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ZONING COMMISSION

CASE No. 05-37

EXHIBIT No. 6

ZONING COMMISSION
District of Columbia
CASE NO.05-37
EXHIBIT NO.6A1

**CAPITOL PLACE
TRANSPORTATION IMPACT STUDY
WASHINGTON, D.C.**

Prepared for:
Louis Dreyfus Property Group

Prepared by:
Wells & Associates, LLC

November 18, 2005

**CAPITOL PLACE
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TABLE OF CONTENTS

Section 1	
Introduction	1
 Section 2	
Background Data	6
Study Scope	6
Public Road Network.....	6
Existing Traffic Counts.....	7
Public Transportation Facilities and Services.....	8
 Section 3	
Analysis.....	12
Existing Levels of Service.....	12
Other Development Trip Generation	12
Trip Distribution Analysis	12
Other Development Project Trip Assignments	15
Background Traffic Growth.....	15
Background Traffic Forecasts	15
Background Future Levels of Service	15
Site Trip Generation Analysis.....	18
Site Traffic Assignments.....	18
Total Future Traffic Forecasts.....	18
Total Future Levels of Service.....	18
Parking Analysis	19
Loading Analysis	19
 Section 4	
Conclusions.....	25



**CAPITOL PLACE
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LIST OF FIGURES

<u>Figure</u>	<u>Title</u>	<u>Page</u>
1-1	Site Location	4
1-2	Proposed Site Plan.....	5
2-1	Intersection Lane Use and Traffic Control.....	9
2-2	Existing Peak Hour and Daily Vehicular Traffic Counts	10
2-3	Existing Peak Hour Pedestrian Traffic Counts.....	11
3-1	Other Development Traffic Assignments	16
3-2	Background Future Peak Hour Traffic Forecasts.....	17
3-3	Site-Generated Traffic Assignments.....	21
3-4	Total Future Peak Hour Traffic Forecasts	22
3-5	30' Delivery Truck Maneuvers	23
3-6	55' Delivery Truck Maneuvers	24

LIST OF TABLES

<u>Figure</u>	<u>Title</u>	<u>Page</u>
3-1	Intersection Levels of Service.....	13
3-2	Trips Generated by Other Approved Developments	14
3-3	Site Trip Generation Analysis.....	20

LIST OF APPENDICES

A.	Existing Peak Hour Vehicular Traffic Counts
B.	Existing Levels of Service
C.	Background Future Levels of Service
D.	Total Future Levels of Service

Section I

INTRODUCTION

This report presents the results of a transportation impact study, which was prepared in support of Louis Dreyfus Property Group's planned unit development (PUD) application for Capitol Place.

The subject site is bounded by H Street on the north, G Street on the south, 3rd Street on the east, and 2nd Street on the west, in the northeast section of Washington, D.C., as shown on Figure I-1. The subject site includes the entire frontage along H Street, most of the frontage along 2nd Street, and most of the western half of the frontage along G Street. The site currently is improved with a daily/monthly commercial parking lot, which generates a small number of trips during the AM and PM peak hours, as well several unoccupied buildings. Directly to the east of the site, several townhouses exist and are not proposed to be modified.

Square 752 is partially bisected by a north/south alley that intersects G Street, which would be widened to 20 feet and straightened through easement as part of this project. The Union Station Metro station is located approximately 900 feet walking distance from the site. The northern portion of the site has been proposed for rezoning to C-2-B as part of the H Street Overlay District case; the southern portion is zoned C-2-A. The PUD application will propose that the entire site be zoned C-2-B.

As shown on Figure I-2, Louis Dreyfus Property Group proposes to re-develop the site with 318 residential condominiums and approximately 74,800 square feet (S.F.) of commercial space. A shared commercial/residential underground parking garage is proposed with approximately 381 parking spaces on three levels. All vehicular access to the parking garage and the loading berths would be provided from 2nd 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 Louis Dreyfus Property Group's development program, plans prepared by Cook + Fox, 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, and at the existing north/south alley on G Street.

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. ***The majority 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. The overall LOS at the intersection of 3rd Street and H Street is a "B" during both the AM and PM peak hour; however, the southbound movement operates at capacity at LOS "F" during the PM peak hour. Modifying the traffic signal timings at this intersection (within the existing cycle length) would allow the southbound movement to operate at an acceptable level of service "D" or better.***
2. ***The approved but unbuilt projects in the study area will generate a total of 562 AM peak hour trips and 572 PM peak hour trips.***

3. ***These additional trips can be adequately accommodated at the key intersections in the study area, if existing traffic signal timings at the 3rd Street/H Street, 2nd Street/Massachusetts Avenue, and 2nd Street/K Street intersections are modified.***
4. ***The proposed development of Capitol Place will generate 149 additional AM peak hour trips and 164 additional PM peak hour trips.***
5. ***These additional site-generated trips can be adequately accommodated at the key intersections in the study area with these traffic signal timing modifications. The site driveway off 2nd Street is anticipated to operate at a LOS "C" during the AM peak hour and a LOS "B" during the PM peak hour.***
6. ***The proposed on-site parking supply would adequately meet 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.***
7. ***A total of 99 residential (at 2.0 FAR) and 112,200 S.F. (at 1.5 FAR) could be built by-right on the subject site. The uses would generate 22-percent additional AM peak hour trips and 12-percent additional PM peak hour trips. The proposed development, therefore, would have less traffic impact than the by-right development.***

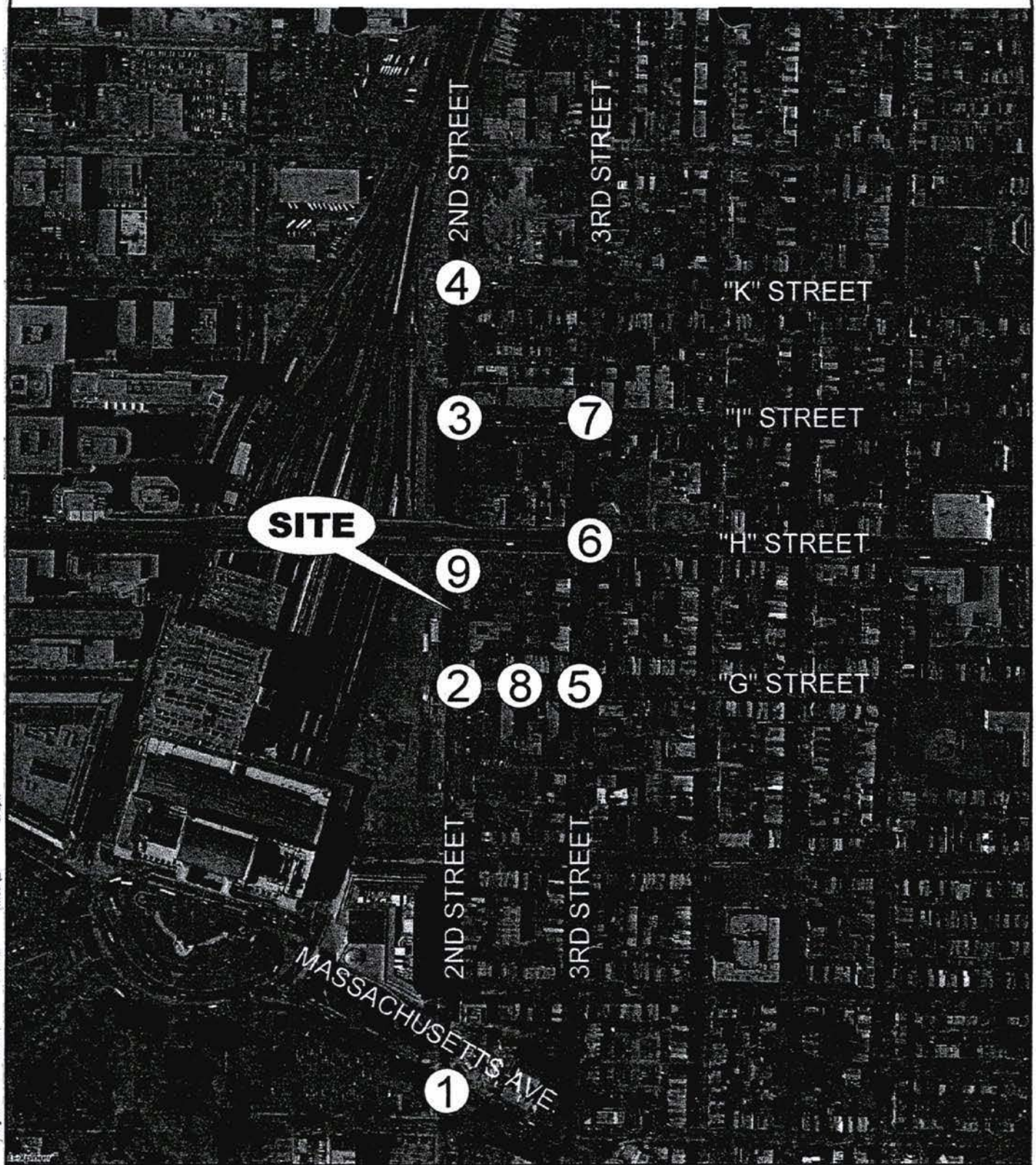


Figure 1-1
Site Location



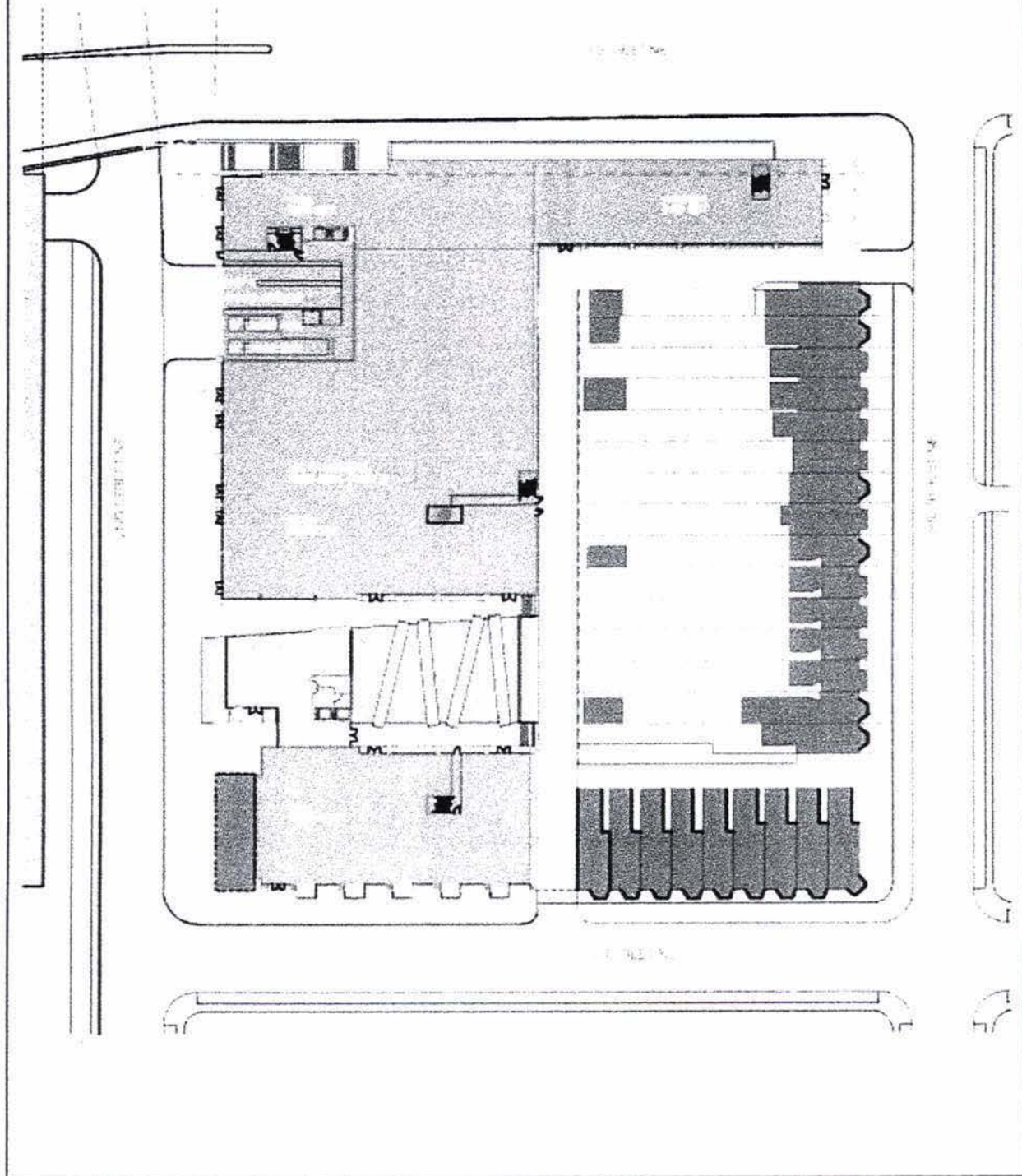


Figure 1-2
Proposed Site Plan



Section 2 BACKGROUND DATA

Study Scope

This traffic study includes the following intersections:

1. 2nd Street/Massachusetts Avenue,
2. 2nd Street/G Street,
3. 2nd Street/Parking Lot Entrances,
4. 2nd Street/Eye Street,
5. 2nd Street/K Street,
6. 3rd Street/G Street,
7. 3rd Street/H Street,
8. 3rd Street/Eye Street, and
9. G Street/Alley.

This study also includes the following approved but incomplete development projects:

1. **Station Place.** This 1,396,00 S.F. office project is located on the west side of 2nd 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.** A new, 213,895 S.F. office building currently is under construction at 830 1st Street.
3. **Senate Square.** This 500-condominium residential project is bounded by Eye Street on the north, H Street on the south, 3rd Street on the east, and 2nd Street on the west.

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/from Capitol Place is provided by 2nd, 3rd, G, and H Streets. Existing intersection lane use and traffic control at key intersections in the site vicinity are shown on Figure 2-1.

2nd Street is a north/south two-lane street with a posted speed limit of 25 miles per hour (mph). Curb parking is primarily available on both sides of the street for Zone 6 residential parking permit holders (with a few restricted areas such as No Parking southbound between Eye and K Street). The intersections of 2nd Street with Massachusetts Avenue and K Street are controlled by traffic signals, and the intersections of 2nd Street with G Street, the Parking Lot Entrances, and Eye Street are controlled by stop signs.

3rd 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 intersections of 3rd Street with G and Eye Streets are controlled by stop signs and the intersection of 3rd Street and H Street is controlled by a traffic signal.

G Street is a one-travel-lane, one-way westbound street with a posted speed limit of 25 mph. Curb parking is available on the south side of G Street for Zone 6 residential parking permit holders.

H Street is an east/west six-lane road with a posted speed limit of 25 mph. It is an overpass section in the vicinity of the site and therefore, provides no direct access to the site. Parking is prohibited on either sides of the road in the vicinity of the subject site.

Existing Traffic Counts

Vehicle Traffic Counts. Existing AM and PM peak period vehicular and pedestrian traffic counts were conducted on Wednesday, October 5, 2005, by Wells & Associates at the following intersections:

1. 2nd Street/Massachusetts Avenue,
2. 2nd Street/G Street,
3. 2nd Street/Parking Lot Entrances,
4. 2nd Street/Eye Street,
5. 2nd Street/K Street,
6. 3rd Street/G Street,
7. 3rd Street/H Street,
8. 3rd Street/Eye Street, and
9. G Street/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 8:00 to 9:00 AM; the PM peak hour generally occurred at 4:45 to 5:45 PM.

Figure 2-2 indicates that H Street, east of 3rd Street, presently carries 1,708 AM peak hour vehicle trips and 1,470 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 25 percent of all PM peak hour trips travel in the westbound direction; 75 percent travel in the eastbound direction away from the central business district.

G Street, south of the subject site presently carries only 223 AM peak hour trips and 82 PM peak hour trips. 2nd Street, west of the subject site carries 466 AM peak hour trips and 416 PM peak hour trips. 3rd Street, east of the subject site carries 308 AM peak hour trips and 313 PM peak hour trips.

Existing Site Traffic. The existing daily/monthly surface parking lot currently generates 14 AM peak hour trips (11 in and 3 out) and 21 PM peak hour trips (0 in and 21 out).

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 north 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.

