               | 11.3                                                                              | 0.0                                                                               |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Approach LOS                      | A                                                                                 | B                                                                                 |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Intersection Summary              |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Average Delay                     |                                                                                   |                                                                                   | 0.1                                                                               |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Intersection Capacity Utilization |                                                                                   |                                                                                   | 28.6%                                                                             | ICU Level of Service                                                              |                                                                                   | A                                                                                 |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Analysis Period (min)             |                                                                                   |                                                                                   | 15                                                                                |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |

Background Conditions  
5: H Street & 4th Street

AM Peak Period  
1/5/2006

| Movement                          | EBL  | EBT   | EBR   | WBL  | WBT  | WBR                  | NBL  | NBT  | NBR  | SBL  | SBT  | SBR  |
|-----------------------------------|------|-------|-------|------|------|----------------------|------|------|------|------|------|------|
| Lane Configurations               |      | ↑↑↑   |       |      | ↑↑↑  |                      |      |      |      |      | ↑↓   |      |
| Ideal Flow (vphpl)                | 1900 | 1900  | 1900  | 1900 | 1900 | 1900                 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Total Lost time (s)               |      | 4.0   |       |      | 4.0  |                      |      |      |      |      | 4.0  |      |
| Lane Util. Factor                 |      | 0.91  |       |      | 0.91 |                      |      |      |      |      | 1.00 |      |
| Fr <sub>t</sub>                   |      | 1.00  |       |      | 1.00 |                      |      |      |      |      | 0.98 |      |
| Flt Protected                     |      | 1.00  |       |      | 1.00 |                      |      |      |      |      | 0.99 |      |
| Satd. Flow (prot)                 |      | 5060  |       |      | 5073 |                      |      |      |      |      | 1809 |      |
| Flt Permitted                     |      | 1.00  |       |      | 0.83 |                      |      |      |      |      | 0.99 |      |
| Satd. Flow (perm)                 |      | 5060  |       |      | 4230 |                      |      |      |      |      | 1809 |      |
| Volume (vph)                      | 0    | 1317  | 45    | 26   | 518  | 0                    | 0    | 0    | 0    | 74   | 230  | 50   |
| Peak-hour factor, PHF             | 0.92 | 0.92  | 0.92  | 0.92 | 0.92 | 0.92                 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Adj. Flow (vph)                   | 0    | 1432  | 49    | 28   | 563  | 0                    | 0    | 0    | 0    | 80   | 250  | 54   |
| RTOR Reduction (vph)              | 0    | 4     | 0     | 0    | 0    | 0                    | 0    | 0    | 0    | 0    | 6    | 0    |
| Lane Group Flow (vph)             | 0    | 1477  | 0     | 0    | 591  | 0                    | 0    | 0    | 0    | 0    | 378  | 0    |
| Turn Type                         |      | Perm  |       |      |      |                      |      |      |      | Perm |      |      |
| Protected Phases                  |      | 4     |       |      | 8    |                      |      |      |      |      | 6    |      |
| Permitted Phases                  |      |       |       | 8    |      |                      |      |      |      | 6    |      |      |
| Actuated Green, G (s)             |      | 60.0  |       |      | 60.0 |                      |      |      |      |      | 32.0 |      |
| Effective Green, g (s)            |      | 60.0  |       |      | 60.0 |                      |      |      |      |      | 32.0 |      |
| Actuated g/C Ratio                |      | 0.60  |       |      | 0.60 |                      |      |      |      |      | 0.32 |      |
| Clearance Time (s)                |      | 4.0   |       |      | 4.0  |                      |      |      |      |      | 4.0  |      |
| Lane Grp Cap (vph)                |      | 3036  |       |      | 2538 |                      |      |      |      |      | 579  |      |
| v/s Ratio Prot                    |      | c0.29 |       |      |      |                      |      |      |      |      |      |      |
| v/s Ratio Perm                    |      |       |       |      | 0.14 |                      |      |      |      |      | 0.21 |      |
| v/c Ratio                         |      | 0.49  |       |      | 0.23 |                      |      |      |      |      | 0.65 |      |
| Uniform Delay, d <sub>1</sub>     |      | 11.3  |       |      | 9.3  |                      |      |      |      |      | 29.2 |      |
| Progression Factor                |      | 0.50  |       |      | 1.00 |                      |      |      |      |      | 1.00 |      |
| Incremental Delay, d <sub>2</sub> |      | 0.4   |       |      | 0.2  |                      |      |      |      |      | 5.6  |      |
| Delay (s)                         |      | 6.1   |       |      | 9.5  |                      |      |      |      |      | 34.9 |      |
| Level of Service                  |      | A     |       |      | A    |                      |      |      |      |      | C    |      |
| Approach Delay (s)                |      | 6.1   |       |      | 9.5  |                      |      | 0.0  |      |      | 34.9 |      |
| Approach LOS                      |      | A     |       |      | A    |                      |      | A    |      |      | C    |      |
| <b>Intersection Summary</b>       |      |       |       |      |      |                      |      |      |      |      |      |      |
| HCM Average Control Delay         |      |       | 11.4  |      |      | HCM Level of Service |      |      |      | B    |      |      |
| HCM Volume to Capacity ratio      |      |       | 0.54  |      |      |                      |      |      |      |      |      |      |
| Actuated Cycle Length (s)         |      |       | 100.0 |      |      | Sum of lost time (s) |      |      |      | 8.0  |      |      |
| Intersection Capacity Utilization |      |       | 55.5% |      |      | ICU Level of Service |      |      |      | B    |      |      |
| Analysis Period (min)             |      |       | 15    |      |      |                      |      |      |      |      |      |      |

c Critical Lane Group



| Movement                          | EBL  | EBT  | WBT   | WBR  | SBL                  | SBR  |      |
|-----------------------------------|------|------|-------|------|----------------------|------|------|
| Lane Configurations               |      | ↑↑↑  | ↑↑↑   |      | ↑                    |      |      |
| Sign Control                      |      | Free | Free  |      | Stop                 |      |      |
| Grade                             |      | 0%   | 0%    |      | 0%                   |      |      |
| Volume (veh/h)                    | 1    | 1361 | 568   | 0    | 1                    | 4    |      |
| Peak Hour Factor                  | 0.92 | 0.92 | 0.92  | 0.92 | 0.92                 | 0.92 |      |
| Hourly flow rate (vph)            | 1    | 1479 | 617   | 0    | 1                    | 4    |      |
| Pedestrians                       |      |      |       |      |                      |      |      |
| Lane Width (ft)                   |      |      |       |      |                      |      |      |
| Walking Speed (ft/s)              |      |      |       |      |                      |      |      |
| Percent Blockage                  |      |      |       |      |                      |      |      |
| Right turn flare (veh)            |      |      |       |      |                      |      |      |
| Median type                       |      |      |       | None |                      |      |      |
| Median storage veh                |      |      |       |      |                      |      |      |
| Upstream signal (ft)              |      | 216  | 198   |      |                      |      |      |
| pX, platoon unblocked             | 0.96 |      |       |      | 0.89                 | 0.96 |      |
| vC, conflicting volume            | 617  |      |       |      | 1113                 | 206  |      |
| vC1, stage 1 conf vol             |      |      |       |      |                      |      |      |
| vC2, stage 2 conf vol             |      |      |       |      |                      |      |      |
| vCu, unblocked vol                | 510  |      |       |      | 665                  | 80   |      |
| tC, single (s)                    | 4.1  |      |       |      | 6.8                  | 6.9  |      |
| tC, 2 stage (s)                   |      |      |       |      |                      |      |      |
| tF (s)                            | 2.2  |      |       |      | 3.5                  | 3.3  |      |
| p0 queue free %                   | 100  |      |       |      | 100                  | 100  |      |
| cM capacity (veh/h)               | 1006 |      |       |      | 350                  | 923  |      |
| Direction, Lane #                 | EB 1 | EB 2 | EB 3  | WB 1 | WB 2                 | WB 3 | SB 1 |
| Volume Total                      | 297  | 592  | 592   | 247  | 247                  | 123  | 5    |
| Volume Left                       | 1    | 0    | 0     | 0    | 0                    | 0    | 1    |
| Volume Right                      | 0    | 0    | 0     | 0    | 0                    | 0    | 4    |
| cSH                               | 1006 | 1700 | 1700  | 1700 | 1700                 | 1700 | 695  |
| Volume to Capacity                | 0.00 | 0.35 | 0.35  | 0.15 | 0.15                 | 0.07 | 0.01 |
| Queue Length 95th (ft)            | 0    | 0    | 0     | 0    | 0                    | 0    | 1    |
| Control Delay (s)                 | 0.0  | 0.0  | 0.0   | 0.0  | 0.0                  | 0.0  | 10.2 |
| Lane LOS                          | A    |      |       |      |                      |      | B    |
| Approach Delay (s)                | 0.0  |      |       | 0.0  |                      |      | 10.2 |
| Approach LOS                      |      |      |       |      |                      |      | B    |
| Intersection Summary              |      |      |       |      |                      |      |      |
| Average Delay                     |      |      | 0.0   |      |                      |      |      |
| Intersection Capacity Utilization |      |      | 37.0% |      | ICU Level of Service |      | A    |
| Analysis Period (min)             |      |      | 15    |      |                      |      |      |