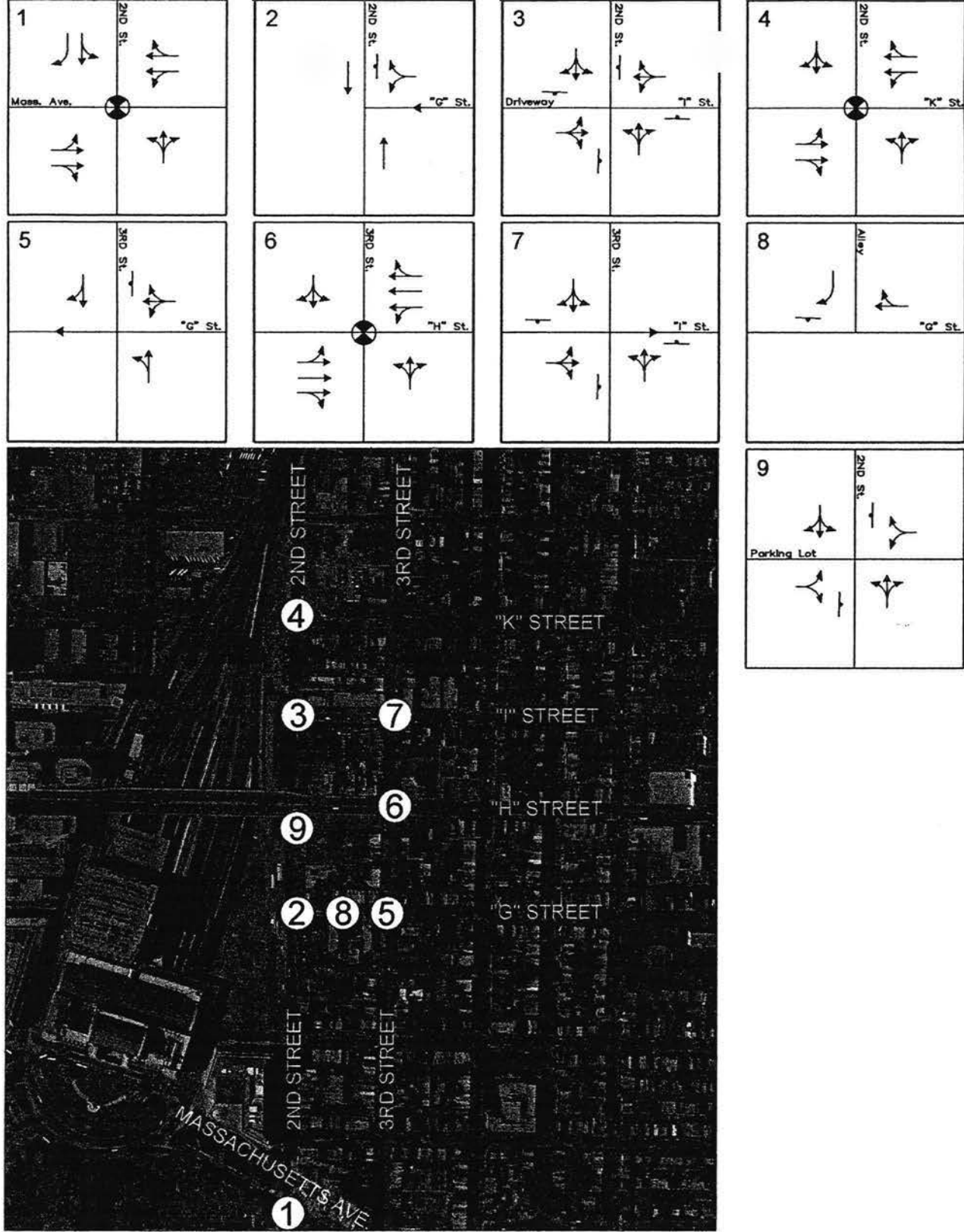


Figure 2-1
Intersection Lane Use and Traffic Control

← Represents One Travel Lane
 ⊙ Signalized Intersection
 — Stop Sign

North
 Schematic

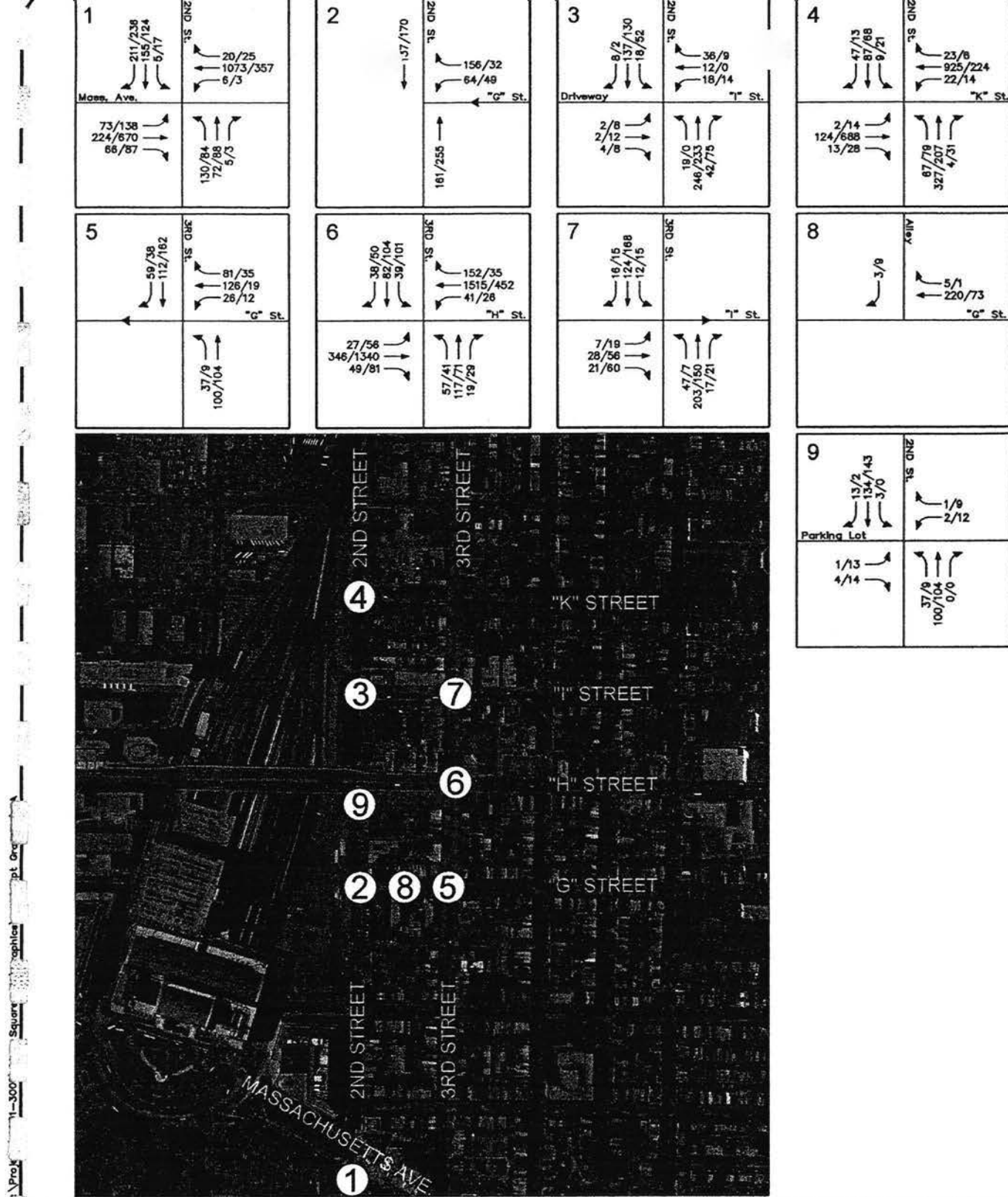


Figure 2-2
Existing Peak Hour Vehicular Traffic Counts

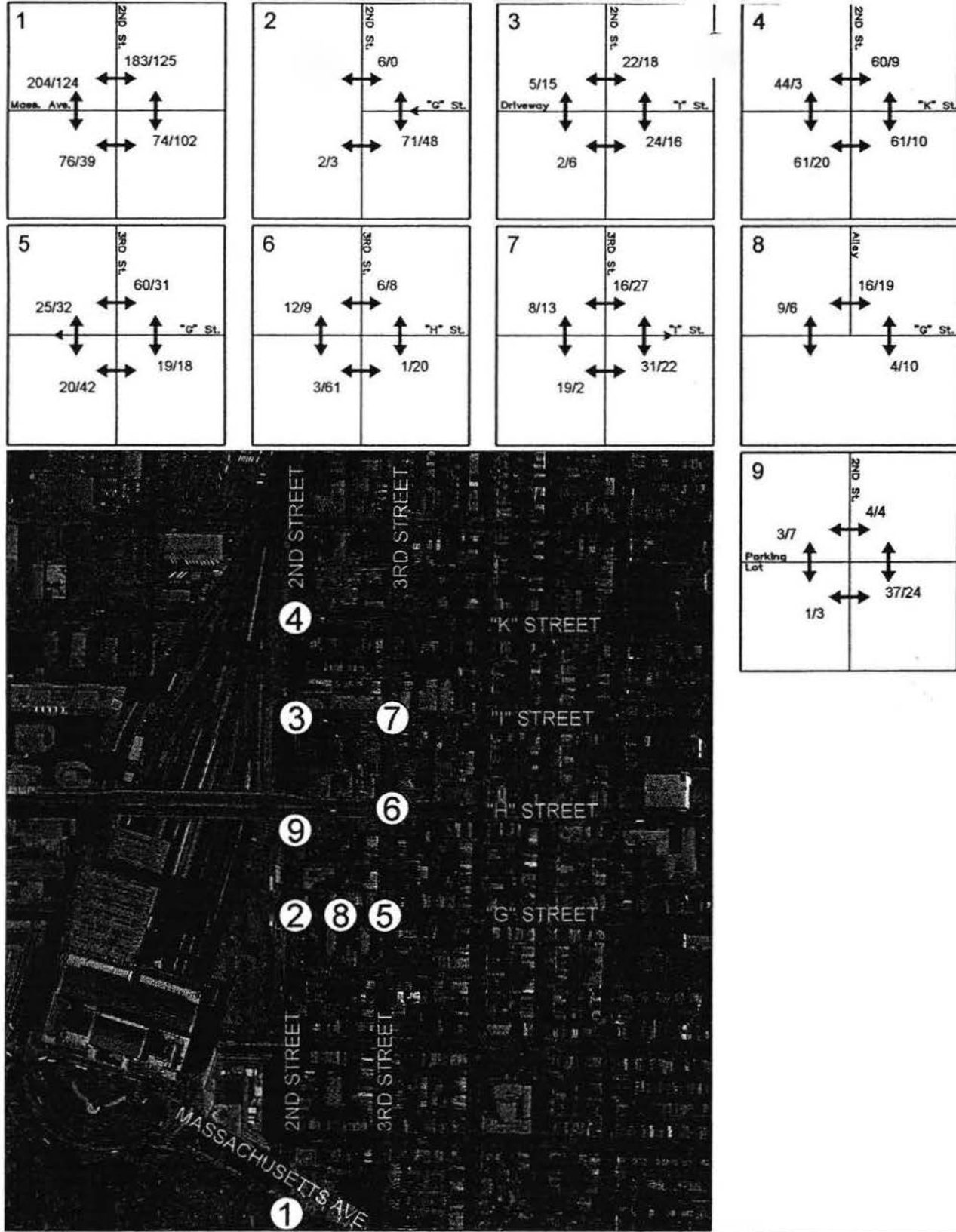


Figure 2-3
Existing Peak Hour Pedestrian Traffic Counts

AM PEAK HOUR
PM PEAK HOUR
000/000

North
Schematic

Section 3 ANALYSIS

Existing Levels of Service

Existing peak hour levels of service were estimated at the nine (9) 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 the majority 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. The overall LOS at the intersection of 3rd Street and H Street is a "B" during both the AM and PM peak hour; however, the southbound movement operates at capacity at LOS "F" during the PM peak hour. Modifying the traffic signal timings at this intersection (within the existing cycle length) would allow the southbound movement to operate at an acceptable level of service "D" or better.

Other Development Trip Generation

The number of peak hour trips that will be generated by the three 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 562 AM peak hour trips, and 572 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 Capitol Place 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 2 nd Street	8%	5%
South along 2 nd Street	7%	10%
South along 3 rd Street	5%	5%
West along K Street	30%	25%
East along H Street	15%	20%
<u>West along Massachusetts Avenue</u>	<u>35%</u>	<u>35%</u>
Total	100%	100%

Table 3-1
Capitol Place
Peak Hour Intersection Levels of Service¹

Intersection	Type of Control	2005 Existing Conditions		2008 Background Conditions		2008 Total Future Conditions	
		AM	PM	AM	PM	AM	PM
1 2nd Street/Massachusetts Avenue	Signal	B(14.6)	C(21.0)	B(14.8)	C(22.3)	B(15.6)	C(24.0)
		D(54.7)	C(23.7)	E(66.8)	C(23.9)	E(66.8)	C(23.9)
		C(24.0)	C(21.1)	C(25.8)	C(21.7)	C(26.4)	C(21.9)
		B(19.2)	B(19.3)	B(19.4)	B(19.5)	B(19.9)	C(20.5)
		D(28.8)	C(21.2)	D(44.5)	C(22.8)	D(44.8)	C(23.8)
	Optimize signal timing	N/A	N/A	B(13.5)	C(20.2)	B(14.3)	C(21.6)
		N/A	N/A	D(51.4)	C(22.3)	D(51.4)	C(22.3)
		N/A	N/A	C(28.4)	C(23.4)	C(28.1)	C(23.6)
		N/A	N/A	C(28.8)	C(28.9)	C(21.3)	C(21.9)
		N/A	N/A	D(46.7)	C(21.1)	D(46.4)	C(22.8)
2 2nd Street/G Street	Stop Sign	B(14.4)	B(14.4)	C(16.3)	C(15.7)	C(19.0)	C(17.2)
3 2nd Street/Parking Lot Entrance	Stop Sign	A(9.8)	B(10.9)	B(11.2)	B(12.0)	B(13.2)	B(14.1)
		B(11.9)	B(11.4)	A(8.0)	A(8.0)	C(15.6)	B(14.2)
		A(8.1)	A(8.0)	A(1.3)	A(8.3)	A(1.9)	A(8.3)
		A(8.2)	A(8.0)	A(8.0)	A(8.0)	A(1.4)	A(1.2)
4 2nd Street/Eye Street	Stop Sign	A(8.0)	A(8.3)	A(8.5)	A(8.6)	A(8.6)	A(9.1)
		A(8.4)	A(8.2)	A(9.0)	A(9.4)	A(9.3)	A(9.7)
		B(10.1)	A(9.8)	B(12.5)	B(11.9)	B(13.8)	B(13.8)
		A(8.8)	A(9.0)	A(9.6)	B(10.1)	B(10.2)	B(10.8)
5 2nd Street/K Street	Signal	A(6.9)	A(9.1)	A(6.9)	A(9.3)	A(7.0)	A(9.5)
		B(10.5)	A(7.2)	B(11.0)	A(7.3)	B(11.0)	A(7.3)
		D(49.8)	D(39.1)	E(69.7)	D(49.0)	F(100.8)	F(84.4)
		C(28.0)	C(22.2)	C(28.6)	C(28.5)	C(28.8)	C(28.7)
		C(21.1)	B(16.9)	C(26.8)	C(28.8)	D(35.1)	C(28.8)
	Optimize signal timing	N/A	N/A	A(9.9)	B(13.2)	B(10.0)	B(13.5)
		N/A	N/A	B(15.7)	B(10.4)	B(15.8)	B(10.4)
		N/A	N/A	D(37.3)	C(31.9)	D(43.0)	D(39.3)
		N/A	N/A	C(22.2)	C(22.7)	C(22.8)	C(22.8)
		N/A	N/A	C(21.2)	B(18.8)	C(22.9)	C(28.4)
6 3rd Street/G Street	Stop Sign	A(9.8)	A(7.8)	B(10.0)	A(8.0)	B(10.2)	A(8.0)
		A(9.1)	A(8.1)	A(9.3)	A(8.3)	A(9.5)	A(8.4)
		A(9.0)	A(8.5)	A(9.3)	A(8.7)	A(9.5)	A(8.8)
7 3rd Street/H Street	Signal	A(4.5)	A(6.7)	A(4.6)	A(7.5)	A(4.6)	A(7.5)
		B(13.7)	A(8.6)	B(15.0)	A(8.8)	B(15.6)	A(8.9)
		D(45.4)	D(39.1)	D(52.9)	D(40.3)	D(52.9)	D(40.3)
		D(29.2)	E(83.2)	D(52.6)	E(120.5)	D(52.6)	E(120.5)
		B(16.2)	B(17.2)	B(18.4)	C(21.9)	B(18.9)	C(21.9)
	Optimize signal timing	A(8.3)	B(12.2)	A(8.5)	B(13.7)	A(8.5)	B(13.7)
		C(22.7)	B(13.7)	C(26.1)	B(14.0)	C(27.4)	B(14.2)
		C(29.1)	C(27.2)	C(30.2)	C(27.6)	C(30.2)	C(27.6)
		C(27.5)	C(24.5)	C(29.2)	D(38.0)	C(29.2)	D(38.0)
		C(21.8)	B(15.8)	C(23.7)	B(17.2)	C(24.4)	B(17.2)
8 3rd Street/Eye Street	Stop Sign	A(8.2)	A(8.8)	A(8.8)	A(9.4)	A(8.9)	A(9.8)
		A(9.6)	A(9.0)	B(10.4)	A(9.8)	B(10.5)	B(10.0)
		A(8.5)	A(9.2)	A(8.9)	A(9.8)	A(9.0)	B(10.0)
9 G Street/Alley	Stop Sign	A(9.6)	A(8.7)	A(8.0)	A(8.0)	A(8.0)	A(8.0)

Notes: ¹ Analysis performed using Synchro/SimTraffic Version 6.0

Table 3-2
Capitol Place
Trips Generated by Other Approved Developments

Trip Type/ Land Use	Background Project	Development Program	Units	AM Peak Hour			PM Peak Hour		
				In	Out	Total	In	Out	Total
<u>ITE Vehicle-Trips ¹</u>									
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
	Subtotal			1,159	309	1,468	361	1,097	1,458
<u>ITE Person-Trips ²</u>									
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
	Subtotal			1,281	367	1,648	423	1,220	1,643
<u>Projected Vehicle Trips ³</u>									
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
Total Background Trips				404	159	562	175	397	572

Notes:

¹

Based on ITE, Trip Generation, 7th Edition.

²

Assumptions:

	<u>Office</u>	<u>Residential</u>
Non-auto mode split:	0%	10%
Average vehicle occupancy (persons per vehicle)	1.1	1.15

³

Assumptions:

	<u>Office</u>	<u>Residential</u>
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 Capitol Place, 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 Capitol Square, were estimated at the nine (9) 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 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. The southbound movement on 3rd Street at H Street will continue to operate at capacity at LOS "F" during the PM peak hour, without traffic signal timing changes. Modifying the traffic signal timings at this intersection (within the existing cycle length) would allow the southbound movement to operate at an acceptable level of service "D" or better.

In addition, the westbound movement at the intersection of 2nd Street and Massachusetts Avenue (during the AM peak hour) and the northbound movement at the intersection of 2nd Street and K Street (during the AM peak hour) are forecasted to operate near capacity at LOS "E", without traffic signal timing changes. Modifying the traffic signal timings at these intersections (within the existing cycle lengths) would allow all movements to operate at an acceptable level of service "D" or better.

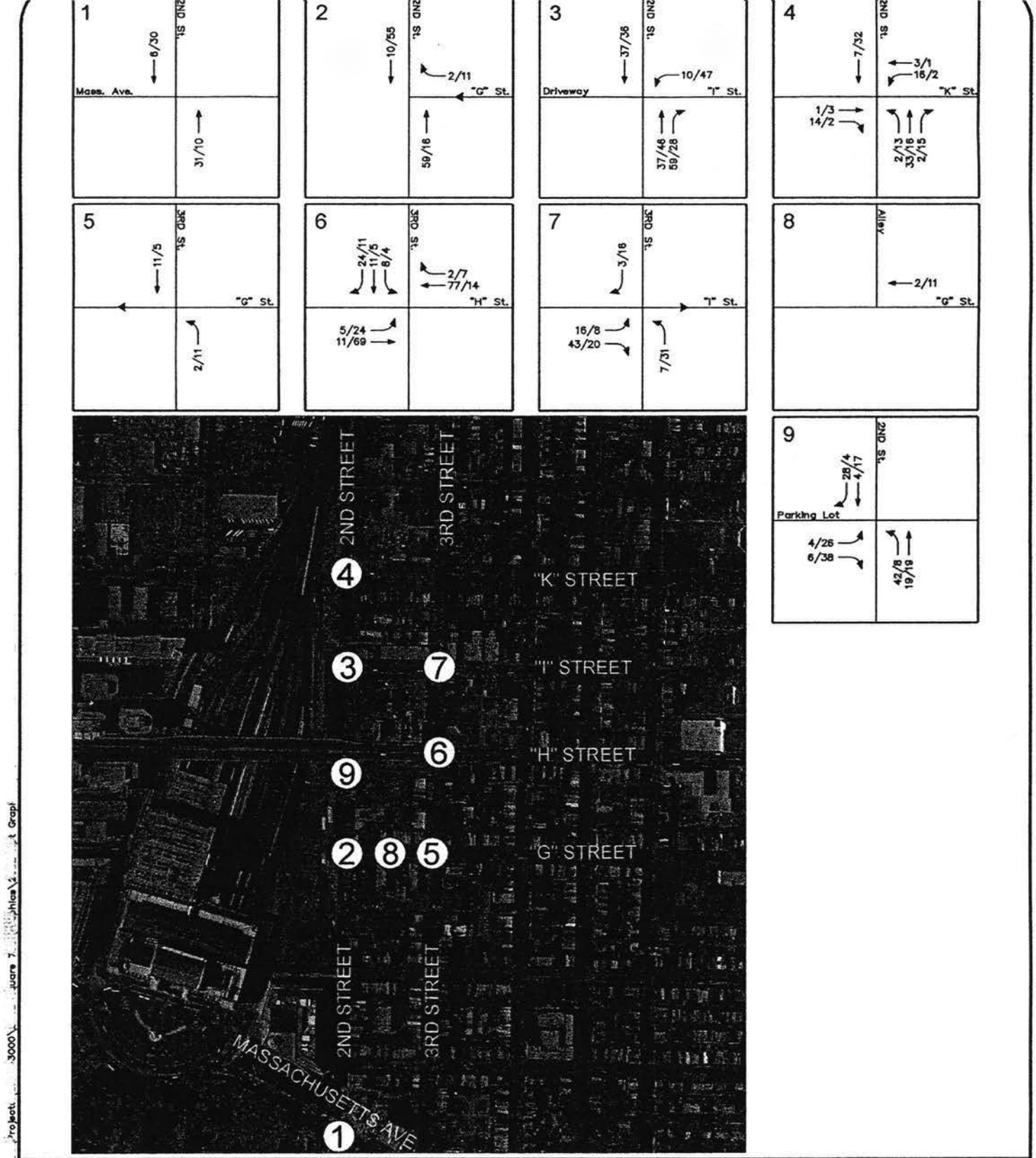


Figure 3-1
Other Developments Traffic Assignments

ALL PEAK HOUR
PM PEAK HOUR
000,000

North
Schematic

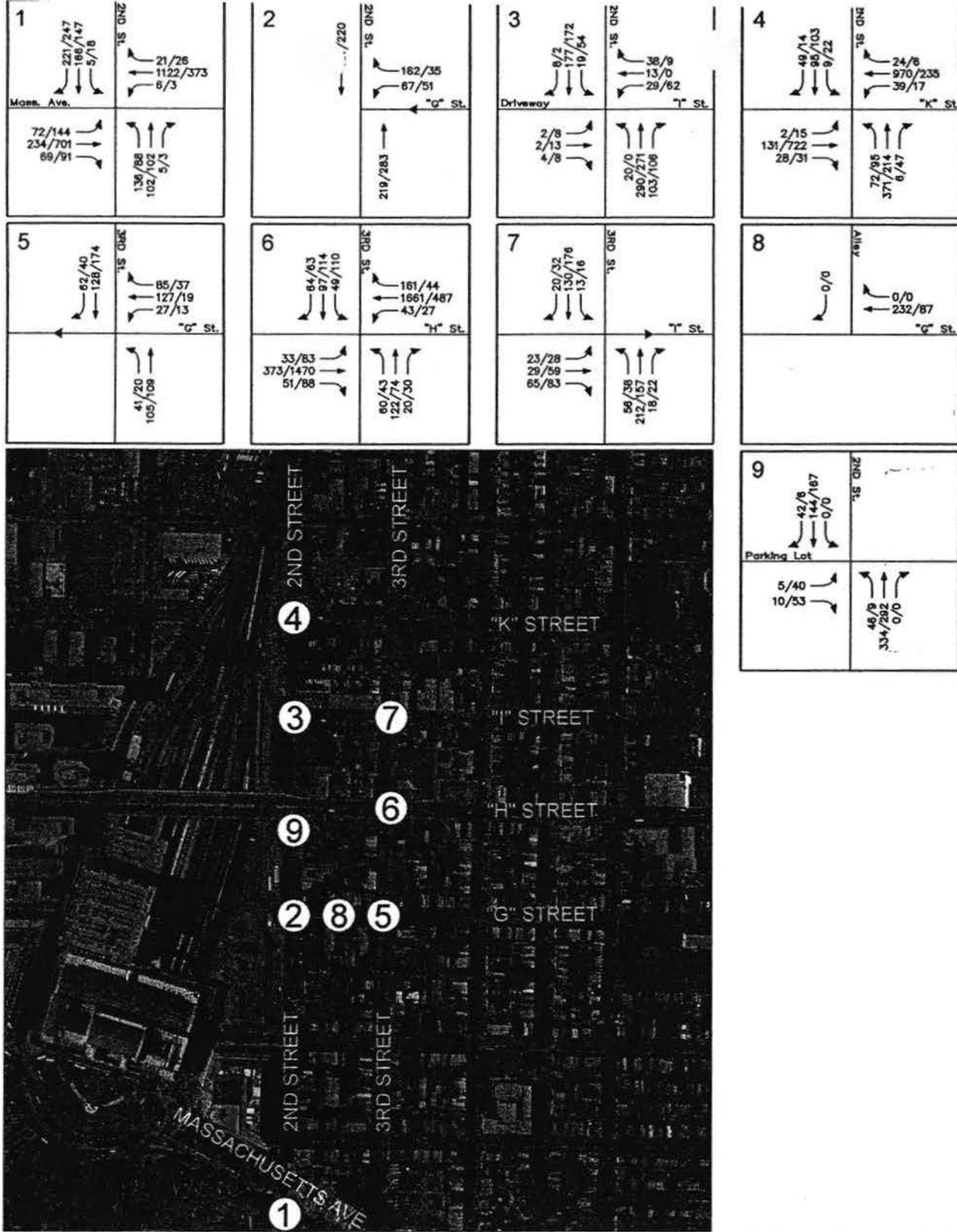


Figure 3-2
Background Future Peak Hour Traffic Forecasts

AM PEAK HOUR
PM PEAK HOUR
000/000

North
Schematic

Site Trip Generation Analysis

The number of trips that will be generated by the development of Capitol Place 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 163 AM peak hour trips (98 in and 66 out), and 185 PM peak hour trips (70 in and 116 out), at project buildout, as shown in Table 3-3. This estimate assumes that 50 percent of all residential site-generated person-trips and 40 percent of all commercial 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.

The surface parking lot presently generates 14 AM peak hour trips (11 in and 3 out) and 21 PM peak hour trips (0 in and 21 out). The development of Capitol Place, therefore, would generate 149 net additional AM peak hour trips and 164 net additional PM peak hour trips.

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 Capitol Place 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 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 Capitol Place and the recommended traffic signal timing modifications.

The site driveway off 2nd Street is anticipated to operate at a LOS "C" during the AM peak hour and a LOS "B" during the PM peak hour.

Parking Analysis

The subject site is proposed to be zoned to 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 unit. 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.

Per the District of Columbia zoning ordinance minimum parking requirements, the subject site would require 96 commercial parking spaces and 106 residential parking spaces, for a total of 202 parking spaces.

The subject site will be served by three (3) levels of underground parking with approximately 94 commercial parking spaces on Level C1 and approximately 309 residential parking spaces (or 0.97 spaces per unit) on Levels C2 and C3. This is 203 more residential spaces and 2 fewer commercial spaces than the minimum number of spaces required by the zoning ordinance.

The proposed residential parking ratio (0.97 spaces per unit) is consistent with prevailing market demands for similar residential projects in other areas of the District of Columbia.

In summary, the proposed on-site parking supply would adequately meet 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 delivery trucks would approach the loading area northbound or southbound along 2nd Street and turn right or left into the loading areas. The trucks would back into the appropriate loading areas, as shown on Figures 3-5 and 3-6.

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

Table 3-3
Capitol Place
Site Trip Generation Summary

Trip Type/ Land Use	Development Program	Units	AM Peak Hour			PM Peak Hour		
			In	Out	Total	In	Out	Total
Existing Surface Parking Lot			11	3	14	0	21	21
<u>ITE Vehicle-Trips ¹</u>								
Retail	74,800	S.F.	131	18	149	28	135	163
Residential	318	DU	22	108	130	104	51	155
Subtotal			153	126	279	132	186	318
<u>ITE Person-Trips ²</u>								
Retail	74,800	S.F.	233	32	264	49	240	289
Residential	318	DU	28	138	166	133	65	198
Subtotal			261	170	430	182	305	487
<u>Projected Vehicle Trips ³</u>								
Retail	74,800	S.F.	87	12	99	18	90	108
Residential	318	DU	11	54	64	52	26	77
Total Site-Generated Trips			98	66	163	70	116	185
Total Net Site-Generated Trips			87	63	149	70	95	164

Notes:

¹ Based on ITE, Trip Generation, 7th Edition.

² Assumptions:

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

³ Assumptions:

	<u>Retail</u>	<u>Residential</u>
Non-auto mode split:	40%	50%
Average vehicle occupancy (persons per vehicle)	1.60	1.3

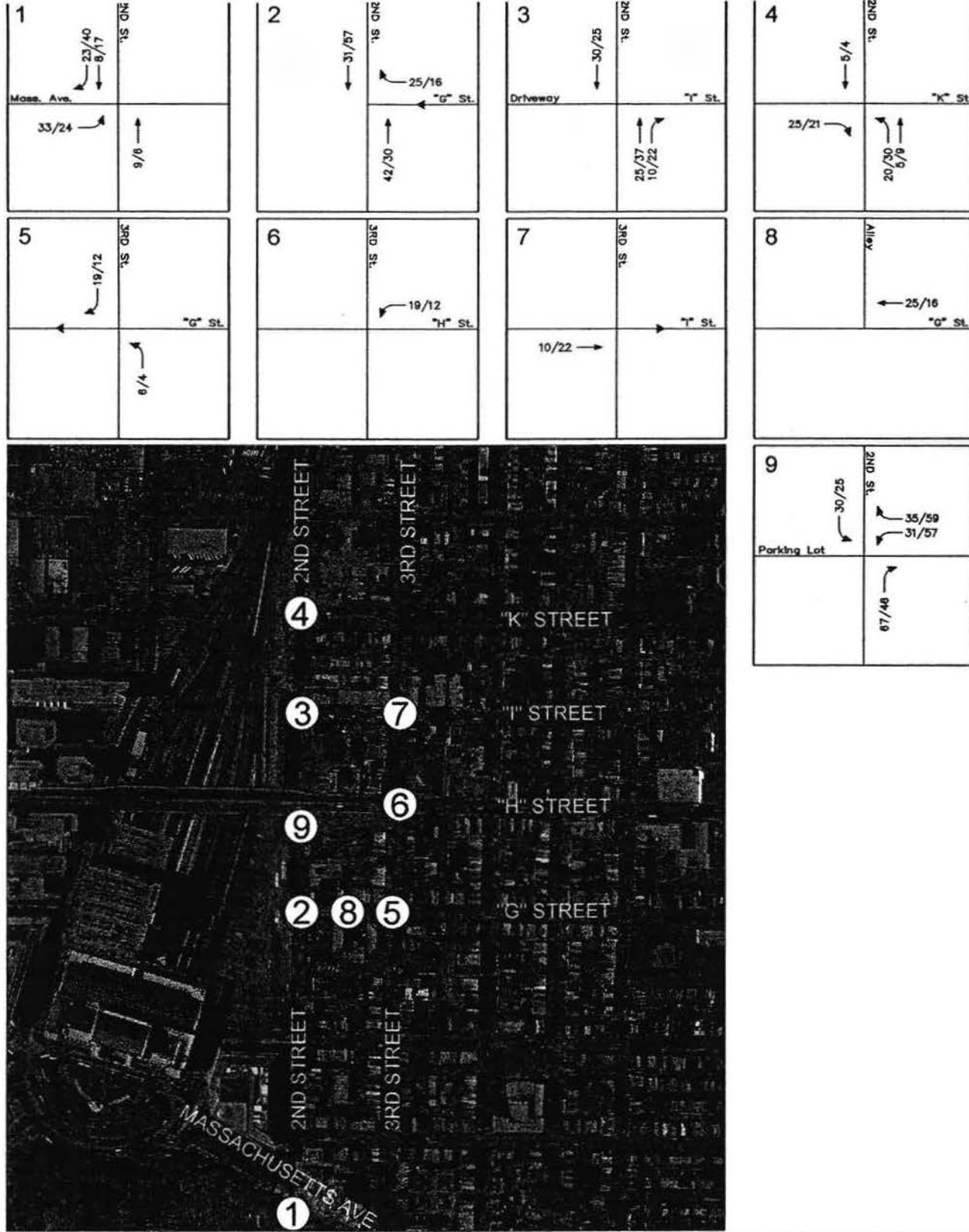


Figure 3-3
Site-Generated Traffic Assignments

AM PEAK HOUR
PM PEAK HOUR
000/000

North
Schematic

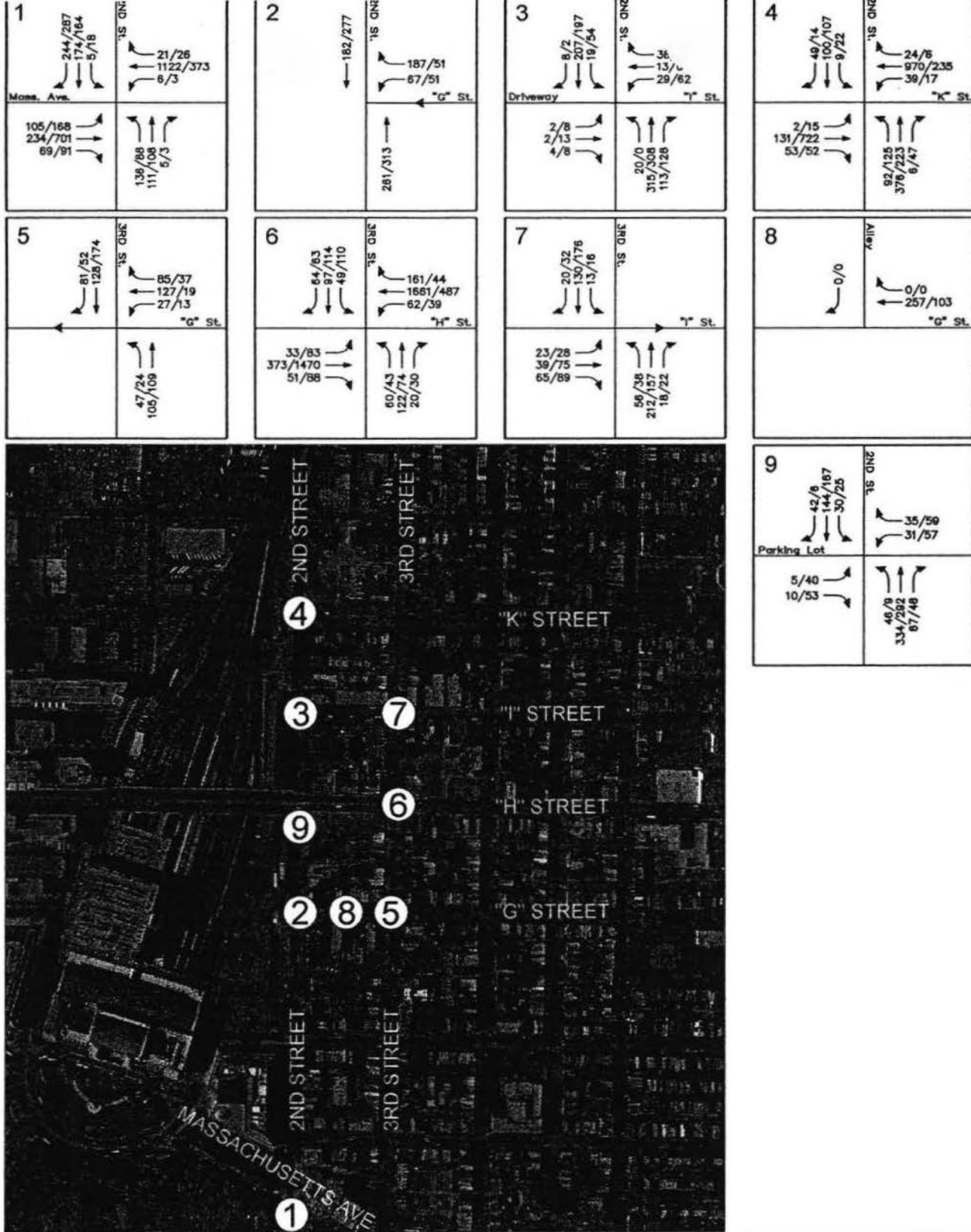


Figure 3-4
Total Future Peak Hour Traffic Forecasts

AM PEAK HOUR
PM PEAK HOUR
000/000

North
Schematic

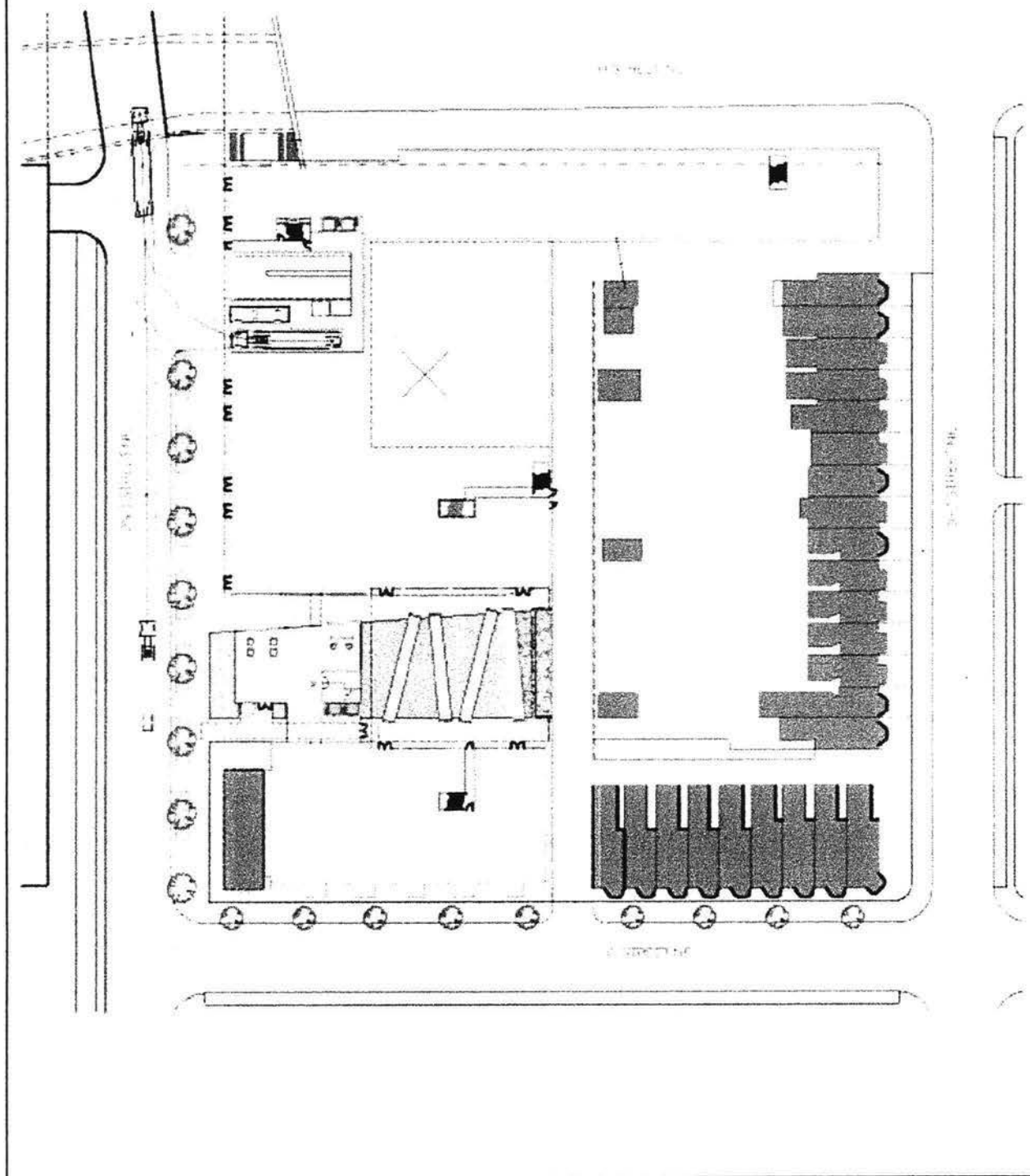


Figure 3-6
55' Delivery Truck Maneuvers

North
Schematic

Section 4

CONCLUSIONS

The conclusions of this traffic impact study are as follows:

1. The majority 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. The overall LOS at the intersection of 3rd Street and H Street is a "B" during both the AM and PM peak hour; however, the southbound movement operates at capacity at LOS "F" during the PM peak hour. Modifying the traffic signal timings at this intersection (within the existing cycle length) would allow the southbound movement to operate at an acceptable level of service "D" or better.
2. The approved but unbuilt projects in the study area will generate a total of 562 AM peak hour trips and 572 PM peak hour trips.
3. These additional trips can be adequately accommodated at the key intersections in the study area, if existing traffic signal timings at the 3rd Street/H Street, 2nd Street/Massachusetts Avenue, and 2nd Street/K Street intersections are modified.
4. The proposed development of Capitol Place will generate 149 additional AM peak hour trips and 164 additional PM peak hour trips.
5. These additional site-generated trips can be adequately accommodated at the key intersections in the study area with these traffic signal timing modifications. The site driveway off 2nd Street is anticipated to operate at a LOS "C" during the AM peak hour and a LOS "B" during the PM peak hour.
6. The proposed on-site parking supply would adequately meet 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.
7. A total of 99 residential (at 2.0 FAR) and 112,200 S.F. (at 1.5 FAR) could be built by-right on the subject site. The uses would generate 22-percent additional AM peak hour trips and 12-percent additional PM peak hour trips. The proposed development, therefore, would have less traffic impact than the by-right development.