|                                   |  |  |  |  |  |  |  |  |  |  |  |  |
|-----------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Movement                          | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 | SBR                                                                                 |
| Lane Configurations               |                                                                                   |  |                                                                                   |                                                                                   |  |                                                                                   |                                                                                    |  |                                                                                     |                                                                                     |  |                                                                                     |
| Ideal Flow (vphpl)                | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                               | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                |
| Total Lost time (s)               |                                                                                   | 4.0                                                                               |                                                                                   |                                                                                   | 4.0                                                                               |                                                                                   |                                                                                    | 4.0                                                                                 |                                                                                     |                                                                                     | 4.0                                                                                 |                                                                                     |
| Lane Util. Factor                 |                                                                                   | 0.91                                                                              |                                                                                   |                                                                                   | 0.91                                                                              |                                                                                   |                                                                                    | 1.00                                                                                |                                                                                     |                                                                                     | 1.00                                                                                |                                                                                     |
| Frt                               |                                                                                   | 0.99                                                                              |                                                                                   |                                                                                   | 0.99                                                                              |                                                                                   |                                                                                    | 0.98                                                                                |                                                                                     |                                                                                     | 0.98                                                                                |                                                                                     |
| Flt Protected                     |                                                                                   | 1.00                                                                              |                                                                                   |                                                                                   | 1.00                                                                              |                                                                                   |                                                                                    | 0.99                                                                                |                                                                                     |                                                                                     | 0.98                                                                                |                                                                                     |
| Satd. Flow (prot)                 |                                                                                   | 5037                                                                              |                                                                                   |                                                                                   | 5021                                                                              |                                                                                   |                                                                                    | 1795                                                                                |                                                                                     |                                                                                     | 1787                                                                                |                                                                                     |
| Flt Permitted                     |                                                                                   | 0.87                                                                              |                                                                                   |                                                                                   | 0.82                                                                              |                                                                                   |                                                                                    | 0.86                                                                                |                                                                                     |                                                                                     | 0.74                                                                                |                                                                                     |
| Satd. Flow (perm)                 |                                                                                   | 4377                                                                              |                                                                                   |                                                                                   | 4116                                                                              |                                                                                   |                                                                                    | 1556                                                                                |                                                                                     |                                                                                     | 1354                                                                                |                                                                                     |
| Volume (vph)                      | 65                                                                                | 1241                                                                              | 64                                                                                | 29                                                                                | 504                                                                               | 39                                                                                | 42                                                                                 | 98                                                                                  | 31                                                                                  | 89                                                                                  | 105                                                                                 | 38                                                                                  |
| Peak-hour factor, PHF             | 0.92                                                                              | 0.92                                                                              | 0.92                                                                              | 0.92                                                                              | 0.92                                                                              | 0.92                                                                              | 0.92                                                                               | 0.92                                                                                | 0.92                                                                                | 0.92                                                                                | 0.92                                                                                | 0.92                                                                                |
| Adj. Flow (vph)                   | 71                                                                                | 1349                                                                              | 70                                                                                | 32                                                                                | 548                                                                               | 42                                                                                | 46                                                                                 | 107                                                                                 | 34                                                                                  | 97                                                                                  | 114                                                                                 | 41                                                                                  |
| RTOR Reduction (vph)              | 0                                                                                 | 5                                                                                 | 0                                                                                 | 0                                                                                 | 8                                                                                 | 0                                                                                 | 0                                                                                  | 8                                                                                   | 0                                                                                   | 0                                                                                   | 7                                                                                   | 0                                                                                   |
| Lane Group Flow (vph)             | 0                                                                                 | 1485                                                                              | 0                                                                                 | 0                                                                                 | 614                                                                               | 0                                                                                 | 0                                                                                  | 179                                                                                 | 0                                                                                   | 0                                                                                   | 245                                                                                 | 0                                                                                   |
| Turn Type                         | Prot                                                                              |                                                                                   |                                                                                   | Perm                                                                              |                                                                                   |                                                                                   | Perm                                                                               |                                                                                     |                                                                                     | Perm                                                                                |                                                                                     |                                                                                     |
| Protected Phases                  | 7                                                                                 | 4                                                                                 |                                                                                   |                                                                                   | 8                                                                                 |                                                                                   |                                                                                    | 2                                                                                   |                                                                                     |                                                                                     | 6                                                                                   |                                                                                     |
| Permitted Phases                  |                                                                                   |                                                                                   |                                                                                   | 8                                                                                 |                                                                                   |                                                                                   | 2                                                                                  |                                                                                     |                                                                                     | 6                                                                                   |                                                                                     |                                                                                     |
| Actuated Green, G (s)             |                                                                                   | 67.0                                                                              |                                                                                   |                                                                                   | 55.0                                                                              |                                                                                   |                                                                                    | 25.0                                                                                |                                                                                     |                                                                                     | 25.0                                                                                |                                                                                     |
| Effective Green, g (s)            |                                                                                   | 67.0                                                                              |                                                                                   |                                                                                   | 55.0                                                                              |                                                                                   |                                                                                    | 25.0                                                                                |                                                                                     |                                                                                     | 25.0                                                                                |                                                                                     |
| Actuated g/C Ratio                |                                                                                   | 0.67                                                                              |                                                                                   |                                                                                   | 0.55                                                                              |                                                                                   |                                                                                    | 0.25                                                                                |                                                                                     |                                                                                     | 0.25                                                                                |                                                                                     |
| Clearance Time (s)                |                                                                                   | 4.0                                                                               |                                                                                   |                                                                                   | 4.0                                                                               |                                                                                   |                                                                                    | 4.0                                                                                 |                                                                                     |                                                                                     | 4.0                                                                                 |                                                                                     |
| Lane Grp Cap (vph)                |                                                                                   | 2985                                                                              |                                                                                   |                                                                                   | 2264                                                                              |                                                                                   |                                                                                    | 389                                                                                 |                                                                                     |                                                                                     | 339                                                                                 |                                                                                     |
| v/s Ratio Prot                    |                                                                                   | c0.04                                                                             |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| v/s Ratio Perm                    |                                                                                   | c0.29                                                                             |                                                                                   |                                                                                   | 0.15                                                                              |                                                                                   |                                                                                    | 0.11                                                                                |                                                                                     |                                                                                     | c0.18                                                                               |                                                                                     |
| v/c Ratio                         |                                                                                   | 0.50                                                                              |                                                                                   |                                                                                   | 0.27                                                                              |                                                                                   |                                                                                    | 0.46                                                                                |                                                                                     |                                                                                     | 0.72                                                                                |                                                                                     |
| Uniform Delay, d1                 |                                                                                   | 8.2                                                                               |                                                                                   |                                                                                   | 11.9                                                                              |                                                                                   |                                                                                    | 31.8                                                                                |                                                                                     |                                                                                     | 34.3                                                                                |                                                                                     |
| Progression Factor                |                                                                                   | 1.00                                                                              |                                                                                   |                                                                                   | 0.44                                                                              |                                                                                   |                                                                                    | 1.00                                                                                |                                                                                     |                                                                                     | 1.00                                                                                |                                                                                     |
| Incremental Delay, d2             |                                                                                   | 0.6                                                                               |                                                                                   |                                                                                   | 0.3                                                                               |                                                                                   |                                                                                    | 3.9                                                                                 |                                                                                     |                                                                                     | 12.6                                                                                |                                                                                     |
| Delay (s)                         |                                                                                   | 8.8                                                                               |                                                                                   |                                                                                   | 5.5                                                                               |                                                                                   |                                                                                    | 35.6                                                                                |                                                                                     |                                                                                     | 46.9                                                                                |                                                                                     |
| Level of Service                  |                                                                                   | A                                                                                 |                                                                                   |                                                                                   | A                                                                                 |                                                                                   |                                                                                    | D                                                                                   |                                                                                     |                                                                                     | D                                                                                   |                                                                                     |
| Approach Delay (s)                |                                                                                   | 8.8                                                                               |                                                                                   |                                                                                   | 5.5                                                                               |                                                                                   |                                                                                    | 35.6                                                                                |                                                                                     |                                                                                     | 46.9                                                                                |                                                                                     |
| Approach LOS                      |                                                                                   | A                                                                                 |                                                                                   |                                                                                   | A                                                                                 |                                                                                   |                                                                                    | D                                                                                   |                                                                                     |                                                                                     | D                                                                                   |                                                                                     |
| <b>Intersection Summary</b>       |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| HCM Average Control Delay         |                                                                                   | 13.7                                                                              |                                                                                   |                                                                                   |                                                                                   |                                                                                   | HCM Level of Service                                                               |                                                                                     |                                                                                     |                                                                                     | B                                                                                   |                                                                                     |
| HCM Volume to Capacity ratio      |                                                                                   | 0.56                                                                              |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Actuated Cycle Length (s)         |                                                                                   | 100.0                                                                             |                                                                                   |                                                                                   |                                                                                   |                                                                                   | Sum of lost time (s)                                                               |                                                                                     |                                                                                     | 8.0                                                                                 |                                                                                     |                                                                                     |
| Intersection Capacity Utilization |                                                                                   | 68.6%                                                                             |                                                                                   |                                                                                   |                                                                                   |                                                                                   | ICU Level of Service                                                               |                                                                                     |                                                                                     | C                                                                                   |                                                                                     |                                                                                     |
| Analysis Period (min)             |                                                                                   | 15                                                                                |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| c Critical Lane Group             |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |

Background Conditions  
8: West Alley & 3rd Street

AM Peak Period  
1/5/2006

|                                   |  |  |  |  |  |  |  |  |  |  |  |  |
|-----------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Movement                          | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 | SBR                                                                                 |
| Lane Configurations               |                                                                                   |  |                                                                                   |                                                                                   |  |                                                                                   |                                                                                    |  |                                                                                     |                                                                                     |  |                                                                                     |
| Sign Control                      |                                                                                   | Stop                                                                              |                                                                                   |                                                                                   | Stop                                                                              |                                                                                   |                                                                                    | Free                                                                                |                                                                                     |                                                                                     | Free                                                                                |                                                                                     |
| Grade                             |                                                                                   | 0%                                                                                |                                                                                   |                                                                                   | 0%                                                                                |                                                                                   |                                                                                    | 0%                                                                                  |                                                                                     |                                                                                     | 0%                                                                                  |                                                                                     |
| Volume (veh/h)                    | 0                                                                                 | 0                                                                                 | 0                                                                                 | 1                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                  | 201                                                                                 | 1                                                                                   | 0                                                                                   | 231                                                                                 | 0                                                                                   |
| Peak Hour Factor                  | 0.92                                                                              | 0.92                                                                              | 0.92                                                                              | 0.92                                                                              | 0.92                                                                              | 0.92                                                                              | 0.92                                                                               | 0.92                                                                                | 0.92                                                                                | 0.92                                                                                | 0.92                                                                                | 0.92                                                                                |
| Hourly flow rate (vph)            | 0                                                                                 | 0                                                                                 | 0                                                                                 | 1                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                  | 218                                                                                 | 1                                                                                   | 0                                                                                   | 251                                                                                 | 0                                                                                   |
| Pedestrians                       |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lane Width (ft)                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Walking Speed (ft/s)              |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Percent Blockage                  |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Right turn flare (veh)            |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Median type                       |                                                                                   | None                                                                              |                                                                                   |                                                                                   | None                                                                              |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Median storage veh                |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Upstream signal (ft)              |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    | 260                                                                                 |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| pX, platoon unblocked             |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| vC, conflicting volume            | 470                                                                               | 471                                                                               | 251                                                                               | 470                                                                               | 470                                                                               | 219                                                                               | 251                                                                                |                                                                                     |                                                                                     | 220                                                                                 |                                                                                     |                                                                                     |
| vC1, stage 1 conf vol             |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| vC2, stage 2 conf vol             |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| vCu, unblocked vol                | 470                                                                               | 471                                                                               | 251                                                                               | 470                                                                               | 470                                                                               | 219                                                                               | 251                                                                                |                                                                                     |                                                                                     | 220                                                                                 |                                                                                     |                                                                                     |
| tC, single (s)                    | 7.1                                                                               | 6.5                                                                               | 6.2                                                                               | 7.1                                                                               | 6.5                                                                               | 6.2                                                                               | 4.1                                                                                |                                                                                     |                                                                                     | 4.1                                                                                 |                                                                                     |                                                                                     |
| tC, 2 stage (s)                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| tF (s)                            | 3.5                                                                               | 4.0                                                                               | 3.3                                                                               | 3.5                                                                               | 4.0                                                                               | 3.3                                                                               | 2.2                                                                                |                                                                                     |                                                                                     | 2.2                                                                                 |                                                                                     |                                                                                     |
| p0 queue free %                   | 100                                                                               | 100                                                                               | 100                                                                               | 100                                                                               | 100                                                                               | 100                                                                               | 100                                                                                |                                                                                     |                                                                                     | 100                                                                                 |                                                                                     |                                                                                     |
| cM capacity (veh/h)               | 504                                                                               | 491                                                                               | 788                                                                               | 504                                                                               | 491                                                                               | 821                                                                               | 1314                                                                               |                                                                                     |                                                                                     | 1350                                                                                |                                                                                     |                                                                                     |
| Direction, Lane #                 | EB 1                                                                              | WB 1                                                                              | NB 1                                                                              | SB 1                                                                              |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Volume Total                      | 0                                                                                 | 1                                                                                 | 220                                                                               | 251                                                                               |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Volume Left                       | 0                                                                                 | 1                                                                                 | 0                                                                                 | 0                                                                                 |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Volume Right                      | 0                                                                                 | 0                                                                                 | 1                                                                                 | 0                                                                                 |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| cSH                               | 1700                                                                              | 504                                                                               | 1314                                                                              | 1350                                                                              |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Volume to Capacity                | 0.00                                                                              | 0.00                                                                              | 0.00                                                                              | 0.00                                                                              |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Queue Length 95th (ft)            | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Control Delay (s)                 | 0.0                                                                               | 12.2                                                                              | 0.0                                                                               | 0.0                                                                               |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lane LOS                          | A                                                                                 | B                                                                                 |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Approach Delay (s)                | 0.0                                                                               | 12.2                                                                              | 0.0                                                                               | 0.0                                                                               |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Approach LOS                      | A                                                                                 | B                                                                                 |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Intersection Summary              |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Average Delay                     |                                                                                   |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Intersection Capacity Utilization |                                                                                   |                                                                                   | 22.2%                                                                             |                                                                                   | ICU Level of Service                                                              |                                                                                   |                                                                                    |                                                                                     |                                                                                     | A                                                                                   |                                                                                     |                                                                                     |
| Analysis Period (min)             |                                                                                   |                                                                                   | 15                                                                                |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |

Background Conditions  
1: I Street & 3rd Street

PM Peak Period  
1/5/2006

|                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
|-----------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|                                   |  |  |  |  |  |  |  |  |  |  |  |  |
| Movement                          | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 | SBR                                                                                 |
| Lane Configurations               |                                                                                   |  |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |  |                                                                                     |                                                                                     |  |                                                                                     |
| Sign Control                      |                                                                                   | Stop                                                                              |                                                                                   |                                                                                   | Yield                                                                             |                                                                                   |                                                                                    | Stop                                                                                |                                                                                     |                                                                                     | Stop                                                                                |                                                                                     |
| Volume (vph)                      | 61                                                                                | 84                                                                                | 88                                                                                | 0                                                                                 | 0                                                                                 | 0                                                                                 | 48                                                                                 | 175                                                                                 | 25                                                                                  | 47                                                                                  | 174                                                                                 | 32                                                                                  |
| Peak Hour Factor                  | 0.92                                                                              | 0.92                                                                              | 0.92                                                                              | 0.92                                                                              | 0.92                                                                              | 0.92                                                                              | 0.92                                                                               | 0.92                                                                                | 0.92                                                                                | 0.92                                                                                | 0.92                                                                                | 0.92                                                                                |
| Hourly flow rate (vph)            | 66                                                                                | 91                                                                                | 96                                                                                | 0                                                                                 | 0                                                                                 | 0                                                                                 | 52                                                                                 | 190                                                                                 | 27                                                                                  | 51                                                                                  | 189                                                                                 | 35                                                                                  |
| Direction, Lane #                 | EB 1                                                                              | NB 1                                                                              | SB 1                                                                              |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Volume Total (vph)                | 253                                                                               | 270                                                                               | 275                                                                               |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Volume Left (vph)                 | 66                                                                                | 52                                                                                | 51                                                                                |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Volume Right (vph)                | 96                                                                                | 27                                                                                | 35                                                                                |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Hadj (s)                          | -0.14                                                                             | 0.01                                                                              | 0.00                                                                              |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Departure Headway (s)             | 5.1                                                                               | 5.0                                                                               | 4.9                                                                               |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Degree Utilization, x             | 0.36                                                                              | 0.37                                                                              | 0.38                                                                              |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Capacity (veh/h)                  | 655                                                                               | 688                                                                               | 689                                                                               |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Control Delay (s)                 | 10.9                                                                              | 10.9                                                                              | 10.9                                                                              |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Approach Delay (s)                | 10.9                                                                              | 10.9                                                                              | 10.9                                                                              |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Approach LOS                      | B                                                                                 | B                                                                                 | B                                                                                 |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Intersection Summary              |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Delay                             |                                                                                   |                                                                                   | 10.9                                                                              |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| HCM Level of Service              |                                                                                   |                                                                                   | B                                                                                 |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Intersection Capacity Utilization |                                                                                   |                                                                                   | 38.0%                                                                             | ICU Level of Service                                                              |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     | A                                                                                   |                                                                                     |                                                                                     |
| Analysis Period (min)             |                                                                                   |                                                                                   | 15                                                                                |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |

Background Conditions  
2: I Street & North Alley

PM Peak Period  
1/5/2006

|                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
|-----------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|                                   |  |  |  |  |  |  |  |  |  |  |  |  |
| Movement                          | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                               | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 | SBR                                                                                 |
| Lane Configurations               |                                                                                   |  |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |  |                                                                                     |                                                                                     |  |                                                                                     |
| Sign Control                      |                                                                                   | Free                                                                              |                                                                                   |                                                                                   | Free                                                                              |                                                                                   |                                                                                   | Stop                                                                                |                                                                                     |                                                                                     | Stop                                                                                |                                                                                     |
| Grade                             |                                                                                   | 0%                                                                                |                                                                                   |                                                                                   | 0%                                                                                |                                                                                   |                                                                                   | 0%                                                                                  |                                                                                     |                                                                                     | 0%                                                                                  |                                                                                     |
| Volume (veh/h)                    | 2                                                                                 | 151                                                                               | 2                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                   | 0                                                                                   | 2                                                                                   | 3                                                                                   | 0                                                                                   |
| Peak Hour Factor                  | 0.92                                                                              | 0.92                                                                              | 0.92                                                                              | 0.92                                                                              | 0.92                                                                              | 0.92                                                                              | 0.92                                                                              | 0.92                                                                                | 0.92                                                                                | 0.92                                                                                | 0.92                                                                                | 0.92                                                                                |
| Hourly flow rate (vph)            | 2                                                                                 | 164                                                                               | 2                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                   | 0                                                                                   | 2                                                                                   | 3                                                                                   | 0                                                                                   |
| Pedestrians                       |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lane Width (ft)                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Walking Speed (ft/s)              |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Percent Blockage                  |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Right turn flare (veh)            |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Median type                       |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   | None                                                                                |                                                                                     |                                                                                     | None                                                                                |                                                                                     |
| Median storage veh)               |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Upstream signal (ft)              |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| pX, platoon unblocked             |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| vC, conflicting volume            | 0                                                                                 |                                                                                   |                                                                                   | 166                                                                               |                                                                                   |                                                                                   | 171                                                                               | 170                                                                                 | 165                                                                                 | 170                                                                                 | 171                                                                                 | 0                                                                                   |
| vC1, stage 1 conf vol             |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| vC2, stage 2 conf vol             |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| vCu, unblocked vol                | 0                                                                                 |                                                                                   |                                                                                   | 166                                                                               |                                                                                   |                                                                                   | 171                                                                               | 170                                                                                 | 165                                                                                 | 170                                                                                 | 171                                                                                 | 0                                                                                   |
| tC, single (s)                    | 4.1                                                                               |                                                                                   |                                                                                   | 4.1                                                                               |                                                                                   |                                                                                   | 7.1                                                                               | 6.5                                                                                 | 6.2                                                                                 | 7.1                                                                                 | 6.5                                                                                 | 6.2                                                                                 |
| tC, 2 stage (s)                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| tF (s)                            | 2.2                                                                               |                                                                                   |                                                                                   | 2.2                                                                               |                                                                                   |                                                                                   | 3.5                                                                               | 4.0                                                                                 | 3.3                                                                                 | 3.5                                                                                 | 4.0                                                                                 | 3.3                                                                                 |
| p0 queue free %                   | 100                                                                               |                                                                                   |                                                                                   | 100                                                                               |                                                                                   |                                                                                   | 100                                                                               | 100                                                                                 | 100                                                                                 | 100                                                                                 | 100                                                                                 | 100                                                                                 |
| cM capacity (veh/h)               | 1623                                                                              |                                                                                   |                                                                                   | 1412                                                                              |                                                                                   |                                                                                   | 789                                                                               | 722                                                                                 | 879                                                                                 | 793                                                                                 | 721                                                                                 | 1085                                                                                |
| Direction, Lane #                 | EB 1                                                                              | NB 1                                                                              | SB 1                                                                              |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Volume Total                      | 168                                                                               | 0                                                                                 | 5                                                                                 |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Volume Left                       | 2                                                                                 | 0                                                                                 | 2                                                                                 |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Volume Right                      | 2                                                                                 | 0                                                                                 | 0                                                                                 |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| cSH                               | 1623                                                                              | 1700                                                                              | 749                                                                               |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Volume to Capacity                | 0.00                                                                              | 0.00                                                                              | 0.01                                                                              |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Queue Length 95th (ft)            | 0                                                                                 | 0                                                                                 | 1                                                                                 |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Control Delay (s)                 | 0.1                                                                               | 0.0                                                                               | 9.8                                                                               |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lane LOS                          | A                                                                                 | A                                                                                 | A                                                                                 |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Approach Delay (s)                | 0.1                                                                               | 0.0                                                                               | 9.8                                                                               |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Approach LOS                      |                                                                                   | A                                                                                 | A                                                                                 |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Intersection Summary              |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Average Delay                     |                                                                                   |                                                                                   | 0.4                                                                               |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Intersection Capacity Utilization |                                                                                   | 18.2%                                                                             |                                                                                   | ICU Level of Service                                                              |                                                                                   | A                                                                                 |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Analysis Period (min)             |                                                                                   | 15                                                                                |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |

Background Conditions  
3: I Street & 4th Street

PM Peak Period  
1/5/2006

|                                   |  |  |  |  |  |  |  |  |  |  |  |  |
|-----------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Movement                          | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                               | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 | SBR                                                                                 |
| Lane Configurations               |                                                                                   |  |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |  |                                                                                     |
| Sign Control                      |                                                                                   | Stop                                                                              |                                                                                   |                                                                                   | Yield                                                                             |                                                                                   |                                                                                   | Free                                                                                |                                                                                     |                                                                                     | Free                                                                                |                                                                                     |
| Grade                             |                                                                                   | 0%                                                                                |                                                                                   |                                                                                   | 0%                                                                                |                                                                                   |                                                                                   | 0%                                                                                  |                                                                                     |                                                                                     | 0%                                                                                  |                                                                                     |
| Volume (veh/h)                    | 0                                                                                 | 131                                                                               | 21                                                                                | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                   | 0                                                                                   | 36                                                                                  | 367                                                                                 | 0                                                                                   |
| Peak Hour Factor                  | 0.92                                                                              | 0.92                                                                              | 0.92                                                                              | 0.92                                                                              | 0.92                                                                              | 0.92                                                                              | 0.92                                                                              | 0.92                                                                                | 0.92                                                                                | 0.92                                                                                | 0.92                                                                                | 0.92                                                                                |
| Hourly flow rate (vph)            | 0                                                                                 | 142                                                                               | 23                                                                                | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                   | 0                                                                                   | 39                                                                                  | 399                                                                                 | 0                                                                                   |
| Pedestrians                       |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lane Width (ft)                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Walking Speed (ft/s)              |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Percent Blockage                  |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Right turn flare (veh)            |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Median type                       |                                                                                   | None                                                                              |                                                                                   |                                                                                   | None                                                                              |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Median storage (veh)              |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Upstream signal (ft)              |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   | 450                                                                                 |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| pX, platoon unblocked             |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| vC, conflicting volume            | 477                                                                               | 477                                                                               | 399                                                                               | 571                                                                               | 477                                                                               | 0                                                                                 | 399                                                                               |                                                                                     |                                                                                     | 0                                                                                   |                                                                                     |                                                                                     |
| vC1, stage 1 conf vol             |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| vC2, stage 2 conf vol             |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| vCu, unblocked vol                | 477                                                                               | 477                                                                               | 399                                                                               | 571                                                                               | 477                                                                               | 0                                                                                 | 399                                                                               |                                                                                     |                                                                                     | 0                                                                                   |                                                                                     |                                                                                     |
| tC, single (s)                    | 7.1                                                                               | 6.5                                                                               | 6.2                                                                               | 7.1                                                                               | 6.5                                                                               | 6.2                                                                               | 4.1                                                                               |                                                                                     |                                                                                     | 4.1                                                                                 |                                                                                     |                                                                                     |
| tC, 2 stage (s)                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| tF (s)                            | 3.5                                                                               | 4.0                                                                               | 3.3                                                                               | 3.5                                                                               | 4.0                                                                               | 3.3                                                                               | 2.2                                                                               |                                                                                     |                                                                                     | 2.2                                                                                 |                                                                                     |                                                                                     |
| p0 queue free %                   | 100                                                                               | 70                                                                                | 96                                                                                | 100                                                                               | 100                                                                               | 100                                                                               | 100                                                                               |                                                                                     |                                                                                     | 98                                                                                  |                                                                                     |                                                                                     |
| cM capacity (veh/h)               | 489                                                                               | 475                                                                               | 651                                                                               | 314                                                                               | 475                                                                               | 1085                                                                              | 1160                                                                              |                                                                                     |                                                                                     | 1623                                                                                |                                                                                     |                                                                                     |
| Direction, Lane #                 | EB 1                                                                              | SB 1                                                                              |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Volume Total                      | 165                                                                               | 438                                                                               |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Volume Left                       | 0                                                                                 | 39                                                                                |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Volume Right                      | 23                                                                                | 0                                                                                 |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| cSH                               | 494                                                                               | 1623                                                                              |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Volume to Capacity                | 0.33                                                                              | 0.02                                                                              |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Queue Length 95th (ft)            | 36                                                                                | 2                                                                                 |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Control Delay (s)                 | 15.9                                                                              | 0.9                                                                               |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lane LOS                          | C                                                                                 | A                                                                                 |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Approach Delay (s)                | 15.9                                                                              | 0.9                                                                               |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Approach LOS                      | C                                                                                 |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Intersection Summary              |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Average Delay                     |                                                                                   | 5.0                                                                               |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Intersection Capacity Utilization |                                                                                   | 36.1%                                                                             |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| ICU Level of Service              |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     | A                                                                                   |                                                                                     |                                                                                     |
| Analysis Period (min)             |                                                                                   | 15                                                                                |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |

Background Conditions  
4: East Alley & 4th Street

PM Peak Period  
1/5/2006

|                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
|-----------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|                                   |  |  |  |  |  |  |  |  |  |  |  |  |
| Movement                          | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                 | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 | SBR                                                                                 |
| Lane Configurations               |                                                                                   |                                                                                   |  |                                                                                   |  |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |  |                                                                                     |
| Sign Control                      |                                                                                   | Stop                                                                              |                                                                                   |                                                                                   | Stop                                                                              |                                                                                   |                                                                                     | Free                                                                                |                                                                                     |                                                                                     | Free                                                                                |                                                                                     |
| Grade                             |                                                                                   | 0%                                                                                |                                                                                   |                                                                                   | 0%                                                                                |                                                                                   |                                                                                     | 0%                                                                                  |                                                                                     |                                                                                     | 0%                                                                                  |                                                                                     |
| Volume (veh/h)                    | 0                                                                                 | 0                                                                                 | 0                                                                                 | 3                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                   | 0                                                                                   | 0                                                                                   | 1                                                                                   | 376                                                                                 | 1                                                                                   |
| Peak Hour Factor                  | 0.92                                                                              | 0.92                                                                              | 0.92                                                                              | 0.92                                                                              | 0.92                                                                              | 0.92                                                                              | 0.92                                                                                | 0.92                                                                                | 0.92                                                                                | 0.92                                                                                | 0.92                                                                                | 0.92                                                                                |
| Hourly flow rate (vph)            | 0                                                                                 | 0                                                                                 | 0                                                                                 | 3                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                   | 0                                                                                   | 0                                                                                   | 1                                                                                   | 409                                                                                 | 1                                                                                   |
| Pedestrians                       |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lane Width (ft)                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Walking Speed (ft/s)              |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Percent Blockage                  |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Right turn flare (veh)            |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Median type                       |                                                                                   | None                                                                              |                                                                                   |                                                                                   | None                                                                              |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Median storage veh                |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Upstream signal (ft)              |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     | 140                                                                                 |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| pX, platoon unblocked             |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| vC, conflicting volume            | 411                                                                               | 411                                                                               | 409                                                                               | 411                                                                               | 412                                                                               | 0                                                                                 | 410                                                                                 |                                                                                     |                                                                                     | 0                                                                                   |                                                                                     |                                                                                     |
| vC1, stage 1 conf vol             |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| vC2, stage 2 conf vol             |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| vCu, unblocked vol                | 411                                                                               | 411                                                                               | 409                                                                               | 411                                                                               | 412                                                                               | 0                                                                                 | 410                                                                                 |                                                                                     |                                                                                     | 0                                                                                   |                                                                                     |                                                                                     |
| tC, single (s)                    | 7.1                                                                               | 6.5                                                                               | 6.2                                                                               | 7.1                                                                               | 6.5                                                                               | 6.2                                                                               | 4.1                                                                                 |                                                                                     |                                                                                     | 4.1                                                                                 |                                                                                     |                                                                                     |
| tC, 2 stage (s)                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| tF (s)                            | 3.5                                                                               | 4.0                                                                               | 3.3                                                                               | 3.5                                                                               | 4.0                                                                               | 3.3                                                                               | 2.2                                                                                 |                                                                                     |                                                                                     | 2.2                                                                                 |                                                                                     |                                                                                     |
| p0 queue free %                   | 100                                                                               | 100                                                                               | 100                                                                               | 99                                                                                | 100                                                                               | 100                                                                               | 100                                                                                 |                                                                                     |                                                                                     | 100                                                                                 |                                                                                     |                                                                                     |
| cM capacity (veh/h)               | 551                                                                               | 530                                                                               | 642                                                                               | 551                                                                               | 530                                                                               | 1085                                                                              | 1149                                                                                |                                                                                     |                                                                                     | 1623                                                                                |                                                                                     |                                                                                     |
| Direction, Lane #                 | EB 1                                                                              | WB 1                                                                              | SB 1                                                                              |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Volume Total                      | 0                                                                                 | 3                                                                                 | 411                                                                               |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Volume Left                       | 0                                                                                 | 3                                                                                 | 1                                                                                 |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Volume Right                      | 0                                                                                 | 0                                                                                 | 1                                                                                 |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| cSH                               | 1700                                                                              | 551                                                                               | 1623                                                                              |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Volume to Capacity                | 0.00                                                                              | 0.01                                                                              | 0.00                                                                              |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Queue Length 95th (ft)            | 0                                                                                 | 0                                                                                 | 0                                                                                 |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Control Delay (s)                 | 0.0                                                                               | 11.6                                                                              | 0.0                                                                               |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lane LOS                          | A                                                                                 | B                                                                                 | A                                                                                 |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Approach Delay (s)                | 0.0                                                                               | 11.6                                                                              | 0.0                                                                               |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Approach LOS                      | A                                                                                 | B                                                                                 |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Intersection Summary              |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Average Delay                     |                                                                                   |                                                                                   | 0.1                                                                               |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Intersection Capacity Utilization |                                                                                   | 29.9%                                                                             |                                                                                   | ICU Level of Service                                                              |                                                                                   |                                                                                   |                                                                                     |                                                                                     | A                                                                                   |                                                                                     |                                                                                     |                                                                                     |
| Analysis Period (min)             |                                                                                   | 15                                                                                |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |

Background Conditions  
5: H Street & 4th Street

PM Peak Period  
1/5/2006

|                                   |  |       |      |      |                      |      |      |      |      |      |      |      |
|-----------------------------------|------------------------------------------------------------------------------------|-------|------|------|----------------------|------|------|------|------|------|------|------|
| Movement                          | EBL                                                                                | EBT   | EBR  | WBL  | WBT                  | WBR  | NBL  | NBT  | NBR  | SBL  | SBT  | SBR  |
| Lane Configurations               |                                                                                    | ↑↑↑   |      |      | ↑↑↑                  |      |      |      |      |      | ↑↓   |      |
| Ideal Flow (vphpl)                | 1900                                                                               | 1900  | 1900 | 1900 | 1900                 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Total Lost time (s)               |                                                                                    | 4.0   |      |      | 4.0                  |      |      |      |      |      | 4.0  |      |
| Lane Util. Factor                 |                                                                                    | 0.91  |      |      | 0.91                 |      |      |      |      |      | 1.00 |      |
| Flt                               |                                                                                    | 1.00  |      |      | 1.00                 |      |      |      |      |      | 0.98 |      |
| Flt Protected                     |                                                                                    | 1.00  |      |      | 1.00                 |      |      |      |      |      | 0.99 |      |
| Satd. Flow (prot)                 |                                                                                    | 5061  |      |      | 5074                 |      |      |      |      |      | 1810 |      |
| Flt Permitted                     |                                                                                    | 1.00  |      |      | 0.82                 |      |      |      |      |      | 0.99 |      |
| Satd. Flow (perm)                 |                                                                                    | 5061  |      |      | 4188                 |      |      |      |      |      | 1810 |      |
| Volume (vph)                      | 0                                                                                  | 1450  | 47   | 27   | 575                  | 0    | 0    | 0    | 0    | 77   | 250  | 52   |
| Peak-hour factor, PHF             | 0.92                                                                               | 0.92  | 0.92 | 0.92 | 0.92                 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Adj. Flow (vph)                   | 0                                                                                  | 1576  | 51   | 29   | 625                  | 0    | 0    | 0    | 0    | 84   | 272  | 57   |
| RTOR Reduction (vph)              | 0                                                                                  | 3     | 0    | 0    | 0                    | 0    | 0    | 0    | 0    | 0    | 5    | 0    |
| Lane Group Flow (vph)             | 0                                                                                  | 1624  | 0    | 0    | 654                  | 0    | 0    | 0    | 0    | 0    | 408  | 0    |
| Turn Type                         | Perm                                                                               |       |      |      |                      |      | Perm |      |      |      |      |      |
| Protected Phases                  |                                                                                    | 4     |      |      | 8                    |      |      |      |      |      | 6    |      |
| Permitted Phases                  |                                                                                    |       |      | 8    |                      |      |      |      |      | 6    |      |      |
| Actuated Green, G (s)             |                                                                                    | 60.0  |      |      | 60.0                 |      |      |      |      |      | 32.0 |      |
| Effective Green, g (s)            |                                                                                    | 60.0  |      |      | 60.0                 |      |      |      |      |      | 32.0 |      |
| Actuated g/C Ratio                |                                                                                    | 0.60  |      |      | 0.60                 |      |      |      |      |      | 0.32 |      |
| Clearance Time (s)                |                                                                                    | 4.0   |      |      | 4.0                  |      |      |      |      |      | 4.0  |      |
| Lane Grp Cap (vph)                |                                                                                    | 3037  |      |      | 2513                 |      |      |      |      |      | 579  |      |
| v/s Ratio Prot                    |                                                                                    | c0.32 |      |      |                      |      |      |      |      |      |      |      |
| v/s Ratio Perm                    |                                                                                    |       |      |      | 0.16                 |      |      |      |      |      | 0.23 |      |
| v/c Ratio                         |                                                                                    | 0.53  |      |      | 0.26                 |      |      |      |      |      | 0.70 |      |
| Uniform Delay, d1                 |                                                                                    | 11.8  |      |      | 9.5                  |      |      |      |      |      | 29.8 |      |
| Progression Factor                |                                                                                    | 0.48  |      |      | 1.00                 |      |      |      |      |      | 1.00 |      |
| Incremental Delay, d2             |                                                                                    | 0.5   |      |      | 0.3                  |      |      |      |      |      | 7.0  |      |
| Delay (s)                         |                                                                                    | 6.1   |      |      | 9.7                  |      |      |      |      |      | 36.9 |      |
| Level of Service                  |                                                                                    | A     |      |      | A                    |      |      |      |      |      | D    |      |
| Approach Delay (s)                |                                                                                    | 6.1   |      |      | 9.7                  |      |      | 0.0  |      |      | 36.9 |      |
| Approach LOS                      |                                                                                    | A     |      |      | A                    |      |      | A    |      |      | D    |      |
| <b>Intersection Summary</b>       |                                                                                    |       |      |      |                      |      |      |      |      |      |      |      |
| HCM Average Control Delay         |                                                                                    | 11.7  |      |      | HCM Level of Service |      |      | B    |      |      |      |      |
| HCM Volume to Capacity ratio      |                                                                                    | 0.59  |      |      |                      |      |      |      |      |      |      |      |
| Actuated Cycle Length (s)         |                                                                                    | 100.0 |      |      | Sum of lost time (s) |      |      | 8.0  |      |      |      |      |
| Intersection Capacity Utilization |                                                                                    | 58.6% |      |      | ICU Level of Service |      |      | B    |      |      |      |      |
| Analysis Period (min)             |                                                                                    | 15    |      |      |                      |      |      |      |      |      |      |      |