Appendix A

Existing Vehicular and Pedestrian Traffic Counts

Wells & Associates, LLC

McLean, Virginia

Existing Traffic Count

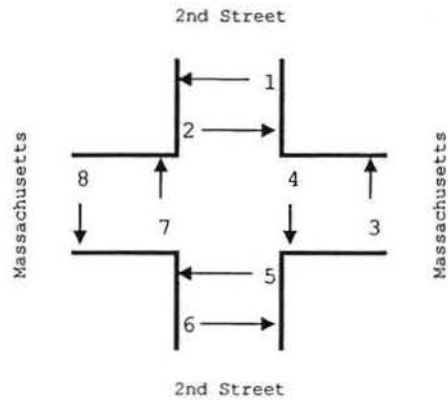
PROJECT: Square 752		DATE: 10/5/2005		SOUTHBOUND ROAD: 2nd Street																	
W & A JOB NO.: 2982		DAY: Wednesday		NORTHBOUND ROAD: 2nd Street																	
INTERSECTION: Massachusetts Avenue and 2nd Street		WEATHER: Clear		WESTBOUND ROAD: Massachusetts Avenue																	
LOCATION: Washington, DC		COUNTED BY: Al and Gern		EASTBOUND ROAD: Massachusetts Avenue																	
		INPUTED BY: CFP																			
Time Period	Turning Movements																Total	PHF	Time Period		
	Southbound 2nd Street				Westbound Massachusetts Avenue				Northbound 2nd Street				Eastbound Massachusetts Avenue							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	11	17	0	28	1	72	5	78	1	5	9	15	7	13	5	25	43	103	146		6:00-6:15
6:15-6:30	7	4	2	13	7	100	0	107	0	5	5	10	4	10	5	19	23	126	149		6:15-6:30
6:30-6:45	19	7	0	26	0	117	1	118	0	11	34	45	4	25	6	35	71	153	224		6:30-6:45
6:45-7:00	11	12	0	23	8	170	0	178	0	14	17	31	8	32	11	51	54	229	283		6:45-7:00
7:00-7:15	18	24	0	42	7	195	0	202	0	14	26	40	7	40	8	55	82	257	339		7:00-7:15
7:15-7:30	28	23	1	52	11	243	1	255	0	25	36	61	5	54	11	70	113	325	438		7:15-7:30
7:30-7:45	37	27	3	67	5	251	1	257	0	25	47	72	19	46	13	78	139	335	474		7:30-7:45
7:45-8:00	35	21	2	58	14	282	3	299	2	24	33	59	6	46	10	62	117	361	478		7:45-8:00
8:00-8:15	51	38	2	91	5	269	2	276	1	9	23	33	22	54	22	98	124	374	498		8:00-8:15
8:15-8:30	52	40	2	94	8	281	1	290	1	16	43	60	12	51	17	80	154	370	524		8:15-8:30
8:30-8:45	52	39	0	91	3	275	1	279	3	18	32	53	17	53	11	81	144	360	504		8:30-8:45
8:45-9:00	56	38	1	95	4	248	2	254	0	29	32	61	15	66	23	104	156	358	514		8:45-9:00
3 Hour Totals	377	290	13	680	73	2,503	17	2,593	8	195	337	540	126	490	142	758	1,220	3,351	4,571		
1 Hour Totals																					
6:00-7:00	48	40	2	90	16	459	6	481	1	35	65	101	23	80	27	130	191	611	802	0.71	6:00-7:00
6:15-7:15	55	47	2	104	22	582	1	605	0	44	82	126	23	107	30	160	230	765	995	0.73	6:15-7:15
6:30-7:30	76	66	1	143	26	725	2	753	0	64	113	177	24	151	36	211	320	964	1,284	0.73	6:30-7:30
6:45-7:45	94	86	4	184	31	859	2	892	0	78	126	204	39	172	43	254	388	1,146	1,534	0.81	6:45-7:45
7:00-8:00	118	95	6	219	37	971	5	1,013	2	88	142	232	37	186	42	265	451	1,278	1,729	0.90	7:00-8:00
7:15-8:15	151	109	8	268	35	1,045	7	1,087	3	83	139	225	52	200	56	308	493	1,395	1,888	0.95	7:15-8:15
7:30-8:30	175	126	9	310	32	1,083	7	1,122	4	74	146	224	59	197	62	318	534	1,440	1,974	0.94	7:30-8:30
7:45-8:45	190	138	6	334	30	1,107	7	1,144	7	67	131	205	57	204	60	321	539	1,465	2,004	0.96	7:45-8:45
8:00-9:00	211	155	5	371	20	1,073	6	1,099	5	72	130	207	66	224	73	363	578	1,462	2,040	0.97	8:00-9:00
AM Peak	211	155	5	371	20	1,073	6	1,099	5	72	130	207	66	224	73	363	578	1,462	2,040	0.97	AM Peak
PM																					
4:00-4:15	37	33	1	71	7	84	2	93	3	19	17	39	24	120	24	168	110	261	371		4:00-4:15
4:15-4:30	34	31	4	69	3	71	0	74	0	20	17	37	25	144	21	190	106	264	370		4:15-4:30
4:30-4:45	35	29	3	67	4	67	1	72	2	18	12	32	27	144	41	212	99	284	383		4:30-4:45
4:45-5:00	40	41	5	86	7	97	0	104	2	5	13	20	23	142	20	185	106	289	395		4:45-5:00
5:00-5:15	60	33	5	98	7	96	1	104	2	19	25	46	20	158	39	217	144	321	465		5:00-5:15
5:15-5:30	60	32	4	96	4	82	0	86	0	25	18	43	26	199	38	263	139	349	488		5:15-5:30
5:30-5:45	42	28	4	74	4	97	1	102	1	22	18	41	18	166	33	217	115	319	434		5:30-5:45
5:45-6:00	74	31	4	109	10	82	1	93	0	22	23	45	23	147	28	198	154	291	445		5:45-6:00
6:00-6:15	64	25	2	91	5	102	4	111	0	27	17	44	17	149	26	192	135	303	438		6:00-6:15
6:15-6:30	67	26	3	96	5	120	3	128	1	31	19	51	25	154	28	207	147	335	482		6:15-6:30
6:30-6:45	62	26	3	91	5	104	1	110	0	25	22	47	17	127	35	179	138	289	427		6:30-6:45
6:45-7:00	56	21	3	80	0	105	2	107	1	20	16	37	20	116	26	162	117	269	386		6:45-7:00
3 Hour Totals	631	356	41	1,028	61	1,107	16	1,184	12	253	217	482	265	1,766	359	2,390	1,510	3,574	5,084		
1 Hour Totals																					
4:00-5:00	146	134	13	293	21	319	3	343	7	62	59	128	99	550	106	755	421	1,098	1,519	0.96	4:00-5:00
4:15-5:15	169	134	17	320	21	331	2	354	6	62	67	135	95	588	121	804	455	1,158	1,613	0.87	4:15-5:15
4:30-5:30	195	135	17	347	22	342	2	366	6	67	68	141	96	643	138	877	488	1,243	1,731	0.89	4:30-5:30
4:45-5:45	202	134	18	354	22	372	2	396	5	71	74	150	87	665	130	882	504	1,278	1,782	0.91	4:45-5:45
5:00-6:00	236	124	17	377	25	357	3	385	3	88	84	175	87	670	138	895	552	1,280	1,832	0.94	5:00-6:00
5:15-6:15	240	116	14	370	23	363	6	392	1	96	76	173	84	661	125	870	543	1,262	1,805	0.92	5:15-6:15
5:30-6:30	247	110	13	370	24	401	9	434	2	102	77	181	83	616	115	814	551	1,248	1,799	0.93	5:30-6:30
5:45-6:45	267	108	12	387	25	408	9	442	1	105	81	187	82	577	117	776	574	1,218	1,792	0.93	5:45-6:45
6:00-7:00	249	98	11	358	15	431	10	456	2	103	74	179	79	546	115	740	537	1,196	1,733	0.90	6:00-7:00
PM Peak	236	124	17	377	25	357	3	385	3	88	84	175	87	670	138	895	552	1,280	1,832	0.94	PM Peak

Wells & Associates, LLC
McLean, Virginia

Pedestrian Volume Survey



Project Name: Square 752
Project Number: 2982
Location: Washington DC
Intersection: Massachusetts Avenue and 2nd
Weather: Clear
Date: 10/5/2005
Surveyor: Al
Hours: Mileage:



TIME	Movement							
	1	2	3	4	5	6	7	8
AM								
6:00-6:15	3	2				1	1	6
6:15-6:30		1			4		2	3
6:30-6:45	2	1	1	1	1		1	2
6:45-7:00	7			1		6	6	5
7:00-7:15	4	5	6	1	1			10
7:15-7:30	12	5		2		1	7	4
7:30-7:45	15	12	1	5	2	1	9	8
7:45-8:00	22	12	5	9	2	3	7	14
8:00-8:15	14	12	7	8	4	1	13	13
8:15-8:30	32	26	8	9	4	6	26	17
8:30-8:45	43	15	9	14	28	9	30	30
8:45-9:00	21	20	4	15	20	4	39	36
PM								
4:00-4:15	6	7	9	7	4	3	12	4
4:15-4:30	3	8	9	11	4	5	21	6
4:30-4:45	8	5	16	11	4	5	15	6
4:45-5:00	7	2			1	6	5	3
5:00-5:15	6	12	2	8	3	8	21	4
5:15-5:30	17	24	8	19	2	11	15	9
5:30-5:45	14	4	14	4	4	4	26	9
5:45-6:00	22	26	29	18	6	1	22	18
6:00-6:15	9	33	16	9	7	15	18	8
6:15-6:30	17	29	6	21	6	24	27	5
6:30-6:45	25	24	12	18	12	8	12	9
6:45-7:00	6	21	9	16	5	11	20	12

Wells & Associates, LLC

McLean, Virginia

Existing Traffic Count

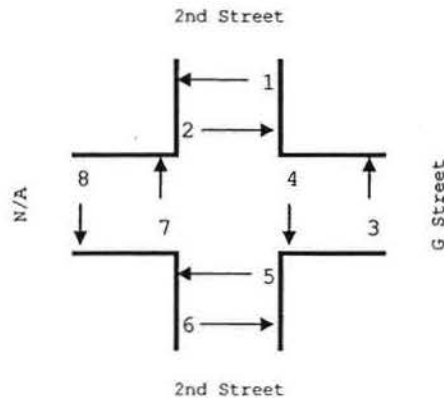
PROJECT: Square 752		DATE: 10/5/2005		SOUTHBOUND ROAD: 2nd Street																	
W & A JOB NO.: 2982		DAY: Wednesday		NORTHBOUND ROAD: 2nd Street																	
INTERSECTION: G Street and 2nd Street		WEATHER: Clear		WESTBOUND ROAD: G Street																	
LOCATION: Washington, DC		COUNTED BY: Angela		EASTBOUND ROAD: G Street																	
		INPUTED BY: CFP																			
Time Period	Turning Movements																Total	PHF	Time Period		
	Southbound 2nd Street				Westbound G Street				Northbound 2nd Street				Eastbound G 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	5	0	5	6	0	0	6	0	17	0	17	0	0	0	0	22	6	28		6:00-6:15
6:15-6:30	0	14	0	14	3	0	6	9	0	15	0	15	0	0	0	0	29	9	38		6:15-6:30
6:30-6:45	0	11	0	11	6	0	0	6	0	15	0	15	0	0	0	0	26	6	32		6:30-6:45
6:45-7:00	0	9	0	9	7	0	3	10	0	28	0	28	0	0	0	0	37	10	47		6:45-7:00
7:00-7:15	0	13	0	13	9	0	7	16	0	32	0	32	0	0	0	0	45	16	61		7:00-7:15
7:15-7:30	0	12	0	12	13	0	4	17	0	32	0	32	0	0	0	0	44	17	61		7:15-7:30
7:30-7:45	0	21	0	21	21	0	10	31	0	34	0	34	0	0	0	0	55	31	86		7:30-7:45
7:45-8:00	0	24	0	24	15	0	8	23	0	49	0	49	0	0	0	0	73	23	96		7:45-8:00
8:00-8:15	0	29	0	29	39	0	11	50	0	42	0	42	0	0	0	0	71	50	121		8:00-8:15
8:15-8:30	0	35	0	35	36	0	19	55	0	43	0	43	0	0	0	0	78	55	133		8:15-8:30
8:30-8:45	0	39	0	39	49	0	15	64	0	36	0	36	0	0	0	0	75	64	139		8:30-8:45
8:45-9:00	0	34	0	34	32	0	19	51	0	40	0	40	0	0	0	0	74	51	125		8:45-9:00
3 Hour Totals	0	246	0	246	236	0	102	338	0	383	0	383	0	0	0	0	629	338	967		
1 Hour Totals																					
6:00-7:00	0	39	0	39	22	0	9	31	0	75	0	75	0	0	0	0	114	31	145	0.77	6:00-7:00
6:15-7:15	0	47	0	47	25	0	16	41	0	90	0	90	0	0	0	0	137	41	178	0.73	6:15-7:15
6:30-7:30	0	45	0	45	35	0	14	49	0	107	0	107	0	0	0	0	152	49	201	0.82	6:30-7:30
6:45-7:45	0	55	0	55	50	0	24	74	0	126	0	126	0	0	0	0	181	74	255	0.74	6:45-7:45
7:00-8:00	0	70	0	70	58	0	29	87	0	147	0	147	0	0	0	0	217	87	304	0.79	7:00-8:00
7:15-8:15	0	86	0	86	88	0	33	121	0	157	0	157	0	0	0	0	243	121	364	0.75	7:15-8:15
7:30-8:30	0	109	0	109	111	0	48	159	0	168	0	168	0	0	0	0	277	159	436	0.82	7:30-8:30
7:45-8:45	0	127	0	127	139	0	53	192	0	170	0	170	0	0	0	0	297	192	489	0.88	7:45-8:45
8:00-9:00	0	137	0	137	156	0	64	220	0	161	0	161	0	0	0	0	298	220	518	0.93	8:00-9:00
AM Peak 8:00-9:00	0	137	0	137	156	0	64	220	0	161	0	161	0	0	0	0	298	220	518	0.93	AM Peak 8:00-9:00
PM																					
4:00-4:15	0	30	0	30	10	0	6	16	0	42	0	42	0	0	0	0	72	16	88		4:00-4:15
4:15-4:30	0	48	0	48	7	0	6	13	0	50	0	50	0	0	0	0	98	13	111		4:15-4:30
4:30-4:45	0	38	0	38	5	0	11	16	0	41	0	41	0	0	0	0	79	16	95		4:30-4:45
4:45-5:00	0	44	0	44	4	0	19	23	0	58	0	58	0	0	0	0	102	23	125		4:45-5:00
5:00-5:15	0	43	0	43	8	0	10	18	0	67	0	67	0	0	0	0	110	18	128		5:00-5:15
5:15-5:30	0	47	0	47	13	0	12	25	0	69	0	69	0	0	0	0	116	25	141		5:15-5:30
5:30-5:45	0	36	0	36	7	0	8	15	0	61	0	61	0	0	0	0	97	15	112		5:30-5:45
5:45-6:00	0	40	0	40	8	0	11	19	0	45	0	45	0	0	0	0	85	19	104		5:45-6:00
6:00-6:15	0	31	0	31	5	0	12	17	0	54	0	54	0	0	0	0	85	17	102		6:00-6:15
6:15-6:30	0	27	0	27	10	0	9	19	0	33	0	33	0	0	0	0	60	19	79		6:15-6:30
6:30-6:45	0	28	0	28	3	0	9	12	0	36	0	36	0	0	0	0	64	12	76		6:30-6:45
6:45-7:00	0	18	0	18	3	0	5	8	0	41	0	41	0	0	0	0	59	8	67		6:45-7:00
3 Hour Totals	0	430	0	430	63	0	118	201	0	597	0	597	0	0	0	0	1,027	201	1,228		
1 Hour Totals																					
4:00-5:00	0	160	0	160	26	0	42	68	0	191	0	191	0	0	0	0	351	68	419	0.84	4:00-5:00
4:15-5:15	0	173	0	173	24	0	46	70	0	216	0	216	0	0	0	0	389	70	459	0.90	4:15-5:15
4:30-5:30	0	172	0	172	30	0	52	82	0	235	0	235	0	0	0	0	407	82	489	0.87	4:30-5:30
4:45-5:45	0	170	0	170	32	0	49	81	0	255	0	255	0	0	0	0	425	81	506	0.90	4:45-5:45
5:00-6:00	0	166	0	166	36	0	41	77	0	242	0	242	0	0	0	0	408	77	485	0.86	5:00-6:00
5:15-6:15	0	154	0	154	33	0	43	76	0	229	0	229	0	0	0	0	383	76	459	0.81	5:15-6:15
5:30-6:30	0	134	0	134	30	0	40	70	0	193	0	193	0	0	0	0	327	70	397	0.89	5:30-6:30
5:45-6:45	0	126	0	126	26	0	41	67	0	168	0	168	0	0	0	0	294	67	361	0.87	5:45-6:45
6:00-7:00	0	104	0	104	21	0	35	56	0	164	0	164	0	0	0	0	268	56	324	0.79	6:00-7:00
PM Peak 4:45-5:45	0	170	0	170	32	0	49	81	0	255	0	255	0	0	0	0	425	81	506	0.90	PM Peak 4:45-5:45

Wells & Associates, LLC
McLean, Virginia

Pedestrian Volume Survey



Project Name: Square 752
Project Number: 2982
Location: Washington DC
Intersection: G Street and 2nd Street
Weather: Clear
Date: 10/5/2005
Surveyor: Angela
Hours: Mileage:



TIME	Movement							
	1	2	3	4	5	6	7	8
AM								
6:00-6:15	3	1	1	10	9	0		
6:15-6:30	11	0	1	2	0	0		
6:30-6:45	2	0	6	6	0	0		
6:45-7:00	2	1	3	10	3	1		
7:00-7:15	2	0	1	11	0	1		
7:15-7:30	7	0	2	10	1	1		
7:30-7:45	0	0	8	9	0	3		
7:45-8:00	0	0	5	8	0	0		
8:00-8:15	2	1	2	10	0	0		
8:15-8:30	0	0	5	6	0	0		
8:30-8:45	1	1	14	5	1	1		
8:45-9:00	1	0	15	14	0	0		
PM								
4:00-4:15	0	0	7	5	0	0		
4:15-4:30	0	0	12	1	0	0		
4:30-4:45	0	0	8	4	0	0		
4:45-5:00	0	0	9	6	0	0		
5:00-5:15	0	0	4	10	0	0		
5:15-5:30	0	0	10	2	11	0		
5:30-5:45	0	0	5	1	1	0		
5:45-6:00	0	0	8	7	1	0		
6:00-6:15	0	0	8	9	1	0		
6:15-6:30	0	0	4	6	0	0		
6:30-6:45	0	0	6	1	0	0		
6:45-7:00	0	0	4	4	1	0		

Wells & Associates, LLC

McLean, Virginia

Existing Traffic Count

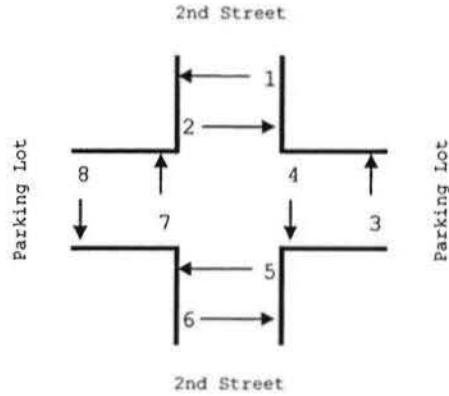
PROJECT: Square 752				DATE: 10/5/2005				SOUTHBOUND ROAD: 2nd Street				2nd Street									
W & A JOB NO.: 2982				DAY: Wednesday				NORTHBOUND ROAD: 2nd Street				2nd Street									
INTERSECTION: 2nd Street and Parking Lot Entrance				WEATHER: Clear				WESTBOUND ROAD: Parking Lot Entrance				Parking Lot Entrance									
LOCATION: Washington, DC				COUNTED BY: Alba				EASTBOUND ROAD: Parking Lot Entrance				Parking Lot Entrance									
				INPUTED BY: CFP																	
Time Period	Turning Movements																Total	PHF	Time Period		
	Southbound 2nd Street				Westbound Parking Lot Entrance				Northbound 2nd Street				Eastbound Parking Lot Entrance							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	3	5	1	9	0	0	0	0	11	12	2	25	2	0	2	4	34	4	38	6:00-6:15	
6:15-6:30	4	14	1	19	0	0	0	0	3	12	3	18	0	0	0	0	37	0	37	6:15-6:30	
6:30-6:45	1	10	0	11	0	0	0	0	3	13	3	19	0	0	0	0	30	0	30	6:30-6:45	
6:45-7:00	2	9	0	11	0	0	0	0	8	24	2	34	0	0	0	0	45	0	45	6:45-7:00	
7:00-7:15	1	12	0	13	0	0	0	0	8	31	4	43	3	0	0	3	56	3	59	7:00-7:15	
7:15-7:30	0	11	1	12	0	0	0	0	13	27	7	47	0	0	0	0	59	0	59	7:15-7:30	
7:30-7:45	1	18	0	19	0	0	0	0	6	43	4	53	1	0	0	1	72	1	73	7:30-7:45	
7:45-8:00	4	22	1	27	0	0	0	0	7	56	0	63	1	0	1	2	90	2	92	7:45-8:00	
8:00-8:15	4	25	2	31	0	0	0	0	3	75	0	78	2	0	1	3	109	3	112	8:00-8:15	
8:15-8:30	2	33	1	36	1	0	2	3	3	77	0	80	1	0	0	1	116	4	120	8:15-8:30	
8:30-8:45	4	39	0	43	0	0	0	0	1	78	3	82	0	0	0	0	125	0	125	8:30-8:45	
8:45-9:00	3	37	0	40	0	0	0	0	1	74	1	76	1	0	0	1	116	1	117	8:45-9:00	
3 Hour Totals	29	235	7	271	1	0	2	3	67	522	29	618	11	0	4	15	889	18	907		
1 Hour Totals																					
6:00-7:00	10	38	2	50	0	0	0	0	25	61	10	96	2	0	2	4	146	4	150	0.83	6:00-7:00
6:15-7:15	8	45	1	54	0	0	0	0	22	80	12	114	3	0	0	3	168	3	171	0.72	6:15-7:15
6:30-7:30	4	42	1	47	0	0	0	0	32	95	16	143	3	0	0	3	190	3	193	0.82	6:30-7:30
6:45-7:45	4	50	1	55	0	0	0	0	35	125	17	177	4	0	0	4	232	4	236	0.81	6:45-7:45
7:00-8:00	6	63	2	71	0	0	0	0	34	157	15	206	5	0	1	6	277	6	283	0.77	7:00-8:00
7:15-8:15	9	76	4	89	0	0	0	0	29	201	11	241	4	0	2	6	330	6	336	0.75	7:15-8:15
7:30-8:30	11	98	4	113	1	0	2	3	19	251	4	274	5	0	2	7	387	10	397	0.83	7:30-8:30
7:45-8:45	14	119	4	137	1	0	2	3	14	286	3	303	4	0	2	6	440	9	449	0.90	7:45-8:45
8:00-9:00	13	134	3	150	1	0	2	3	8	304	4	316	4	0	1	5	466	8	474	0.95	8:00-9:00
AM Peak 8:00-9:00	13	134	3	150	1	0	2	3	8	304	4	316	4	0	1	5	466	8	474	0.95	AM Peak 8:00-9:00
PM																					
4:00-4:15	0	27	0	27	4	0	4	8	1	42	2	45	1	0	2	3	72	11	83		4:00-4:15
4:15-4:30	0	40	3	43	4	0	8	12	1	51	0	52	0	0	0	0	95	12	107		4:15-4:30
4:30-4:45	1	34	0	35	2	0	4	6	1	47	0	48	0	0	2	2	83	8	91		4:30-4:45
4:45-5:00	1	42	0	43	3	0	0	3	0	54	0	54	2	0	1	3	97	6	103		4:45-5:00
5:00-5:15	1	35	0	36	3	0	4	7	0	75	0	75	3	0	2	5	111	12	123		5:00-5:15
5:15-5:30	1	43	0	44	1	0	2	3	0	75	1	76	2	0	5	7	120	10	130		5:15-5:30
5:30-5:45	0	27	0	27	4	0	5	9	0	65	0	65	3	0	1	4	92	13	105		5:30-5:45
5:45-6:00	0	38	0	38	1	0	1	2	0	55	0	55	6	0	5	11	93	13	106		5:45-6:00
6:00-6:15	0	25	0	25	2	0	3	5	1	57	1	59	1	0	0	1	84	6	90		6:00-6:15
6:15-6:30	0	23	0	23	2	0	3	5	1	43	0	44	2	0	3	5	67	10	77		6:15-6:30
6:30-6:45	1	24	0	25	1	0	1	2	0	38	0	38	3	0	2	5	63	7	70		6:30-6:45
6:45-7:00	0	15	0	15	0	0	0	0	0	44	1	45	2	0	1	3	60	3	63		6:45-7:00
3 Hour Totals	8	373	3	381	27	0	35	62	5	646	5	656	25	0	24	49	1,037	111	1,148		
1 Hour Totals																					
4:00-5:00	2	143	3	148	13	0	16	29	3	194	2	199	3	0	5	8	347	37	384	0.90	4:00-5:00
4:15-5:15	3	151	3	157	12	0	16	28	2	227	0	229	5	0	5	10	386	38	424	0.86	4:15-5:15
4:30-5:30	4	154	0	158	9	0	10	19	1	251	1	253	7	0	10	17	411	36	447	0.86	4:30-5:30
4:45-5:45	3	147	0	150	11	0	11	22	0	269	1	270	10	0	9	19	420	41	461	0.89	4:45-5:45
5:00-6:00	2	143	0	145	9	0	12	21	0	270	1	271	14	0	13	27	416	48	464	0.89	5:00-6:00
5:15-6:15	1	133	0	134	8	0	11	19	1	252	2	255	12	0	11	23	389	42	431	0.83	5:15-6:15
5:30-6:30	0	113	0	113	9	0	12	21	2	220	1	223	12	0	9	21	336	42	378	0.89	5:30-6:30
5:45-6:45	1	110	0	111	6	0	8	14	2	193	1	196	12	0	10	22	307	36	343	0.81	5:45-6:45
6:00-7:00	1	87	0	88	5	0	7	12	2	182	2	186	8	0	6	14	274	26	300	0.83	6:00-7:00
PM Peak 5:00-6:00	2	143	0	145	9	0	12	21	0	270	1	271	14	0	13	27	416	48	464	0.89	PM Peak 5:00-6:00

Wells & Associates, LLC
McLean, Virginia

Pedestrian Volume Survey



Project Name: Square 752
Project Number: 2982
Location: Washington DC
Intersection: 2nd Street and Parking Lot
Weather: Clear
Date: 10/5/2005
Surveyor: Alba
Hours: Mileage:



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

Wells & Associates, LLC

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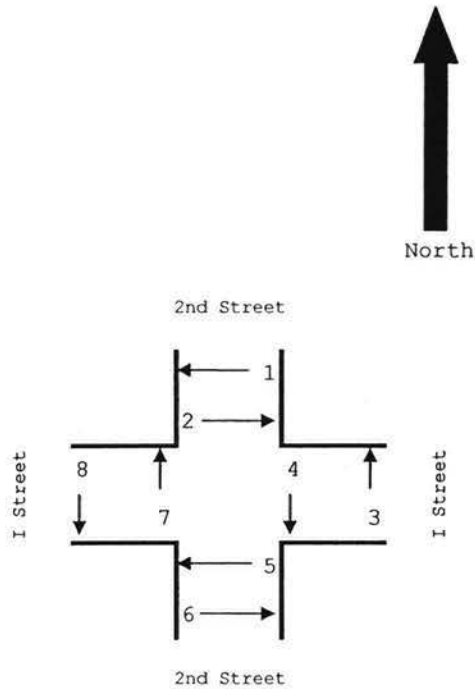
Existing Traffic Count

PROJECT: Square 752				DATE: 10/5/2005				SOUTHBOUND ROAD: 2nd Street												
W & A JOB NO.: 2982				DAY: Wednesday				NORTHBOUND ROAD: 2nd Street												
INTERSECTION: I Street and 2nd Street				WEATHER: Clear				WESTBOUND ROAD: I Street												
LOCATION: Washington, DC				COUNTED BY: Matt				EASTBOUND ROAD: I Street												
				INPUTED BY: CFP																
Time Period	Turning Movements																Total	PHF	Time Period	
	Southbound 2nd Street				Westbound I Street				Northbound 2nd Street				Eastbound I Street							
	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				North & South
AM																				
6:00-6:15	1	7	1	9	3	2	2	7	3	5	1	9	0	1	0	1	18	8	26	6:00-6:15
6:15-6:30	0	16	1	17	1	0	1	2	4	9	2	15	1	0	0	1	32	3	35	6:15-6:30
6:30-6:45	0	11	2	13	1	0	0	1	0	11	1	12	0	0	0	0	25	1	26	6:30-6:45
6:45-7:00	0	9	1	10	2	0	1	3	2	23	1	26	1	1	0	2	36	5	41	6:45-7:00
7:00-7:15	2	12	3	17	5	0	1	6	0	27	3	30	0	0	0	0	47	6	53	7:00-7:15
7:15-7:30	0	13	3	16	3	1	1	5	2	23	1	26	0	0	1	1	42	6	48	7:15-7:30
7:30-7:45	1	18	1	20	8	0	3	11	10	28	3	41	0	0	0	0	61	11	72	7:30-7:45
7:45-8:00	4	24	3	31	6	0	1	7	3	58	1	62	1	1	0	2	93	9	102	7:45-8:00
8:00-8:15	0	26	3	29	7	2	3	12	8	57	4	69	3	0	2	5	98	17	115	8:00-8:15
8:15-8:30	2	35	3	40	13	4	4	21	11	64	5	80	0	1	0	1	120	22	142	8:15-8:30
8:30-8:45	1	38	6	45	8	4	4	16	9	59	3	71	1	1	0	2	116	18	134	8:30-8:45
8:45-9:00	5	38	6	49	8	2	7	17	14	66	7	87	0	0	0	0	136	17	153	8:45-9:00
3 Hour Totals	16	247	33	296	65	15	28	108	66	430	32	528	7	5	3	15	824	123	947	
1 Hour Totals																				
6:00-7:00	1	43	5	49	7	2	4	13	9	48	5	62	2	2	0	4	111	17	128	0.78 6:00-7:00
6:15-7:15	2	48	7	57	9	0	3	12	6	70	7	83	2	1	0	3	140	15	155	0.73 6:15-7:15
6:30-7:30	2	45	9	56	11	1	3	15	4	84	6	94	1	1	1	3	150	18	168	0.79 6:30-7:30
6:45-7:45	3	52	8	63	18	1	6	25	14	101	8	123	1	1	1	3	186	28	214	0.74 6:45-7:45
7:00-8:00	7	67	10	84	22	1	6	29	15	136	8	159	1	1	1	3	243	32	275	0.67 7:00-8:00
7:15-8:15	5	81	10	96	24	3	8	35	23	166	9	198	4	1	3	8	294	43	337	0.73 7:15-8:15
7:30-8:30	7	103	10	120	34	6	11	51	32	207	13	252	4	2	2	8	372	59	431	0.76 7:30-8:30
7:45-8:45	7	123	15	145	34	10	12	56	31	238	13	282	5	3	2	10	427	66	493	0.87 7:45-8:45
8:00-9:00	8	137	18	163	36	12	18	66	42	246	19	307	4	2	2	8	470	74	544	0.89 8:00-9:00
AM Peak																				
8:00-9:00	8	137	18	163	36	12	18	66	42	246	19	307	4	2	2	8	470	74	544	0.89 AM Peak
PM																				
4:00-4:15	0	16	8	24	3	0	1	4	10	42	0	52	6	1	1	8	76	12	88	4:00-4:15
4:15-4:30	0	34	4	38	1	2	1	4	4	31	0	35	0	0	0	0	73	4	77	4:15-4:30
4:30-4:45	1	38	7	46	0	0	5	5	8	43	0	51	2	2	1	5	97	10	107	4:30-4:45
4:45-5:00	0	41	11	52	2	0	1	3	14	55	0	69	2	1	1	4	121	7	128	4:45-5:00
5:00-5:15	1	32	14	47	3	0	5	8	23	56	0	79	0	3	2	5	126	13	139	5:00-5:15
5:15-5:30	0	36	13	49	1	0	4	5	20	66	0	86	3	5	2	10	135	15	150	5:15-5:30
5:30-5:45	1	21	14	36	3	0	4	7	18	56	0	74	3	3	3	9	110	16	126	5:30-5:45
5:45-6:00	0	36	4	40	5	1	1	7	15	50	0	65	3	1	1	5	105	12	117	5:45-6:00
6:00-6:15	0	22	5	27	2	1	3	6	13	46	1	60	2	0	1	3	87	9	96	6:00-6:15
6:15-6:30	0	22	4	26	2	0	0	2	9	35	0	44	2	3	1	6	70	8	78	6:15-6:30
6:30-6:45	0	23	2	25	6	1	0	7	6	41	0	47	2	2	2	6	72	13	85	6:30-6:45
6:45-7:00	2	12	2	16	4	0	2	6	7	40	1	48	1	2	3	6	64	12	76	6:45-7:00
3 Hour Totals	5	333	88	426	32	5	27	64	147	561	2	710	26	23	18	67	1,136	131	1,267	
1 Hour Totals																				
4:00-5:00	1	129	30	160	6	2	8	16	36	171	0	207	10	4	3	17	367	33	400	0.78 4:00-5:00
4:15-5:15	2	145	36	183	6	2	12	20	49	185	0	234	4	6	4	14	417	34	451	0.81 4:15-5:15
4:30-5:30	2	147	45	194	6	0	15	21	65	220	0	285	7	11	6	24	479	45	524	0.87 4:30-5:30
4:45-5:45	2	130	52	184	9	0	14	23	75	233	0	308	8	12	8	28	492	51	543	0.91 4:45-5:45
5:00-6:00	2	125	45	172	12	1	14	27	76	228	0	304	9	12	8	29	476	56	532	0.89 5:00-6:00
5:15-6:15	1	115	36	152	11	2	12	25	66	218	1	285	11	9	7	27	437	52	489	0.82 5:15-6:15
5:30-6:30	1	101	27	129	12	2	8	22	55	187	1	243	10	7	6	23	372	45	417	0.83 5:30-6:30
5:45-6:45	0	103	15	118	15	3	4	22	43	172	1	216	9	6	5	20	334	42	376	0.80 5:45-6:45
6:00-7:00	2	79	13	94	14	2	5	21	35	162	2	199	7	7	7	21	293	42	335	0.87 6:00-7:00
PM Peak																				
4:45-5:45	2	130	52	184	9	0	14	23	75	233	0	308	8	12	8	28	492	51	543	0.91 PM Peak

Wells & Associates, LLC
McLean, Virginia

Pedestrian Volume Survey

Project Name: Square 752
Project Number: 2982
Location: Washington DC
Intersection: I Street and 2nd Street
Weather: Clear
Date: 10/5/2005
Surveyor: Matt
Hours: Mileage: 52



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

Wells & Associates, LLC

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Existing Traffic Count

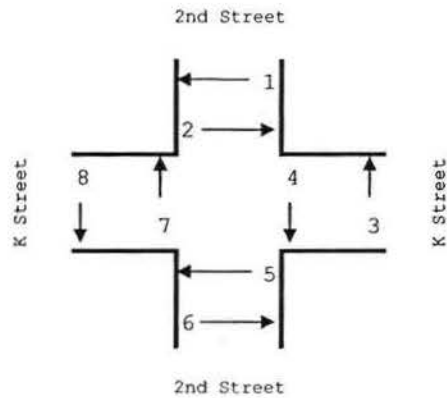
PROJECT: Square 752				DATE: 10/5/2005				SOUTHBOUND ROAD: 2nd Street													
W & A JOB NO.: 2982				DAY: Wednesday				NORTHBOUND ROAD: 2nd Street													
INTERSECTION: K Street and 2nd Street				WEATHER: Clear				WESTBOUND ROAD: K Street													
LOCATION: Washington, DC				COUNTED BY: Oliver and Ebony				EASTBOUND ROAD: K Street													
				INPUTED BY: CFP																	
Time Period	Turning Movements																Total	PHF	Time Period		
	Southbound 2nd Street				Westbound K Street				Northbound 2nd Street				Eastbound K 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	3	3	0	6	1	52	1	54	1	11	3	15	3	13	0	16	21	70	91	6:00-6:15	
6:15-6:30	3	7	0	10	1	53	5	59	1	7	2	10	2	21	1	24	20	83	103	6:15-6:30	
6:30-6:45	3	4	0	7	5	85	6	96	4	9	3	16	2	22	0	24	23	120	143	6:30-6:45	
6:45-7:00	3	4	0	7	3	119	4	126	0	22	5	27	2	11	1	14	34	140	174	6:45-7:00	
7:00-7:15	2	5	0	7	5	154	2	161	1	30	10	41	0	28	1	29	48	190	238	7:00-7:15	
7:15-7:30	2	6	0	8	6	176	3	185	0	22	9	31	4	22	0	26	39	211	250	7:15-7:30	
7:30-7:45	7	10	3	20	5	229	3	237	2	38	10	50	5	26	1	32	70	269	339	7:30-7:45	
7:45-8:00	8	10	3	21	6	217	2	225	0	81	22	103	9	29	1	39	124	264	388	7:45-8:00	
8:00-8:15	5	22	2	29	7	237	5	249	3	85	15	103	4	36	0	40	132	289	421	8:00-8:15	
8:15-8:30	17	27	1	45	5	242	6	253	1	97	13	111	0	29	0	29	156	282	438	8:15-8:30	
8:30-8:45	17	28	3	48	5	229	9	243	0	64	17	81	0	30	1	31	129	274	403	8:30-8:45	
8:45-9:00	11	16	1	28	2	220	11	233	2	70	16	88	2	10	0	12	116	245	361	8:45-9:00	
3 Hour Totals	81	142	13	236	51	2,013	57	2,121	15	636	125	676	33	277	6	316	912	2,437	3,349		
1 Hour Totals																					
6:00-7:00	12	18	0	30	10	309	16	335	6	49	13	68	9	67	2	78	98	413	511	0.73 6:00-7:00	
6:15-7:15	11	20	0	31	14	411	17	442	6	68	20	94	6	82	3	91	125	533	658	0.69 6:15-7:15	
6:30-7:30	10	19	0	29	19	534	15	568	5	83	27	115	8	83	2	93	144	661	805	0.81 6:30-7:30	
6:45-7:45	14	25	3	42	19	678	12	709	3	112	34	149	11	87	3	101	191	810	1,001	0.74 6:45-7:45	
7:00-8:00	19	31	6	56	22	776	10	808	3	171	51	225	18	105	3	126	281	934	1,215	0.78 7:00-8:00	
7:15-8:15	22	48	8	78	24	859	13	896	5	226	56	287	22	113	2	137	365	1,033	1,398	0.83 7:15-8:15	
7:30-8:30	37	69	9	115	23	925	16	964	6	301	60	367	18	120	2	140	482	1,104	1,586	0.91 7:30-8:30	
7:45-8:45	47	87	9	143	23	925	22	970	4	327	67	398	13	124	2	139	541	1,109	1,650	0.94 7:45-8:45	
8:00-9:00	50	93	7	150	19	928	31	978	6	316	61	383	6	105	1	112	533	1,090	1,623	0.93 8:00-9:00	
AM Peak																					
7:45-8:45	47	87	9	143	23	925	22	970	4	327	67	398	13	124	2	139	541	1,109	1,650	0.94 7:45-8:45	
PM																					
4:00-4:15	1	14	9	24	2	62	5	69	5	15	17	37	11	90	3	104	61	173	234	4:00-4:15	
4:15-4:30	2	21	23	46	1	52	0	53	9	51	14	74	16	107	3	126	120	179	299	4:15-4:30	
4:30-4:45	5	15	4	24	4	49	1	54	7	59	14	80	11	126	2	139	104	193	297	4:30-4:45	
4:45-5:00	4	23	9	36	1	53	0	54	3	72	15	90	2	142	1	145	126	199	325	4:45-5:00	
5:00-5:15	8	17	6	31	1	53	3	57	7	84	16	107	4	206	3	213	138	270	408	5:00-5:15	
5:15-5:30	1	19	1	21	0	66	7	73	12	35	25	72	8	181	2	191	93	264	357	5:15-5:30	
5:30-5:45	0	9	5	14	4	52	4	60	9	16	23	48	14	159	8	181	62	241	303	5:30-5:45	
5:45-6:00	4	24	4	32	4	74	4	82	3	35	16	54	5	140	1	146	86	228	314	5:45-6:00	
6:00-6:15	5	12	2	19	1	57	4	62	2	28	14	44	7	122	0	129	63	191	254	6:00-6:15	
6:15-6:30	3	18	3	24	0	62	4	66	4	16	27	47	9	181	1	191	71	257	328	6:15-6:30	
6:30-6:45	6	14	0	20	8	95	5	108	4	26	16	46	5	102	1	108	66	216	282	6:30-6:45	
6:45-7:00	2	18	1	21	2	73	4	79	4	34	27	65	4	135	0	139	86	218	304	6:45-7:00	
3 Hour Totals	41	204	67	312	28	748	41	817	69	471	224	764	96	1,691	25	1,812	1,076	2,629	3,705		
1 Hour Totals																					
4:00-5:00	12	73	45	130	8	216	6	230	24	197	60	281	40	465	9	514	411	744	1,155	0.89 4:00-5:00	
4:15-5:15	19	76	42	137	7	207	4	218	26	266	59	351	33	581	9	623	488	841	1,329	0.81 4:15-5:15	
4:30-5:30	18	74	20	112	6	221	11	238	29	250	70	349	25	655	8	688	461	926	1,387	0.85 4:30-5:30	
4:45-5:45	13	68	21	102	6	224	14	244	31	207	79	317	28	688	14	730	419	974	1,393	0.85 4:45-5:45	
5:00-6:00	13	69	16	98	9	245	18	272	31	170	80	281	31	686	14	731	379	1,003	1,382	0.85 5:00-6:00	
5:15-6:15	10	64	12	86	9	249	19	277	26	114	78	218	34	602	11	647	304	924	1,228	0.86 5:15-6:15	
5:30-6:30	12	63	14	89	9	245	16	270	18	95	80	193	35	602	10	647	282	917	1,199	0.91 5:30-6:30	
5:45-6:45	18	68	9	95	13	288	17	318	13	105	73	191	26	545	3	574	286	892	1,178	0.90 5:45-6:45	
6:00-7:00	16	62	6	84	11	287	17	315	14	104	84	202	25	540	2	567	286	882	1,168	0.89 6:00-7:00	
PM Peak																					
4:45-5:45	13	68	21	102	6	224	14	244	31	207	79	317	28	688	14	730	419	974	1,393	0.85 4:45-5:45	

Wells & Associates, LLC
McLean, Virginia

Pedestrian Volume Survey



Project Name: Square 752
Project Number: 2982
Location: Washington DC
Intersection: K Street and 2nd Street
Weather: Clear
Date: 10/5/2005
Surveyor: Oliver and Ebony
Hours: Mileage: 75



TIME	Movement							
	1	2	3	4	5	6	7	8
AM								
6:00-6:15	0	1	0	0	0	0	0	0
6:15-6:30	1	3	0	2	5	1	1	0
6:30-6:45	2	5	1	4	1	2	2	1
6:45-7:00	5	3	2	5	2	3	3	2
7:00-7:15	5	4	3	6	3	4	1	1
7:15-7:30	3	5	2	7	5	5	2	2
7:30-7:45	4	6	0	8	6	4	4	3
7:45-8:00	5	7	3	9	14	3	5	4
8:00-8:15	6	9	2	15	12	2	6	5
8:15-8:30	6	10	1	16	11	1	7	6
8:30-8:45	7	10	2	13	13	5	8	3
8:45-9:00	6	15	3	14	10	4	9	2
PM								
4:00-4:15	0	0	1	0	0	0	0	0
4:15-4:30	2	1	1	0	0	1	0	0
4:30-4:45	0	1	2	0	2	2	1	1
4:45-5:00	2	2	1	1	1	1	0	1
5:00-5:15	0	1	3	0	3	5	1	0
5:15-5:30	3	0	2	2	0	3	0	0
5:30-5:45	0	1	1	0	5	2	1	0
5:45-6:00	3	2	2	0	1	5	0	0
6:00-6:15	1	3	3	0	2	4	1	0
6:15-6:30	1	1	1	0	1	3	0	0
6:30-6:45	2	2	2	0	3	2	0	0
6:45-7:00	3	2	1	0	1	2	0	0

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Existing Traffic Count

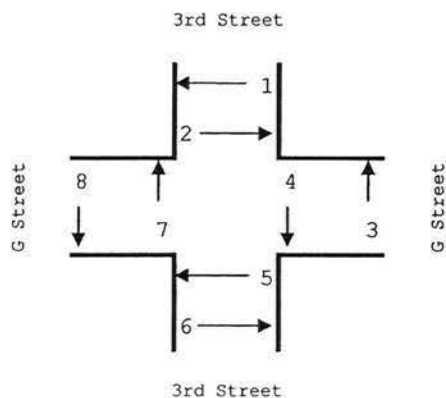
PROJECT: Square 752				DATE: 10/5/2005				SOUTHBOUND ROAD: 3rd Street												
W & A JOB NO.: 2982				DAY: Wednesday				NORTHBOUND ROAD: 3rd Street												
INTERSECTION: G Street and 3rd Street				WEATHER: Clear				WESTBOUND ROAD: G Street												
LOCATION: Washington, DC				COUNTED BY: Berta and Belen				EASTBOUND ROAD: G Street												
				INPUTED BY: CFP																
Time Period	Turning Movements																Total	PHF	Time Period	
	Southbound 3rd Street				Westbound G Street				Northbound 3rd Street				Eastbound G Street							
	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				North & South
AM																				
6:00-6:15	6	3	0	9	2	0	0	2	0	6	1	7	0	0	0	0	16	2	18	6:00-6:15
6:15-6:30	4	7	0	11	1	4	2	7	0	12	1	13	0	0	0	0	24	7	31	6:15-6:30
6:30-6:45	7	12	0	19	3	1	2	6	0	13	0	13	0	0	0	0	32	6	38	6:30-6:45
6:45-7:00	3	5	0	8	3	5	3	11	0	11	3	14	0	0	0	0	22	11	33	6:45-7:00
7:00-7:15	6	10	0	16	7	6	3	16	0	10	5	15	0	0	0	0	31	16	47	7:00-7:15
7:15-7:30	7	19	0	26	8	7	2	17	0	21	3	24	0	0	0	0	50	17	67	7:15-7:30
7:30-7:45	7	8	0	15	12	10	5	27	0	18	6	24	0	0	0	0	39	27	66	7:30-7:45
7:45-8:00	5	22	0	27	9	18	11	38	0	26	3	29	0	0	0	0	56	38	94	7:45-8:00
8:00-8:15	8	36	0	44	23	27	3	53	0	22	10	32	0	0	0	0	76	53	129	8:00-8:15
8:15-8:30	24	23	0	47	24	33	5	62	0	21	7	28	0	0	0	0	75	62	137	8:15-8:30
8:30-8:45	8	29	0	37	27	35	10	72	0	31	11	42	0	0	0	0	79	72	151	8:30-8:45
8:45-9:00	19	24	0	43	7	31	8	46	0	26	9	35	0	0	0	0	78	46	124	8:45-9:00
3 Hour Totals	104	198	0	302	126	177	54	357	0	217	59	276	0	0	0	0	578	357	935	
1 Hour Totals																				
6:00-7:00	20	27	0	47	9	10	7	26	0	42	5	47	0	0	0	0	94	26	120	0.79 6:00-7:00
6:15-7:15	20	34	0	54	14	16	10	40	0	46	9	55	0	0	0	0	109	40	149	0.79 6:15-7:15
6:30-7:30	23	46	0	69	21	19	10	50	0	55	11	66	0	0	0	0	135	50	185	0.69 6:30-7:30
6:45-7:45	23	42	0	65	30	28	13	71	0	60	17	77	0	0	0	0	142	71	213	0.79 6:45-7:45
7:00-8:00	25	59	0	84	36	41	21	98	0	75	17	92	0	0	0	0	176	98	274	0.73 7:00-8:00
7:15-8:15	27	85	0	112	52	62	21	135	0	87	22	109	0	0	0	0	221	135	356	0.69 7:15-8:15
7:30-8:30	44	89	0	133	68	88	24	180	0	87	26	113	0	0	0	0	246	180	426	0.78 7:30-8:30
7:45-8:45	45	110	0	155	83	113	29	225	0	100	31	131	0	0	0	0	286	225	511	0.85 7:45-8:45
8:00-9:00	59	112	0	171	81	126	26	233	0	100	37	137	0	0	0	0	308	233	541	0.90 8:00-9:00
AM Peak 8:00-9:00																				
59	112	0	171	81	126	26	233	0	100	37	137	0	0	0	0	0	308	233	541	0.90 8:00-9:00
PM																				
4:00-4:15	5	27	0	32	7	4	2	13	0	21	1	22	0	0	0	0	54	13	67	4:00-4:15
4:15-4:30	3	23	0	26	8	7	6	21	0	25	2	27	0	0	0	0	53	21	74	4:15-4:30
4:30-4:45	6	19	0	25	9	7	2	18	0	13	1	14	0	0	0	0	39	18	57	4:30-4:45
4:45-5:00	3	40	0	43	10	9	1	20	0	22	4	26	0	0	0	0	69	20	89	4:45-5:00
5:00-5:15	13	43	0	56	11	5	3	19	0	16	0	16	0	0	0	0	72	19	91	5:00-5:15
5:15-5:30	10	46	0	56	8	8	3	19	0	30	1	31	0	0	0	0	87	19	106	5:15-5:30
5:30-5:45	11	30	0	41	10	3	4	17	0	29	3	32	0	0	0	0	73	17	90	5:30-5:45
5:45-6:00	4	43	0	47	6	3	2	11	0	29	5	34	0	0	0	0	81	11	92	5:45-6:00
6:00-6:15	5	39	0	44	7	5	2	14	0	17	1	18	0	0	0	0	62	14	76	6:00-6:15
6:15-6:30	9	22	0	31	4	5	1	10	0	16	3	19	0	0	0	0	50	10	60	6:15-6:30
6:30-6:45	5	26	0	31	2	3	2	7	0	27	2	29	0	0	0	0	60	7	67	6:30-6:45
6:45-7:00	8	55	0	63	10	7	1	18	0	20	0	20	0	0	0	0	83	18	101	6:45-7:00
3 Hour Totals	82	413	0	495	92	66	29	187	0	265	23	288	0	0	0	0	783	187	970	
1 Hour Totals																				
4:00-5:00	17	109	0	126	34	27	11	72	0	81	8	89	0	0	0	0	215	72	287	0.81 4:00-5:00
4:15-5:15	25	125	0	150	38	28	12	78	0	76	7	83	0	0	0	0	233	78	311	0.85 4:15-5:15
4:30-5:30	32	148	0	180	38	29	9	76	0	81	6	87	0	0	0	0	267	76	343	0.81 4:30-5:30
4:45-5:45	37	159	0	196	39	25	11	75	0	97	8	105	0	0	0	0	301	75	376	0.89 4:45-5:45
5:00-6:00	38	162	0	200	35	19	12	66	0	104	9	113	0	0	0	0	313	66	379	0.89 5:00-6:00
5:15-6:15	30	158	0	188	31	19	11	61	0	105	10	115	0	0	0	0	303	61	364	0.86 5:15-6:15
5:30-6:30	29	134	0	163	27	16	9	52	0	91	12	103	0	0	0	0	266	52	318	0.86 5:30-6:30
5:45-6:45	23	130	0	153	19	16	7	42	0	89	11	100	0	0	0	0	253	42	295	0.80 5:45-6:45
6:00-7:00	27	142	0	169	23	20	6	49	0	80	6	86	0	0	0	0	255	49	304	0.75 6:00-7:00
PM Peak 5:00-6:00																				
38	162	0	200	35	19	12	66	0	104	9	113	0	0	0	0	0	313	66	379	0.89 5:00-6:00

Wells & Associates, LLC
McLean, Virginia

Pedestrian Volume Survey



Project Name: Square 752
Project Number: 2982
Location: Washington DC
Intersection: G Street and 3rd Street
Weather: Clear
Date: 10/5/2005
Surveyor: Belen
Hours: Mileage: 27



TIME	Movement							
	1	2	3	4	5	6	7	8
AM								
6:00-6:15	3	2	2	0	1	1	7	0
6:15-6:30	1	0	2	1	2	1	0	1
6:30-6:45	3	3	0	0	2	0	2	0
6:45-7:00	2	1	3	0	4	0	1	1
7:00-7:15	7	2	2	2	3	0	4	1
7:15-7:30	4	1	3	0	5	0	3	3
7:30-7:45	1	5	0	3	3	3	1	7
7:45-8:00	2	4	3	0	1	4	0	0
8:00-8:15	11	7	4	5	6	3	1	7
8:15-8:30	6	3	2	1	4	1	0	3
8:30-8:45	10	2	1	3	3	1	1	7
8:45-9:00	15	6	1	2	2	0	0	6
PM								
4:00-4:15	0	0	0	0	0	1	0	2
4:15-4:30	1	0	0	0	0	2	0	7
4:30-4:45	2	0	2	5	0	0	2	5
4:45-5:00	2	7	1	1	0	5	0	3
5:00-5:15	1	3	2	0	0	7	6	4
5:15-5:30	5	9	1	3	6	13	1	3
5:30-5:45	1	6	2	2	1	8	3	4
5:45-6:00	3	3	1	7	1	6	6	5
6:00-6:15	2	4	2	2	4	3	1	3
6:15-6:30	0	1	3	1	2	5	3	2
6:30-6:45	0	0	5	8	3	3	1	2
6:45-7:00	0	0	4	3	1	2	5	3

Wells & Associates, LLC

McLean, Virginia

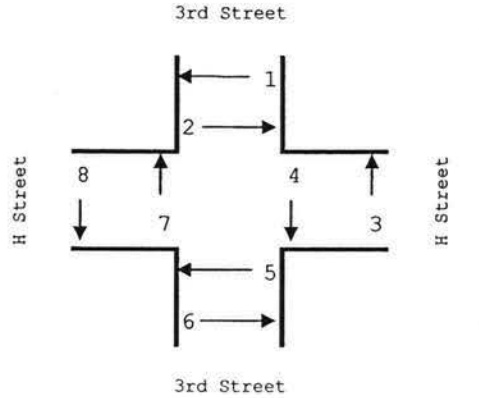
Existing Traffic Count

PROJECT: Square 752				DATE: 10/5/2005				SOUTHBOUND ROAD: 3rd Street													
W & A JOB NO.: 2982				DAY: Wednesday				NORTHBOUND ROAD: 3rd Street													
INTERSECTION: H Street and 3rd Street				WEATHER: Clear				WESTBOUND ROAD: H Street													
LOCATION: Washington DC				COUNTED BY: Leyla and Jose				EASTBOUND ROAD: H Street													
				INPUTED BY: CFP																	
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	4	2	1	7	5	177	3	185	0	4	1	5	3	32	9	44	12	229	241	6:00-6:15	
6:15-6:30	6	1	0	7	7	226	2	235	2	9	3	14	6	30	2	38	21	273	294	6:15-6:30	
6:30-6:45	3	0	2	5	13	248	3	264	3	14	3	20	10	44	7	61	25	325	350	6:30-6:45	
6:45-7:00	9	2	7	18	18	343	5	368	3	6	2	11	3	55	3	61	29	427	456	6:45-7:00	
7:00-7:15	4	4	9	17	23	355	9	387	4	12	5	21	5	67	3	75	38	462	500	7:00-7:15	
7:15-7:30	5	8	5	18	27	395	10	432	7	18	10	35	8	65	7	80	53	512	565	7:15-7:30	
7:30-7:45	6	5	5	16	33	376	7	416	1	23	12	36	10	76	6	92	52	508	560	7:30-7:45	
7:45-8:00	7	6	4	17	32	368	17	417	6	21	10	37	6	57	8	71	54	488	542	7:45-8:00	
8:00-8:15	12	22	9	43	40	381	11	432	4	23	17	44	8	94	9	111	87	543	630	8:00-8:15	
8:15-8:30	5	18	7	30	31	385	12	428	4	34	19	57	14	88	3	105	87	533	620	8:15-8:30	
8:30-8:45	9	20	4	33	46	392	13	451	9	36	11	56	13	88	10	111	89	562	651	8:30-8:45	
8:45-9:00	12	22	19	53	35	357	5	397	2	24	10	36	14	76	5	95	89	492	581	8:45-9:00	
3 Hour Totals	82	110	72	264	310	4,063	97	4,410	45	224	103	372	100	772	72	944	636	5,354	5,990		
1 Hour Totals																					
6:00-7:00	22	5	10	37	43	994	13	1,050	8	33	9	50	22	161	21	204	87	1,254	1,341	0.74 6:00-7:00	
6:15-7:15	22	7	18	47	61	1,172	19	1,252	12	41	13	66	24	196	15	235	113	1,487	1,600	0.80 6:15-7:15	
6:30-7:30	21	14	23	58	81	1,341	27	1,449	17	50	20	87	26	231	20	277	145	1,726	1,871	0.83 6:30-7:30	
6:45-7:45	24	19	26	69	101	1,469	31	1,601	15	59	29	103	26	263	19	308	172	1,909	2,081	0.92 6:45-7:45	
7:00-8:00	22	23	23	68	115	1,494	43	1,652	18	74	37	129	29	265	24	318	197	1,970	2,167	0.96 7:00-8:00	
7:15-8:15	30	41	23	94	132	1,520	45	1,697	18	85	49	152	32	292	30	354	246	2,051	2,297	0.91 7:15-8:15	
7:30-8:30	30	51	25	106	136	1,510	47	1,693	15	101	58	174	38	315	26	379	280	2,072	2,352	0.93 7:30-8:30	
7:45-8:45	33	66	24	123	149	1,526	53	1,728	23	114	57	194	41	327	30	398	317	2,126	2,443	0.94 7:45-8:45	
8:00-9:00	38	82	39	159	152	1,515	41	1,708	19	117	57	193	49	346	27	422	352	2,130	2,482	0.95 8:00-9:00	
AM Peak																					
8:00-9:00	38	82	39	159	152	1,515	41	1,708	19	117	57	193	49	346	27	422	352	2,130	2,482	0.95 AM Peak	
PM																					
4:00-4:15	13	20	18	51	6	130	7	143	3	17	6	26	13	233	7	253	77	396	473	4:00-4:15	
4:15-4:30	12	12	10	34	12	132	4	148	6	19	10	35	18	274	8	300	69	448	517	4:15-4:30	
4:30-4:45	8	20	21	49	5	96	3	104	11	9	6	26	12	296	14	322	75	426	501	4:30-4:45	
4:45-5:00	5	24	27	56	8	116	8	132	5	15	9	29	14	362	14	390	85	522	607	4:45-5:00	
5:00-5:15	14	30	21	65	11	117	6	134	4	15	14	33	30	315	10	355	98	489	587	5:00-5:15	
5:15-5:30	15	21	33	69	8	109	7	124	12	19	9	40	24	320	18	362	109	486	595	5:15-5:30	
5:30-5:45	16	29	20	65	8	110	5	123	8	22	9	39	16	343	14	373	104	496	600	5:30-5:45	
5:45-6:00	12	17	8	37	5	123	3	131	5	23	13	41	31	331	29	391	78	522	600	5:45-6:00	
6:00-6:15	5	12	18	35	7	104	2	113	5	18	3	26	19	291	19	329	61	442	503	6:00-6:15	
6:15-6:30	14	3	13	30	10	110	1	121	1	16	6	23	21	328	13	362	53	483	536	6:15-6:30	
6:30-6:45	2	2	5	9	9	115	4	128	7	18	8	33	33	279	18	330	42	458	500	6:30-6:45	
6:45-7:00	9	9	7	25	4	124	8	136	8	17	10	35	31	287	19	337	60	473	533	6:45-7:00	
3 Hour Totals	125	199	201	525	93	1,386	58	1,537	75	208	103	386	262	3,659	183	4,104	911	5,641	6,552		
1 Hour Totals																					
4:00-5:00	38	76	76	190	31	474	22	527	25	60	31	116	57	1,165	43	1,265	306	1,792	2,098	0.86 4:00-5:00	
4:15-5:15	39	86	79	204	36	461	21	518	26	58	39	123	74	1,247	46	1,367	327	1,885	2,212	0.91 4:15-5:15	
4:30-5:30	42	95	102	239	32	438	24	494	32	58	38	128	80	1,293	56	1,429	367	1,923	2,280	0.94 4:30-5:30	
4:45-5:45	50	104	101	255	35	452	26	513	29	71	41	141	84	1,340	56	1,480	396	1,993	2,389	0.98 4:45-5:45	
5:00-6:00	57	97	82	236	32	459	21	512	29	79	45	153	101	1,309	71	1,481	389	1,993	2,382	0.99 5:00-6:00	
5:15-6:15	48	79	79	206	28	446	17	491	30	82	34	146	90	1,285	80	1,455	352	1,946	2,298	0.96 5:15-6:15	
5:30-6:30	47	61	59	167	30	447	11	488	19	79	31	129	87	1,293	75	1,455	296	1,943	2,239	0.93 5:30-6:30	
5:45-6:45	33	34	44	111	31	452	10	493	18	75	30	123	104	1,229	79	1,412	234	1,905	2,139	0.89 5:45-6:45	
6:00-7:00	30	26	43	99	30	453	15	498	21	69	27	117	104	1,185	69	1,358	216	1,856	2,072	0.97 6:00-7:00	
PM Peak																					
4:45-5:45	50	104	101	255	35	452	26	513	29	71	41	141	84	1,340	56	1,480	396	1,993	2,389	0.98 4:45-5:45	

Wells & Associates, LLC
McLean, Virginia

Pedestrian Volume Survey

Project Name: Square 752
Project Number: 2982
Location: Washington DC
Intersection: H Street and 3rd Street
Weather: Clear
Date: 10/5/2005
Surveyor: Roberto
Hours: Mileage:



TIME	Movement							
	1	2	3	4	5	6	7	8
AM								
6:00-6:15	2	1		2				1
6:15-6:30							1	3
6:30-6:45		3						
6:45-7:00								
7:00-7:15						1		4
7:15-7:30	1		1				2	
7:30-7:45								1
7:45-8:00					2		1	3
8:00-8:15						2	3	2
8:15-8:30	2				1			1
8:30-8:45		2	1					5
8:45-9:00	2						1	
PM								
4:00-4:15	3	1	2	1	8	6	2	4
4:15-4:30	2	2			11	7		1
4:30-4:45	1			2	6	2	3	6
4:45-5:00		1	3		9	6	2	
5:00-5:15	2			2	16	5		
5:15-5:30	4		14	1	6	4	1	
5:30-5:45		1	6		7	8		6
5:45-6:00			12		12	16	4	
6:00-6:15	1		9	2	3	9	1	2
6:15-6:30	2	1	13		5	2	4	
6:30-6:45	4		11		15	10		6
6:45-7:00	2				6	9	2	

Wells & Associates, LLC

McLean, Virginia

Existing Traffic Count

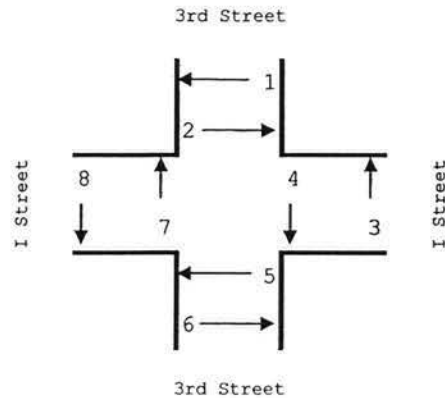
PROJECT: Square 752				DATE: 10/5/2005				SOUTHBOUND ROAD: 3rd Street													
W & A JOB NO.: 2982				DAY: Wednesday				NORTHBOUND ROAD: 3rd Street													
INTERSECTION: I Street and 3rd Street				WEATHER: Clear				WESTBOUND ROAD: I Street													
LOCATION: Washington, DC				COUNTED BY: Jonathan and Darya				EASTBOUND ROAD: I Street													
				INPUTED BY: CFP																	
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	1	6	0	7	0	0	0	0	2	8	4	14	3	0	0	3	21	3	24		6:00-6:15
6:15-6:30	2	5	2	9	0	0	0	0	0	9	1	10	2	3	0	5	19	5	24		6:15-6:30
6:30-6:45	1	7	0	8	0	0	0	0	1	19	0	20	0	2	0	2	28	2	30		6:30-6:45
6:45-7:00	1	8	2	11	0	0	0	0	3	18	1	22	2	0	1	3	33	3	36		6:45-7:00
7:00-7:15	0	12	1	13	0	0	0	0	3	20	5	28	2	1	1	4	41	4	45		7:00-7:15
7:15-7:30	2	12	0	14	0	0	0	0	2	38	2	42	0	4	1	5	56	5	61		7:15-7:30
7:30-7:45	4	11	1	16	0	0	0	0	5	47	11	63	2	7	2	11	79	11	90		7:30-7:45
7:45-8:00	3	23	0	26	0	0	0	0	1	49	7	57	2	4	0	6	83	6	89		7:45-8:00
8:00-8:15	3	36	3	42	0	0	0	0	4	52	11	67	7	5	0	12	109	12	121		8:00-8:15
8:15-8:30	4	25	3	32	0	0	0	0	2	46	13	61	3	8	2	13	93	13	106		8:15-8:30
8:30-8:45	4	32	3	39	0	0	0	0	6	60	13	79	3	8	1	12	118	12	130		8:30-8:45
8:45-9:00	5	31	3	39	0	0	0	0	5	45	10	60	8	7	4	19	99	19	118		8:45-9:00
3 Hour Totals	30	208	18	256	0	0	0	0	34	411	78	523	34	49	12	95	779	95	874		
1 Hour Totals																					
6:00-7:00	5	26	4	35	0	0	0	0	6	54	6	66	7	5	1	13	101	13	114	0.79	6:00-7:00
6:15-7:15	4	32	5	41	0	0	0	0	7	66	7	80	6	6	2	14	121	14	135	0.75	6:15-7:15
6:30-7:30	4	39	3	46	0	0	0	0	9	95	8	112	4	7	3	14	158	14	172	0.70	6:30-7:30
6:45-7:45	7	43	4	54	0	0	0	0	13	123	19	155	6	12	5	23	209	23	232	0.64	6:45-7:45
7:00-8:00	9	58	2	69	0	0	0	0	11	154	25	190	6	16	4	26	259	26	285	0.79	7:00-8:00
7:15-8:15	12	82	4	98	0	0	0	0	12	186	31	229	11	20	3	34	327	34	361	0.75	7:15-8:15
7:30-8:30	14	95	7	116	0	0	0	0	12	194	42	248	14	24	4	42	364	42	406	0.84	7:30-8:30
7:45-8:45	14	116	9	139	0	0	0	0	13	207	44	264	15	25	3	43	403	43	446	0.86	7:45-8:45
8:00-9:00	16	124	12	152	0	0	0	0	17	203	47	267	21	28	7	56	419	56	475	0.91	8:00-9:00
AM Peak 8:00-9:00																					
4:00-4:15	4	41	6	51	0	0	0	0	4	32	3	39	10	8	2	20	90	20	110		4:00-4:15
4:15-4:30	3	28	2	33	0	0	0	0	2	34	3	39	9	9	0	18	72	18	90		4:15-4:30
4:30-4:45	4	40	3	47	0	0	0	0	2	26	0	28	11	8	1	20	75	20	95		4:30-4:45
4:45-5:00	1	36	4	41	0	0	0	0	3	30	1	34	9	14	3	26	75	26	101		4:45-5:00
5:00-5:15	4	50	1	55	0	0	0	0	2	33	2	37	19	14	6	39	92	39	131		5:00-5:15
5:15-5:30	3	47	5	55	0	0	0	0	5	34	2	41	16	16	7	39	96	39	135		5:15-5:30
5:30-5:45	4	41	3	48	0	0	0	0	6	35	2	43	19	15	2	36	91	36	127		5:30-5:45
5:45-6:00	4	30	6	40	0	0	0	0	8	48	1	57	6	11	4	21	97	21	118		5:45-6:00
6:00-6:15	1	24	1	26	0	0	0	0	4	42	1	47	10	5	1	16	73	16	89		6:00-6:15
6:15-6:30	0	18	3	21	0	0	0	0	2	32	1	35	8	7	0	15	56	15	71		6:15-6:30
6:30-6:45	2	12	2	16	0	0	0	0	1	30	3	34	7	0	0	7	50	7	57		6:30-6:45
6:45-7:00	1	15	1	17	0	0	0	0	1	18	3	22	2	5	1	8	39	8	47		6:45-7:00
3 Hour Totals	31	382	37	450	0	0	0	0	40	394	22	456	126	112	27	265	906	265	1,171		
1 Hour Totals																					
4:00-5:00	12	145	15	172	0	0	0	0	11	122	7	140	39	39	6	84	312	84	396	0.90	4:00-5:00
4:15-5:15	12	154	10	176	0	0	0	0	9	123	6	138	48	45	10	103	314	103	417	0.80	4:15-5:15
4:30-5:30	12	173	13	198	0	0	0	0	12	123	5	140	55	52	17	124	338	124	462	0.86	4:30-5:30
4:45-5:45	12	174	13	199	0	0	0	0	16	132	7	155	63	59	18	140	354	140	494	0.91	4:45-5:45
5:00-6:00	15	168	15	198	0	0	0	0	21	150	7	178	60	56	19	135	376	135	511	0.95	5:00-6:00
5:15-6:15	12	142	15	169	0	0	0	0	23	159	6	188	51	47	14	112	357	112	469	0.87	5:15-6:15
5:30-6:30	9	113	13	135	0	0	0	0	20	157	5	182	43	38	7	88	317	88	405	0.80	5:30-6:30
5:45-6:45	7	84	12	103	0	0	0	0	15	152	6	173	31	23	5	59	276	59	335	0.71	5:45-6:45
6:00-7:00	4	69	7	80	0	0	0	0	8	122	8	138	27	17	2	46	218	46	264	0.74	6:00-7:00
PM Peak 5:00-6:00																					
5:00-6:00	15	168	15	198	0	0	0	0	21	150	7	178	60	56	19	135	376	135	511	0.95	PM Peak 5:00-6:00

Wells & Associates, LLC
McLean, Virginia

Pedestrian Volume Survey



Project Name: Square 752
Project Number: 2982
Location: Washington DC
Intersection: I Street and 3rd Street
Weather: Clear
Date: 10/5/2005
Surveyor: Jonathan
Hours: Mileage: 56



TIME	Movement							
	1	2	3	4	5	6	7	8
AM								
6:00-6:15				2		2	1	1
6:15-6:30				2	3			2
6:30-6:45				14				5
6:45-7:00				1				
7:00-7:15	1		4	4	2	2		
7:15-7:30		2	1	6	1			2
7:30-7:45		1	1	4	3		3	2
7:45-8:00		1	1	4		2		1
8:00-8:15		6	6	3	5	2		
8:15-8:30	3	1	6				3	
8:30-8:45	1	2	5	1	3	1	2	
8:45-9:00	2	1	6	4	5	3	1	2
PM								
4:00-4:15	2	3	2	5		1	1	3
4:15-4:30		2	4	1				1
4:30-4:45		3	2	2			3	1
4:45-5:00	6		2	1		1		1
5:00-5:15	5	3	2	3	1			
5:15-5:30		1	2	5			2	1
5:30-5:45	4	1	1	6				
5:45-6:00	8	5	1	2		1	4	6
6:00-6:15	3	2		2			2	2
6:15-6:30	2	2		3	1	2	2	2
6:30-6:45		4	4	8	1			
6:45-7:00			5		1			1

Wells & Associates, LLC

McLean, Virginia

Existing Traffic Count

PROJECT: Square 752				DATE: 10/5/2005				SOUTHBOUND ROAD: Alley													
W & A JOB NO.: 2982				DAY: Wednesday				NORTHBOUND ROAD: N/A													
INTERSECTION: G Street and Alley				WEATHER: Clear				WESTBOUND ROAD: G Street													
LOCATION: Washington, DC				COUNTED BY: Majda				EASTBOUND ROAD: G Street													
				INPUTED BY: CFP																	
Time Period	Turning Movements																Total	PHF	Time Period		
	Southbound Alley				Westbound G Street				Northbound N/A				Eastbound G 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	1	8	0	9	0	0	0	0	0	0	0	0	0	0	9	9	6:00-6:15
6:15-6:30	0	0	0	0	1	9	0	10	0	0	0	0	0	0	0	0	0	0	10	10	6:15-6:30
6:30-6:45	0	0	0	0	2	6	0	8	0	0	0	0	0	0	0	0	0	0	8	8	6:30-6:45
6:45-7:00	2	0	0	2	1	9	0	10	0	0	0	0	0	0	0	0	0	2	10	12	6:45-7:00
7:00-7:15	0	0	0	0	4	14	0	18	0	0	0	0	0	0	0	0	0	0	18	18	7:00-7:15
7:15-7:30	1	0	0	1	1	16	0	17	0	0	0	0	0	0	0	0	0	1	17	18	7:15-7:30
7:30-7:45	0	0	0	0	2	20	0	22	0	0	0	0	0	0	0	0	0	0	22	22	7:30-7:45
7:45-8:00	0	0	0	0	1	27	0	28	0	0	0	0	0	0	0	0	0	0	28	28	7:45-8:00
8:00-8:15	1	0	0	1	0	45	0	45	0	0	0	0	0	0	0	0	0	1	45	46	8:00-8:15
8:15-8:30	1	0	0	1	2	58	0	60	0	0	0	0	0	0	0	0	0	1	60	61	8:15-8:30
8:30-8:45	1	0	0	1	1	55	0	56	0	0	0	0	0	0	0	0	0	1	56	57	8:30-8:45
8:45-9:00	0	0	0	0	2	62	0	64	0	0	0	0	0	0	0	0	0	0	64	64	8:45-9:00
3 Hour Totals	6	0	0	6	18	329	0	347	0	0	0	0	0	0	0	0	0	6	347	353	
1 Hour Totals																					
6:00-7:00	2	0	0	2	5	32	0	37	0	0	0	0	0	0	0	0	0	2	37	39	0.81 6:00-7:00
6:15-7:15	2	0	0	2	8	38	0	46	0	0	0	0	0	0	0	0	0	2	46	48	0.67 6:15-7:15
6:30-7:30	3	0	0	3	8	45	0	53	0	0	0	0	0	0	0	0	0	3	53	56	0.78 6:30-7:30
6:45-7:45	3	0	0	3	8	59	0	67	0	0	0	0	0	0	0	0	0	3	67	70	0.80 6:45-7:45
7:00-8:00	1	0	0	1	8	77	0	85	0	0	0	0	0	0	0	0	0	1	85	86	0.77 7:00-8:00
7:15-8:15	2	0	0	2	4	108	0	112	0	0	0	0	0	0	0	0	0	2	112	114	0.62 7:15-8:15
7:30-8:30	2	0	0	2	5	150	0	155	0	0	0	0	0	0	0	0	0	2	155	157	0.64 7:30-8:30
7:45-8:45	3	0	0	3	4	185	0	189	0	0	0	0	0	0	0	0	0	3	189	192	0.79 7:45-8:45
8:00-9:00	3	0	0	3	5	220	0	225	0	0	0	0	0	0	0	0	0	3	225	228	0.89 8:00-9:00
AM Peak 8:00-9:00	3	0	0	3	5	220	0	225	0	0	0	0	0	0	0	0	0	3	225	228	0.89 AM Peak 8:00-9:00
PM																					
4:00-4:15	3	0	0	3	0	13	0	13	0	0	0	0	0	0	0	0	0	3	13	16	4:00-4:15
4:15-4:30	0	0	0	0	0	13	0	13	0	0	0	0	0	0	0	0	0	0	13	13	4:15-4:30
4:30-4:45	2	0	0	2	0	11	0	11	0	0	0	0	0	0	0	0	0	2	11	13	4:30-4:45
4:45-5:00	1	0	0	1	0	18	0	18	0	0	0	0	0	0	0	0	0	1	18	19	4:45-5:00
5:00-5:15	1	0	0	1	1	19	0	20	0	0	0	0	0	0	0	0	0	1	20	21	5:00-5:15
5:15-5:30	5	0	0	5	0	17	0	17	0	0	0	0	0	0	0	0	0	5	17	22	5:15-5:30
5:30-5:45	2	0	0	2	0	19	0	19	0	0	0	0	0	0	0	0	0	2	19	21	5:30-5:45
5:45-6:00	3	0	0	3	0	14	0	14	0	0	0	0	0	0	0	0	0	3	14	17	5:45-6:00
6:00-6:15	1	0	0	1	2	13	0	15	0	0	0	0	0	0	0	0	0	1	15	16	6:00-6:15
6:15-6:30	2	0	0	2	0	22	0	22	0	0	0	0	0	0	0	0	0	2	22	24	6:15-6:30
6:30-6:45	2	0	0	2	0	9	0	9	0	0	0	0	0	0	0	0	0	2	9	11	6:30-6:45
6:45-7:00	0	0	0	0	3	8	0	11	0	0	0	0	0	0	0	0	0	0	11	11	6:45-7:00
3 Hour Totals	22	0	0	22	6	176	0	182	0	0	0	0	0	0	0	0	0	22	182	204	
1 Hour Totals																					
4:00-5:00	6	0	0	6	0	55	0	55	0	0	0	0	0	0	0	0	0	6	55	61	0.80 4:00-5:00
4:15-5:15	4	0	0	4	1	61	0	62	0	0	0	0	0	0	0	0	0	4	62	66	0.79 4:15-5:15
4:30-5:30	9	0	0	9	1	65	0	66	0	0	0	0	0	0	0	0	0	9	66	75	0.85 4:30-5:30
4:45-5:45	9	0	0	9	1	73	0	74	0	0	0	0	0	0	0	0	0	9	74	83	0.94 4:45-5:45
5:00-6:00	11	0	0	11	1	69	0	70	0	0	0	0	0	0	0	0	0	11	70	81	0.92 5:00-6:00
5:15-6:15	11	0	0	11	2	63	0	65	0	0	0	0	0	0	0	0	0	11	65	76	0.86 5:15-6:15
5:30-6:30	8	0	0	8	2	68	0	70	0	0	0	0	0	0	0	0	0	8	70	78	0.81 5:30-6:30
5:45-6:45	8	0	0	8	2	58	0	60	0	0	0	0	0	0	0	0	0	8	60	68	0.71 5:45-6:45
6:00-7:00	5	0	0	5	5	52	0	57	0	0	0	0	0	0	0	0	0	5	57	62	0.65 6:00-7:00
PM Peak 4:45-5:45	9	0	0	9	1	73	0	74	0	0	0	0	0	0	0	0	0	9	74	83	0.94 PM Peak 4:45-5:45

Wells & Associates, LLC
McLean, Virginia

Pedestrian Volume Survey

Project Name: Square 752

Project Number: 2982

Location: Washington DC

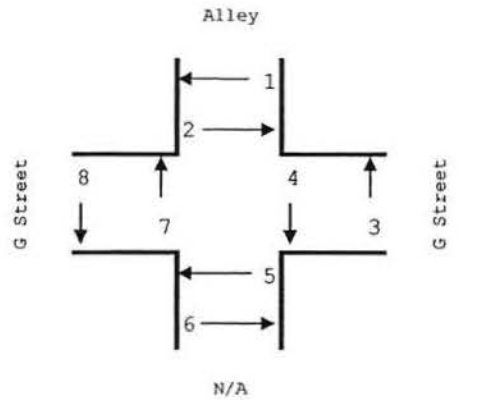
Intersection: G Street and Alley

Weather: Clear

Date: 10/5/2005

Surveyor: Maida

Hours: Mileage:



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

Appendix B

Existing Levels of Service

Existing Conditions
1: Massachusetts Ave. & 2nd Street

AM Peak Period
11/18/2005

												
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)		3.0			3.0			3.0			3.0	3.0
Lane Util. Factor		0.95			0.95			1.00			1.00	1.00
Frpb, ped/bikes		0.99			0.99			1.00			1.00	0.78
Flpb, ped/bikes		1.00			1.00			0.91			1.00	1.00
Frt		0.97			1.00			1.00			1.00	0.85
Flt Protected		0.99			1.00			0.97			1.00	1.00
Satd. Flow (prot)		3362			3493			1633			1858	1241
Flt Permitted		0.57			0.95			0.70			0.99	1.00
Satd. Flow (perm)		1948			3329			1176			1844	1241
Volume (vph)	73	224	66	6	1073	20	130	72	5	5	155	211
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	81	249	73	7	1192	22	144	80	6	6	172	234
RTOR Reduction (vph)	0	19	0	0	1	0	0	1	0	0	0	136
Lane Group Flow (vph)	0	384	0	0	1220	0	0	229	0	0	178	98
Confl. Peds. (#/hr)	225		18	18		225	111		29	29		111
Turn Type	pm+pt			Perm			Perm			Perm		Perm
Protected Phases	7	4			8			2			6	
Permitted Phases	4			8			2			6		6
Actuated Green, G (s)		51.0			36.0			39.0			39.0	39.0
Effective Green, g (s)		52.0			37.0			42.0			42.0	42.0
Actuated g/C Ratio		0.52			0.37			0.42			0.42	0.42
Clearance Time (s)		5.0			4.0			6.0			6.0	6.0
Lane Grp Cap (vph)		1183			1232			494			774	521
v/s Ratio Prot		c0.04										
v/s Ratio Perm		0.13			c0.37			c0.19			0.10	0.08
v/c Ratio		0.32			0.99			0.46			0.23	0.19
Uniform Delay, d1		13.9			31.3			20.9			18.6	18.3
Progression Factor		1.00			1.00			1.00			1.00	1.00
Incremental Delay, d2		0.7			23.4			3.1			0.7	0.8
Delay (s)		14.6			54.7			24.0			19.3	19.1
Level of Service		B			D			C			B	B
Approach Delay (s)		14.6			54.7			24.0			19.2	
Approach LOS		B			D			C			B	
Intersection Summary												
HCM Average Control Delay		38.0			HCM Level of Service			D				
HCM Volume to Capacity ratio		0.64										
Actuated Cycle Length (s)		100.0			Sum of lost time (s)			6.0				
Intersection Capacity Utilization		84.0%			ICU Level of Service			E				
Analysis Period (min)		15										
c Critical Lane Group												

												
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)		3.0			3.0			3.0			3.0	3.0
Lane Util. Factor		0.95			0.95			1.00			1.00	1.00
Frpb, ped/bikes		0.99			0.96			1.00			1.00	0.78
Flpb, ped/bikes		0.97			1.00			0.93			1.00	1.00
Frt		0.99			0.99			1.00			1.00	0.85
Flt Protected		0.99			1.00			0.98			0.99	1.00
Satd. Flow (prot)		3341			3377			1680			1844	1241
Flt Permitted		0.75			0.95			0.80			0.96	1.00
Satd. Flow (perm)		2518			3210			1373			1777	1241
Volume (vph)	138	670	87	3	357	25	84	88	3	17	124	236
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	153	744	97	3	397	28	93	98	3	19	138	262
RTOR Reduction (vph)	0	8	0	0	5	0	0	1	0	0	0	152
Lane Group Flow (vph)	0	986	0	0	423	0	0	193	0	0	157	110
Confl. Peds. (#/hr)	225		18	18		225	111		29	29		111
Turn Type	pm+pt			Perm			Perm			Perm		Perm
Protected Phases	7	4			8			2			6	
Permitted Phases	4			8			2			6		6
Actuated Green, G (s)		51.0			36.0			39.0			39.0	39.0
Effective Green, g (s)		52.0			37.0			42.0			42.0	42.0
Actuated g/C Ratio		0.52			0.37			0.42			0.42	0.42
Clearance Time (s)		5.0			4.0			6.0			6.0	6.0
Lane Grp Cap (vph)		1408			1188			577			746	521
v/s Ratio Prot		c0.08										
v/s Ratio Perm		c0.28			0.13			c0.14			0.09	0.09
v/c Ratio		0.70			0.36			0.34			0.21	0.21
Uniform Delay, d1		18.1			22.9			19.6			18.5	18.5
Progression Factor		1.00			1.00			1.00			1.00	1.00
Incremental Delay, d2		2.9			0.8			1.6			0.6	0.9
Delay (s)		21.0			23.7			21.1			19.1	19.4
Level of Service		C			C			C			B	B
Approach Delay (s)		21.0			23.7			21.1			19.3	
Approach LOS		C			C			C			B	
Intersection Summary												
HCM Average Control Delay		21.2			HCM Level of Service			C				
HCM Volume to Capacity ratio		0.53										
Actuated Cycle Length (s)		100.0			Sum of lost time (s)			6.0				
Intersection Capacity Utilization		78.8%			ICU Level of Service			D				
Analysis Period (min)		15										
c Critical Lane Group												



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↘		↑			↑
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Volume (veh/h)	64	156	161	0	0	137
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	71	173	179	0	0	152
Pedestrians	90		45			5
Lane Width (ft)	12.0		12.0			12.0
Walking Speed (ft/s)	4.0		4.0			4.0
Percent Blockage	8		4			0
Right turn flare (veh)						
Median type	None					
Median storage veh)						
Upstream signal (ft)	1316					
pX, platoon unblocked						
vC, conflicting volume	466	274			269	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	466	274			269	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	86	75			100	
cM capacity (veh/h)	494	705			1198	
Direction, Lane #	WB 1	NB 1	SB 1			
Volume Total	244	179	152			
Volume Left	71	0	0			
Volume Right	173	0	0			
cSH	627	1700	1700			
Volume to Capacity	0.39	0.11	0.09			
Queue Length 95th (ft)	46	0	0			
Control Delay (s)	14.4	0.0	0.0			
Lane LOS	B					
Approach Delay (s)	14.4	0.0	0.0			
Approach LOS	B					
Intersection Summary						
Average Delay	6.1					
Intersection Capacity Utilization	33.3%		ICU Level of Service		A	
Analysis Period (min)	15					



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↘		↑			↑
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Volume (veh/h)	49	32	255	0	0	170
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	54	36	283	0	0	189
Pedestrians	90		45			5
Lane Width (ft)	12.0		12.0			12.0
Walking Speed (ft/s)	4.0		4.0			4.0
Percent Blockage	8		4			0
Right turn flare (veh)						
Median type	None					
Median storage (veh)						
Upstream signal (ft)	1316					
pX, platoon unblocked						
vC, conflicting volume	607	378			373	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	607	378			373	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	87	94			100	
cM capacity (veh/h)	409	616			1096	
Direction, Lane #	WB 1	NB 1	SB 1			
Volume Total	90	283	189			
Volume Left	54	0	0			
Volume Right	36	0	0			
cSH	472	1700	1700			
Volume to Capacity	0.19	0.17	0.11			
Queue Length 95th (ft)	17	0	0			
Control Delay (s)	14.4	0.0	0.0			
Lane LOS	B					
Approach Delay (s)	14.4	0.0	0.0			
Approach LOS	B					
Intersection Summary						
Average Delay	2.3					
Intersection Capacity Utilization	26.3%		ICU Level of Service		A	
Analysis Period (min)	15					

												
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)	1	0	4	2	0	1	4	304	8	3	134	13
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	1	0	4	2	0	1	4	338	9	3	149	14
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	515	518	156	518	521	342	163			347		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	515	518	156	518	521	342	163			347		
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)	467	459	890	463	457	700	1415			1212		
Direction, Lane #	EB 1	WB 1	WB 2	NB 1	SB 1							
Volume Total	6	1	2	351	167							
Volume Left	1	1	1	4	3							
Volume Right	4	0	1	9	14							
cSH	753	463	581	1415	1212							
Volume to Capacity	0.01	0.00	0.00	0.00	0.00							
Queue Length 95th (ft)	1	0	0	0	0							
Control Delay (s)	9.8	12.8	11.2	0.1	0.2							
Lane LOS	A	B	B	A	A							
Approach Delay (s)	9.8	11.9		0.1	0.2							
Approach LOS	A	B										
Intersection Summary												
Average Delay			0.3									
Intersection Capacity Utilization		28.5%		ICU Level of Service						A		
Analysis Period (min)		15										

												
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)	13	0	14	12	0	9	1	270	0	0	143	2
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	14	0	16	13	0	10	1	300	0	0	159	2
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	472	462	160	478	463	300	161			300		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	472	462	160	478	463	300	161			300		
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 %	97	100	98	97	100	99	100			100		
cM capacity (veh/h)	495	496	885	489	495	740	1418			1261		
Direction, Lane #	EB 1	WB 1	WB 2	NB 1	SB 1							
Volume Total	30	9	14	301	161							
Volume Left	14	9	4	1	0							
Volume Right	16	0	10	0	2							
cSH	642	489	639	1418	1261							
Volume to Capacity	0.05	0.02	0.02	0.00	0.00							
Queue Length 95th (ft)	4	1	2	0	0							
Control Delay (s)	10.9	12.5	10.8	0.0	0.0							
Lane LOS	B	B	B	A								
Approach Delay (s)	10.9	11.4		0.0	0.0							
Approach LOS	B	B										
Intersection Summary												
Average Delay			1.2									
Intersection Capacity Utilization			29.9%			ICU Level of Service				A		
Analysis Period (min)			15									

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control	Stop			Stop			Stop			Stop		
Volume (vph)	2	2	4	18	12	36	19	246	42	18	137	8
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	2	2	4	20	13	40	21	273	47	20	152	9
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total (vph)	9	73	341	181								
Volume Left (vph)	2	20	21	20								
Volume Right (vph)	4	40	47	9								
Hadj (s)	-0.22	-0.24	-0.04	0.03								
Departure Headway (s)	5.0	4.8	4.3	4.5								
Degree Utilization, x	0.01	0.10	0.40	0.23								
Capacity (veh/h)	639	668	822	769								
Control Delay (s)	8.0	8.4	10.1	8.8								
Approach Delay (s)	8.0	8.4	10.1	8.8								
Approach LOS	A	A	B	A								
Intersection Summary												
Delay	9.5											
HCM Level of Service	A											
Intersection Capacity Utilization	36.0%			ICU Level of Service	A							
Analysis Period (min)	15											

Existing Conditions
4: I Street & 2nd Street

PM Peak Period
11/18/2005

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Volume (vph)	8	12	8	14	0	9	0	233	75	52	130	2
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	9	13	9	16	0	10	0	259	83	58	144	2
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total (vph)	31	26	342	204								
Volume Left (vph)	9	16	0	58								
Volume Right (vph)	9	10	83	2								
Hadj (s)	-0.08	-0.08	-0.11	0.08								
Departure Headway (s)	5.0	5.1	4.2	4.5								
Degree Utilization, x	0.04	0.04	0.40	0.25								
Capacity (veh/h)	634	630	847	776								
Control Delay (s)	8.3	8.2	9.8	9.0								
Approach Delay (s)	8.3	8.2	9.8	9.0								
Approach LOS	A	A	A	A								
Intersection Summary												
Delay				9.4								
HCM Level of Service				A								
Intersection Capacity Utilization				46.7%	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)		3.0			3.0			3.0			3.0	
Lane Util. Factor		0.95			0.95			1.00			1.00	
Frpb, ped/bikes		0.98			1.00			1.00			0.99	
Flpb, ped/bikes		1.00			1.00			1.00			1.00	
Frt		0.99			1.00			1.00			0.96	
Flt Protected		1.00			1.00			0.99			1.00	
Satd. Flow (prot)		3416			3501			1844			1765	
Flt Permitted		0.95			0.95			0.92			0.97	
Satd. Flow (perm)		3242			3319			1712			1724	
Volume (vph)	2	124	13	22	925	23	67	327	4	9	87	47
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	2	138	14	24	1028	26	74	363	4	10	97	52
RTOR Reduction (vph)	0	5	0	0	2	0	0	0	0	0	18	0
Lane Group Flow (vph)	0	149	0	0	1076	0	0	441	0	0	142	0
Confl. Peds. (#/hr)	25		68	68		25	3		6	6		3
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)		63.0			63.0			29.0			29.0	
Effective Green, g (s)		64.0			64.0			30.0			30.0	
Actuated g/C Ratio		0.64			0.64			0.30			0.30	
Clearance Time (s)		4.0			4.0			4.0			4.0	
Lane Grp Cap (vph)		2075			2124			514			517	
v/s Ratio Prot												
v/s Ratio Perm		0.05			0.32			0.26			0.08	
v/c Ratio		0.07			0.51			0.86			0.27	
Uniform Delay, d1		6.8			9.6			33.0			26.7	
Progression Factor		1.00			1.00			1.00			1.00	
Incremental Delay, d2		0.1			0.9			16.8			1.3	
Delay (s)		6.9			10.5			49.8			28.0	
Level of Service		A			B			D			C	
Approach Delay (s)		6.9			10.5			49.8			28.0	
Approach LOS		A			B			D			C	
Intersection Summary												
HCM Average Control Delay		21.1			HCM Level of Service			C				
HCM Volume to Capacity ratio		0.62										
Actuated Cycle Length (s)		100.0			Sum of lost time (s)			6.0				
Intersection Capacity Utilization		86.7%			ICU Level of Service			E				
Analysis Period (min)		15										
c Critical Lane Group												

Existing Conditions
5: K Street & 2nd Street

PM Peak Period
11/18/2005

												
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)		3.0			3.0			3.0			3.0	
Lane Util. Factor		0.95			0.95			1.00			1.00	
Frpb, ped/bikes		0.99			1.00			1.00			1.00	
Flpb, ped/bikes		1.00			1.00			1.00			1.00	
Frt		0.99			1.00			0.99			0.98	
Flt Protected		1.00			1.00			0.99			0.99	
Satd. Flow (prot)		3481			3496			1810			1809	
Flt Permitted		0.95			0.90			0.90			0.90	
Satd. Flow (perm)		3300			3165			1652			1654	
Volume (vph)	14	688	28	14	224	6	79	207	31	21	68	13
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	16	764	31	16	249	7	88	230	34	23	76	14
RTOR Reduction (vph)	0	3	0	0	2	0	0	4	0	0	5	0
Lane Group Flow (vph)	0	808	0	0	270	0	0	349	0	0	108	0
Confl. Peds. (#/hr)	25		68	68		25	3		6	6		3
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)		63.0			63.0			29.0			29.0	
Effective Green, g (s)		64.0			64.0			30.0			30.0	
Actuated g/C Ratio		0.64			0.64			0.30			0.30	
Clearance Time (s)		4.0			4.0			4.0			4.0	
Lane Grp Cap (vph)		2112			2026			496			496	
v/s Ratio Prot												
v/s Ratio Perm		c0.24			0.09			c0.21			0.07	
v/c Ratio		0.38			0.13			0.70			0.22	
Uniform Delay, d1		8.6			7.1			31.0			26.2	
Progression Factor		1.00			1.00			1.00			1.00	
Incremental Delay, d2		0.5			0.1			8.1			1.0	
Delay (s)		9.1			7.2			39.1			27.2	
Level of Service		A			A			D			C	
Approach Delay (s)		9.1			7.2			39.1			27.2	
Approach LOS		A			A			D			C	
Intersection Summary												
HCM Average Control Delay		16.9			HCM Level of Service			B				
HCM Volume to Capacity ratio		0.48										
Actuated Cycle Length (s)		100.0			Sum of lost time (s)			6.0				
Intersection Capacity Utilization		60.7%			ICU Level of Service			B				
Analysis Period (min)		15										
c Critical Lane Group												

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control	Stop				Stop			Stop			Stop	
Volume (vph)	0	0	0	26	126	81	37	100	0	0	112	59
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	0	0	0	29	140	90	41	111	0	0	124	66
Direction, Lane #	WB 1	NB 1	SB 1									
Volume Total (vph)	259	152	190									
Volume Left (vph)	29	41	0									
Volume Right (vph)	90	0	66									
Hadj (s)	-0.15	0.09	-0.17									
Departure Headway (s)	4.6	4.9	4.6									
Degree Utilization, x	0.33	0.21	0.24									
Capacity (veh/h)	740	697	740									
Control Delay (s)	9.8	9.1	9.0									
Approach Delay (s)	9.8	9.1	9.0									
Approach LOS	A	A	A									
Intersection Summary												
Delay			9.4									
HCM Level of Service			A									
Intersection Capacity Utilization		53.5%										
Analysis Period (min)			15									

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control	Stop			Stop			Stop			Stop		
Volume (vph)	0	0	0	12	19	35	9	104	0	0	162	38
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	0	0	0	13	21	39	10	116	0	0	180	42
Direction, Lane #	WB 1	NB 1	SB 1									
Volume Total (vph)	73	126	222									
Volume Left (vph)	13	10	0									
Volume Right (vph)	39	0	42									
Hadj (s)	-0.25	0.05	-0.08									
Departure Headway (s)	4.4	4.3	4.1									
Degree Utilization, x	0.09	0.15	0.25									
Capacity (veh/h)	751	801	854									
Control Delay (s)	7.8	8.1	8.5									
Approach Delay (s)	7.8	8.1	8.5									
Approach LOS	A	A	A									
Intersection Summary												
Delay	8.3											
HCM Level of Service	A											
Intersection Capacity Utilization	32.3%			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)	3.0			3.0			3.0			3.0		
Lane Util. Factor	0.91			0.91			1.00			1.00		
Frpb, ped/bikes	0.99			0.99			0.99			0.99		
Flpb, ped/bikes	1.00			1.00			0.99			0.99		
Frt	0.98			0.99			0.99			0.97		
Flt Protected	1.00			1.00			0.99			0.99		
Satd. Flow (prot)	4952			4966			1789			1749		
Flt Permitted	0.80			0.91			0.81			0.84		
Satd. Flow (perm)	3993			4537			1464			1486		
Volume (vph)	27	346	49	41	1515	152	57	117	19	39	82	38
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	30	384	54	46	1683	169	63	130	21	43	91	42
RTOR Reduction (vph)	0	15	0	0	11	0	0	4	0	0	11	0
Lane Group Flow (vph)	0	453	0	0	1887	0	0	210	0	0	165	0
Confl. Peds. (#/hr)	25		10	10		25	23		24	24		23
Turn Type	pm+pt			Perm			Perm			Perm		
Protected Phases	7	4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	69.0			59.0			19.0			19.0		
Effective Green, g (s)	72.0			62.0			22.0			22.0		
Actuated g/C Ratio	0.72			0.62			0.22			0.22		
Clearance Time (s)	6.0			6.0			6.0			6.0		
Lane Grp Cap (vph)	2942			2813			322			327		
v/s Ratio Prot	c0.01											
v/s Ratio Perm	0.10			c0.42			c0.14			0.11		
v/c Ratio	0.15			0.67			0.65			0.50		
Uniform Delay, d1	4.4			12.4			35.5			34.2		
Progression Factor	1.00			1.00			1.00			1.00		
Incremental Delay, d2	0.1			1.3			9.9			5.5		
Delay (s)	4.5			13.7			45.4			39.7		
Level of Service	A			B			D			D		
Approach Delay (s)	4.5			13.7			45.4			39.7		
Approach LOS	A			B			D			D		
Intersection Summary												
HCM Average Control Delay			16.2		HCM Level of Service			B				
HCM Volume to Capacity ratio			0.63									
Actuated Cycle Length (s)			100.0		Sum of lost time (s)			9.0				
Intersection Capacity Utilization			72.2%		ICU Level of Service			C				
Analysis Period (min)			15									
c Critical Lane Group												

												
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)	3.0			3.0			3.0			3.0		
Lane Util. Factor	0.91			0.91			1.00			1.00		
Frpb, ped/bikes	1.00			0.99			0.99			0.99		
Flpb, ped/bikes	1.00			1.00			1.00			0.99		
Frt	0.99			0.99			0.97			0.97		
Flt Protected	1.00			1.00			0.99			0.98		
Satd. Flow (prot)	5013			4986			1757			1741		
Flt Permitted	0.89			0.81			0.79			0.73		
Satd. Flow (perm)	4458			4072			1409			1299		
Volume (vph)	56	1340	84	26	452	35	41	71	29	101	104	50
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	62	1489	93	29	502	39	46	79	32	112	116	56
RTOR Reduction (vph)	0	6	0	0	8	0	0	9	0	0	9	0
Lane Group Flow (vph)	0	1638	0	0	562	0	0	148	0	0	275	0
Confl. Peds. (#/hr)	25		10	10		25	23		24	24		23
Turn Type	pm+pt		Perm				Perm				Perm	
Protected Phases	7	4	8				2				6	
Permitted Phases	4	8				2				6		
Actuated Green, G (s)	69.0		59.0				19.0				19.0	
Effective Green, g (s)	72.0		62.0				22.0				22.0	
Actuated g/C Ratio	0.72		0.62				0.22				0.22	
Clearance Time (s)	6.0		6.0				6.0				6.0	
Lane Grp Cap (vph)	3249		2525				310				286	
v/s Ratio Prot	c0.04											
v/s Ratio Perm	c0.33		0.14				0.10				c0.21	
v/c Ratio	0.50		0.22				0.48				0.96	
Uniform Delay, d1	6.2		8.4				34.0				38.6	
Progression Factor	1.00		1.00				1.00				1.00	
Incremental Delay, d2	0.6		0.2				5.2				44.6	
Delay (s)	6.7		8.6				39.1				83.2	
Level of Service	A		A				D				F	
Approach Delay (s)	6.7		8.6				39.1				83.2	
Approach LOS	A		A				D				F	
Intersection Summary												
HCM Average Control Delay	17.2			HCM Level of Service				B				
HCM Volume to Capacity ratio	0.61											
Actuated Cycle Length (s)	100.0			Sum of lost time (s)				6.0				
Intersection Capacity Utilization	73.5%			ICU Level of Service				D				
Analysis Period (min)	15											
c Critical Lane Group												

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↕						↕			↕		
Sign Control	Stop			Stop			Stop			Stop		
Volume (vph)	7	28	21	0	0	0	47	203	17	12	124	16
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	8	31	23	0	0	0	52	226	19	13	138	18
Direction, Lane #	EB 1	NB 1	SB 1									
Volume Total (vph)	62	297	169									
Volume Left (vph)	8	52	13									
Volume Right (vph)	23	19	18									
Hadj (s)	-0.17	0.03	-0.01									
Departure Headway (s)	4.8	4.3	4.3									
Degree Utilization, x	0.08	0.35	0.20									
Capacity (veh/h)	686	825	798									
Control Delay (s)	8.2	9.6	8.5									
Approach Delay (s)	8.2	9.6	8.5									
Approach LOS	A	A	A									
Intersection Summary												
Delay	9.0											
HCM Level of Service	A											
Intersection Capacity Utilization	42.7%			ICU Level of Service			A					
Analysis Period (min)	15											

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↕						↕			↕		
Sign Control	Stop			Stop			Stop			Stop		
Volume (vph)	19	56	60	0	0	0	7	150	21	15	168	15
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	21	62	67	0	0	0	8	167	23	17	187	17
Direction, Lane #	EB 1	NB 1	SB 1									
Volume Total (vph)	150	198	220									
Volume Left (vph)	21	8	17									
Volume Right (vph)	67	23	17									
Hadj (s)	-0.20	-0.03	0.00									
Departure Headway (s)	4.6	4.5	4.5									
Degree Utilization, x	0.19	0.25	0.28									
Capacity (veh/h)	712	766	763									
Control Delay (s)	8.8	9.0	9.2									
Approach Delay (s)	8.8	9.0	9.2									
Approach LOS	A	A	A									
Intersection Summary												
Delay	9.0											
HCM Level of Service	A											
Intersection Capacity Utilization	37.4%			ICU Level of Service			A					
Analysis Period (min)	15											



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations			↑			↑
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Volume (veh/h)	0	0	220	5	0	3
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	0	0	244	6	0	3
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type					None	
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	250				247	247
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	250				247	247
tC, single (s)	4.1				6.4	6.2
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	100				100	100
cM capacity (veh/h)	1316				741	792
Direction, Lane #	WB 1	SB 1				
Volume Total	250	3				
Volume Left	0	0				
Volume Right	6	3				
cSH	1700	792				
Volume to Capacity	0.15	0.00				
Queue Length 95th (ft)	0	0				
Control Delay (s)	0.0	9.6				
Lane LOS		A				
Approach Delay (s)	0.0	9.6				
Approach LOS		A				
Intersection Summary						
Average Delay		0.1				
Intersection Capacity Utilization		21.9%		ICU Level of Service		A
Analysis Period (min)		15				



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations			↩			↗
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Volume (veh/h)	0	0	73	1	0	9
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	0	0	81	1	0	10
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type					None	
Median storage veh						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	82				82	82
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	82				82	82
tC, single (s)	4.1				6.4	6.2
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	100				100	99
cM capacity (veh/h)	1515				920	978
Direction, Lane #	WB 1	SB 1				
Volume Total	82	10				
Volume Left	0	0				
Volume Right	1	10				
cSH	1700	978				
Volume to Capacity	0.05	0.01				
Queue Length 95th (ft)	0	1				
Control Delay (s)	0.0	8.7				
Lane LOS		A				
Approach Delay (s)	0.0	8.7				
Approach LOS		A				
Intersection Summary						
Average Delay		0.9				
Intersection Capacity Utilization		13.9%		ICU Level of Service		A
Analysis Period (min)		15				