c Critical Lane Group



| Movement                          | EBL  | EBT  | WBT   | WBR  | SBL                  | SBR  |      |
|-----------------------------------|------|------|-------|------|----------------------|------|------|
| Lane Configurations               |      | ↑↑↑  | ↑↑↑   |      | ↑                    |      |      |
| Sign Control                      |      | Free | Free  |      | Stop                 |      |      |
| Grade                             |      | 0%   | 0%    |      | 0%                   |      |      |
| Volume (veh/h)                    | 1    | 1496 | 627   | 0    | 1                    | 4    |      |
| Peak Hour Factor                  | 0.92 | 0.92 | 0.92  | 0.92 | 0.92                 | 0.92 |      |
| Hourly flow rate (vph)            | 1    | 1626 | 682   | 0    | 1                    | 4    |      |
| Pedestrians                       |      |      |       |      |                      |      |      |
| Lane Width (ft)                   |      |      |       |      |                      |      |      |
| Walking Speed (ft/s)              |      |      |       |      |                      |      |      |
| Percent Blockage                  |      |      |       |      |                      |      |      |
| Right turn flare (veh)            |      |      |       |      |                      |      |      |
| Median type                       |      |      |       | None |                      |      |      |
| Median storage veh                |      |      |       |      |                      |      |      |
| Upstream signal (ft)              |      | 216  | 198   |      |                      |      |      |
| pX, platoon unblocked             | 0.95 |      |       |      | 0.87                 | 0.95 |      |
| vC, conflicting volume            | 682  |      |       |      | 1226                 | 227  |      |
| vC1, stage 1 conf vol             |      |      |       |      |                      |      |      |
| vC2, stage 2 conf vol             |      |      |       |      |                      |      |      |
| vCu, unblocked vol                | 558  |      |       |      | 704                  | 80   |      |
| tC, single (s)                    | 4.1  |      |       |      | 6.8                  | 6.9  |      |
| tC, 2 stage (s)                   |      |      |       |      |                      |      |      |
| tF (s)                            | 2.2  |      |       |      | 3.5                  | 3.3  |      |
| p0 queue free %                   | 100  |      |       |      | 100                  | 100  |      |
| cM capacity (veh/h)               | 958  |      |       |      | 323                  | 916  |      |
| Direction, Lane #                 | EB 1 | EB 2 | EB 3  | WB 1 | WB 2                 | WB 3 | SB 1 |
| Volume Total                      | 326  | 650  | 650   | 273  | 273                  | 136  | 5    |
| Volume Left                       | 1    | 0    | 0     | 0    | 0                    | 0    | 1    |
| Volume Right                      | 0    | 0    | 0     | 0    | 0                    | 0    | 4    |
| cSH                               | 958  | 1700 | 1700  | 1700 | 1700                 | 1700 | 670  |
| Volume to Capacity                | 0.00 | 0.38 | 0.38  | 0.16 | 0.16                 | 0.08 | 0.01 |
| Queue Length 95th (ft)            | 0    | 0    | 0     | 0    | 0                    | 0    | 1    |
| Control Delay (s)                 | 0.0  | 0.0  | 0.0   | 0.0  | 0.0                  | 0.0  | 10.4 |
| Lane LOS                          | A    |      |       |      |                      |      | B    |
| Approach Delay (s)                | 0.0  |      |       | 0.0  |                      |      | 10.4 |
| Approach LOS                      |      |      |       |      |                      |      | B    |
| Intersection Summary              |      |      |       |      |                      |      |      |
| Average Delay                     |      |      | 0.0   |      |                      |      |      |
| Intersection Capacity Utilization |      |      | 39.6% |      | ICU Level of Service |      | A    |
| Analysis Period (min)             |      |      | 15    |      |                      |      |      |

|                                   |  |  |  |  |  |  |  |  |  |  |  |  |
|-----------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Movement                          | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                 | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 | SBR                                                                                 |
| Lane Configurations               |                                                                                   |  |                                                                                   |                                                                                   |  |                                                                                   |                                                                                     |  |                                                                                     |                                                                                     |  |                                                                                     |
| Ideal Flow (vphpl)                | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                              | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                | 1900                                                                                |
| Total Lost time (s)               |                                                                                   | 4.0                                                                               |                                                                                   |                                                                                   | 4.0                                                                               |                                                                                   |                                                                                     | 4.0                                                                                 |                                                                                     |                                                                                     | 4.0                                                                                 |                                                                                     |
| Lane Util. Factor                 |                                                                                   | 0.91                                                                              |                                                                                   |                                                                                   | 0.91                                                                              |                                                                                   |                                                                                     | 1.00                                                                                |                                                                                     |                                                                                     | 1.00                                                                                |                                                                                     |
| Fr <sub>t</sub>                   |                                                                                   | 0.99                                                                              |                                                                                   |                                                                                   | 0.99                                                                              |                                                                                   |                                                                                     | 0.98                                                                                |                                                                                     |                                                                                     | 0.98                                                                                |                                                                                     |
| Fl <sub>t</sub> Protected         |                                                                                   | 1.00                                                                              |                                                                                   |                                                                                   | 1.00                                                                              |                                                                                   |                                                                                     | 0.99                                                                                |                                                                                     |                                                                                     | 0.98                                                                                |                                                                                     |
| Satd. Flow (prot)                 |                                                                                   | 5037                                                                              |                                                                                   |                                                                                   | 5011                                                                              |                                                                                   |                                                                                     | 1794                                                                                |                                                                                     |                                                                                     | 1786                                                                                |                                                                                     |
| Fl <sub>t</sub> Permitted         |                                                                                   | 0.83                                                                              |                                                                                   |                                                                                   | 0.77                                                                              |                                                                                   |                                                                                     | 0.84                                                                                |                                                                                     |                                                                                     | 0.73                                                                                |                                                                                     |
| Satd. Flow (perm)                 |                                                                                   | 4176                                                                              |                                                                                   |                                                                                   | 3847                                                                              |                                                                                   |                                                                                     | 1524                                                                                |                                                                                     |                                                                                     | 1325                                                                                |                                                                                     |
| Volume (vph)                      | 92                                                                                | 1367                                                                              | 67                                                                                | 42                                                                                | 541                                                                               | 48                                                                                | 44                                                                                  | 102                                                                                 | 33                                                                                  | 97                                                                                  | 115                                                                                 | 44                                                                                  |
| Peak-hour factor, PHF             | 0.92                                                                              | 0.92                                                                              | 0.92                                                                              | 0.92                                                                              | 0.92                                                                              | 0.92                                                                              | 0.92                                                                                | 0.92                                                                                | 0.92                                                                                | 0.92                                                                                | 0.92                                                                                | 0.92                                                                                |
| Adj. Flow (vph)                   | 100                                                                               | 1486                                                                              | 73                                                                                | 46                                                                                | 588                                                                               | 52                                                                                | 48                                                                                  | 111                                                                                 | 36                                                                                  | 105                                                                                 | 125                                                                                 | 48                                                                                  |
| RTOR Reduction (vph)              | 0                                                                                 | 5                                                                                 | 0                                                                                 | 0                                                                                 | 9                                                                                 | 0                                                                                 | 0                                                                                   | 8                                                                                   | 0                                                                                   | 0                                                                                   | 8                                                                                   | 0                                                                                   |
| Lane Group Flow (vph)             | 0                                                                                 | 1654                                                                              | 0                                                                                 | 0                                                                                 | 677                                                                               | 0                                                                                 | 0                                                                                   | 187                                                                                 | 0                                                                                   | 0                                                                                   | 271                                                                                 | 0                                                                                   |
| Turn Type                         | Prot                                                                              |                                                                                   |                                                                                   | Perm                                                                              |                                                                                   |                                                                                   | Perm                                                                                |                                                                                     |                                                                                     | Perm                                                                                |                                                                                     |                                                                                     |
| Protected Phases                  | 7                                                                                 | 4                                                                                 |                                                                                   |                                                                                   | 8                                                                                 |                                                                                   |                                                                                     | 2                                                                                   |                                                                                     |                                                                                     | 6                                                                                   |                                                                                     |
| Permitted Phases                  |                                                                                   |                                                                                   |                                                                                   | 8                                                                                 |                                                                                   |                                                                                   | 2                                                                                   |                                                                                     |                                                                                     | 6                                                                                   |                                                                                     |                                                                                     |
| Actuated Green, G (s)             |                                                                                   | 67.0                                                                              |                                                                                   |                                                                                   | 55.0                                                                              |                                                                                   |                                                                                     | 25.0                                                                                |                                                                                     |                                                                                     | 25.0                                                                                |                                                                                     |
| Effective Green, g (s)            |                                                                                   | 67.0                                                                              |                                                                                   |                                                                                   | 55.0                                                                              |                                                                                   |                                                                                     | 25.0                                                                                |                                                                                     |                                                                                     | 25.0                                                                                |                                                                                     |
| Actuated g/C Ratio                |                                                                                   | 0.67                                                                              |                                                                                   |                                                                                   | 0.55                                                                              |                                                                                   |                                                                                     | 0.25                                                                                |                                                                                     |                                                                                     | 0.25                                                                                |                                                                                     |
| Clearance Time (s)                |                                                                                   | 4.0                                                                               |                                                                                   |                                                                                   | 4.0                                                                               |                                                                                   |                                                                                     | 4.0                                                                                 |                                                                                     |                                                                                     | 4.0                                                                                 |                                                                                     |
| Lane Grp Cap (vph)                |                                                                                   | 2867                                                                              |                                                                                   |                                                                                   | 2116                                                                              |                                                                                   |                                                                                     | 381                                                                                 |                                                                                     |                                                                                     | 331                                                                                 |                                                                                     |
| v/s Ratio Prot                    |                                                                                   | c0.05                                                                             |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| v/s Ratio Perm                    |                                                                                   | c0.34                                                                             |                                                                                   |                                                                                   | 0.18                                                                              |                                                                                   |                                                                                     | 0.12                                                                                |                                                                                     |                                                                                     | c0.20                                                                               |                                                                                     |
| v/c Ratio                         |                                                                                   | 0.58                                                                              |                                                                                   |                                                                                   | 0.32                                                                              |                                                                                   |                                                                                     | 0.49                                                                                |                                                                                     |                                                                                     | 0.82                                                                                |                                                                                     |
| Uniform Delay, d <sub>1</sub>     |                                                                                   | 8.9                                                                               |                                                                                   |                                                                                   | 12.3                                                                              |                                                                                   |                                                                                     | 32.1                                                                                |                                                                                     |                                                                                     | 35.3                                                                                |                                                                                     |
| Progression Factor                |                                                                                   | 1.00                                                                              |                                                                                   |                                                                                   | 0.42                                                                              |                                                                                   |                                                                                     | 1.00                                                                                |                                                                                     |                                                                                     | 1.00                                                                                |                                                                                     |
| Incremental Delay, d <sub>2</sub> |                                                                                   | 0.9                                                                               |                                                                                   |                                                                                   | 0.4                                                                               |                                                                                   |                                                                                     | 4.5                                                                                 |                                                                                     |                                                                                     | 19.6                                                                                |                                                                                     |
| Delay (s)                         |                                                                                   | 9.7                                                                               |                                                                                   |                                                                                   | 5.6                                                                               |                                                                                   |                                                                                     | 36.5                                                                                |                                                                                     |                                                                                     | 55.0                                                                                |                                                                                     |
| Level of Service                  |                                                                                   | A                                                                                 |                                                                                   |                                                                                   | A                                                                                 |                                                                                   |                                                                                     | D                                                                                   |                                                                                     |                                                                                     | D                                                                                   |                                                                                     |
| Approach Delay (s)                |                                                                                   | 9.7                                                                               |                                                                                   |                                                                                   | 5.6                                                                               |                                                                                   |                                                                                     | 36.5                                                                                |                                                                                     |                                                                                     | 55.0                                                                                |                                                                                     |
| Approach LOS                      |                                                                                   | A                                                                                 |                                                                                   |                                                                                   | A                                                                                 |                                                                                   |                                                                                     | D                                                                                   |                                                                                     |                                                                                     | D                                                                                   |                                                                                     |
| <b>Intersection Summary</b>       |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| HCM Average Control Delay         |                                                                                   | 15.0                                                                              |                                                                                   |                                                                                   | HCM Level of Service                                                              |                                                                                   |                                                                                     | B                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| HCM Volume to Capacity ratio      |                                                                                   | 0.64                                                                              |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Actuated Cycle Length (s)         |                                                                                   | 100.0                                                                             |                                                                                   |                                                                                   | Sum of lost time (s)                                                              |                                                                                   |                                                                                     | 8.0                                                                                 |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Intersection Capacity Utilization |                                                                                   | 74.8%                                                                             |                                                                                   |                                                                                   | ICU Level of Service                                                              |                                                                                   |                                                                                     | D                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Analysis Period (min)             |                                                                                   | 15                                                                                |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |

c Critical Lane Group

Background Conditions  
8: West Alley & 3rd Street

PM Peak Period  
1/5/2006

|                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
|-----------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|                                   |  |  |  |  |  |  |  |  |  |  |  |  |
| Movement                          | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                               | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 | SBR                                                                                 |
| Lane Configurations               |                                                                                   |  |                                                                                   |                                                                                   |  |                                                                                   |                                                                                   |  |                                                                                     |                                                                                     |  |                                                                                     |
| Sign Control                      |                                                                                   | Stop                                                                              |                                                                                   |                                                                                   | Stop                                                                              |                                                                                   |                                                                                   | Free                                                                                |                                                                                     |                                                                                     | Free                                                                                |                                                                                     |
| Grade                             |                                                                                   | 0%                                                                                |                                                                                   |                                                                                   | 0%                                                                                |                                                                                   |                                                                                   | 0%                                                                                  |                                                                                     |                                                                                     | 0%                                                                                  |                                                                                     |
| Volume (veh/h)                    | 0                                                                                 | 0                                                                                 | 0                                                                                 | 1                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 241                                                                                 | 1                                                                                   | 0                                                                                   | 262                                                                                 | 0                                                                                   |
| Peak Hour Factor                  | 0.92                                                                              | 0.92                                                                              | 0.92                                                                              | 0.92                                                                              | 0.92                                                                              | 0.92                                                                              | 0.92                                                                              | 0.92                                                                                | 0.92                                                                                | 0.92                                                                                | 0.92                                                                                | 0.92                                                                                |
| Hourly flow rate (vph)            | 0                                                                                 | 0                                                                                 | 0                                                                                 | 1                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 262                                                                                 | 1                                                                                   | 0                                                                                   | 285                                                                                 | 0                                                                                   |
| Pedestrians                       |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lane Width (ft)                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Walking Speed (ft/s)              |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Percent Blockage                  |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Right turn flare (veh)            |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Median type                       |                                                                                   | None                                                                              |                                                                                   |                                                                                   | None                                                                              |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Median storage (veh)              |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Upstream signal (ft)              |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   | 260                                                                                 |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| pX, platoon unblocked             |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| vC, conflicting volume            | 547                                                                               | 548                                                                               | 285                                                                               | 547                                                                               | 547                                                                               | 262                                                                               | 285                                                                               |                                                                                     |                                                                                     |                                                                                     | 263                                                                                 |                                                                                     |
| vC1, stage 1 conf vol             |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| vC2, stage 2 conf vol             |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| vCu, unblocked vol                | 547                                                                               | 548                                                                               | 285                                                                               | 547                                                                               | 547                                                                               | 262                                                                               | 285                                                                               |                                                                                     |                                                                                     |                                                                                     | 263                                                                                 |                                                                                     |
| tC, single (s)                    | 7.1                                                                               | 6.5                                                                               | 6.2                                                                               | 7.1                                                                               | 6.5                                                                               | 6.2                                                                               | 4.1                                                                               |                                                                                     |                                                                                     |                                                                                     | 4.1                                                                                 |                                                                                     |
| tC, 2 stage (s)                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| tF (s)                            | 3.5                                                                               | 4.0                                                                               | 3.3                                                                               | 3.5                                                                               | 4.0                                                                               | 3.3                                                                               | 2.2                                                                               |                                                                                     |                                                                                     |                                                                                     | 2.2                                                                                 |                                                                                     |
| p0 queue free %                   | 100                                                                               | 100                                                                               | 100                                                                               | 100                                                                               | 100                                                                               | 100                                                                               | 100                                                                               |                                                                                     |                                                                                     |                                                                                     | 100                                                                                 |                                                                                     |
| cM capacity (veh/h)               | 448                                                                               | 444                                                                               | 754                                                                               | 448                                                                               | 444                                                                               | 776                                                                               | 1277                                                                              |                                                                                     |                                                                                     |                                                                                     | 1301                                                                                |                                                                                     |
| Direction, Lane #                 | EB 1                                                                              | WB 1                                                                              | NB 1                                                                              | SB 1                                                                              |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Volume Total                      | 0                                                                                 | 1                                                                                 | 263                                                                               | 285                                                                               |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Volume Left                       | 0                                                                                 | 1                                                                                 | 0                                                                                 | 0                                                                                 |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Volume Right                      | 0                                                                                 | 0                                                                                 | 1                                                                                 | 0                                                                                 |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| cSH                               | 1700                                                                              | 448                                                                               | 1277                                                                              | 1301                                                                              |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Volume to Capacity                | 0.00                                                                              | 0.00                                                                              | 0.00                                                                              | 0.00                                                                              |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Queue Length 95th (ft)            | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Control Delay (s)                 | 0.0                                                                               | 13.1                                                                              | 0.0                                                                               | 0.0                                                                               |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lane LOS                          | A                                                                                 | B                                                                                 |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Approach Delay (s)                | 0.0                                                                               | 13.1                                                                              | 0.0                                                                               | 0.0                                                                               |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Approach LOS                      | A                                                                                 | B                                                                                 |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Intersection Summary              |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Average Delay                     |                                                                                   |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Intersection Capacity Utilization |                                                                                   |                                                                                   | 23.8%                                                                             | ICU Level of Service                                                              |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     | A                                                                                   |                                                                                     |                                                                                     |
| Analysis Period (min)             |                                                                                   |                                                                                   | 15                                                                                |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |