TABLE 3

SUMMARY OF CAPACITY ANALYSIS RESULTS –
EXISTING WEEKEND VS. WEEKDAY TRAFFIC CONDITIONS

	Weekend	Weekday
Intersection	**PM Peak**	**PM Peak**
1) Western Ave @ Wisconsin Circle*	B 18.0	C 25.8
2) Western Ave @ Military Road*	C 23.0	C 28.8
3) Wisconsin Ave @ Western Ave*	C 24.7	C 28.8
4) Military Rd @ 43rd St**	B 14.2	C 15.7

xx = Level of Service
000 = Average Delay

* Signalized intersection. Results describe the collective operation of all approaches.

** Unsignalized intersection. Results are for the approach with the greatest average delay (in seconds).

Source: O.R. George & Associates.

Table 3 shows that the study area intersections currently operate at acceptable Levels of Service during the existing weekend (Saturday) peak periods. The data also indicates that the existing weekend peak hour Levels of Service are quite comparable with those computed for the afternoon peak hour.

To assess the potential weekend impact of the proposed development upon its build-out and occupancy in year 2006, the following were undertaken:

a) Application of an annual growth rate of two percent (2%) to Saturday peak hour through traffic volumes on the study area roadways, unto the year 2006. (The derived year 2006 base volumes are shown in Attachment 4.)

b) Development of Saturday peak hour trip estimates for the background developments considered in the initial traffic impact analysis, using the current Institute of Transportation Engineers (ITE) Trip Generation Manual, and the assignment of these trips on the study area road network (see Attachment 5.)

c) Estimation of Saturday peak hour trips for the proposed PUD, utilizing the current ITE Trip Generation Manual. (The projected weekend site trips are shown in Table 4, and their assignment on the study area road network is illustrated on Exhibit 4.)

TABLE 4

PROJECTED SATURDAY PEAK HOUR TRIP GENERATION - SUBJECT PLANNED UNIT DEVELOPMENT

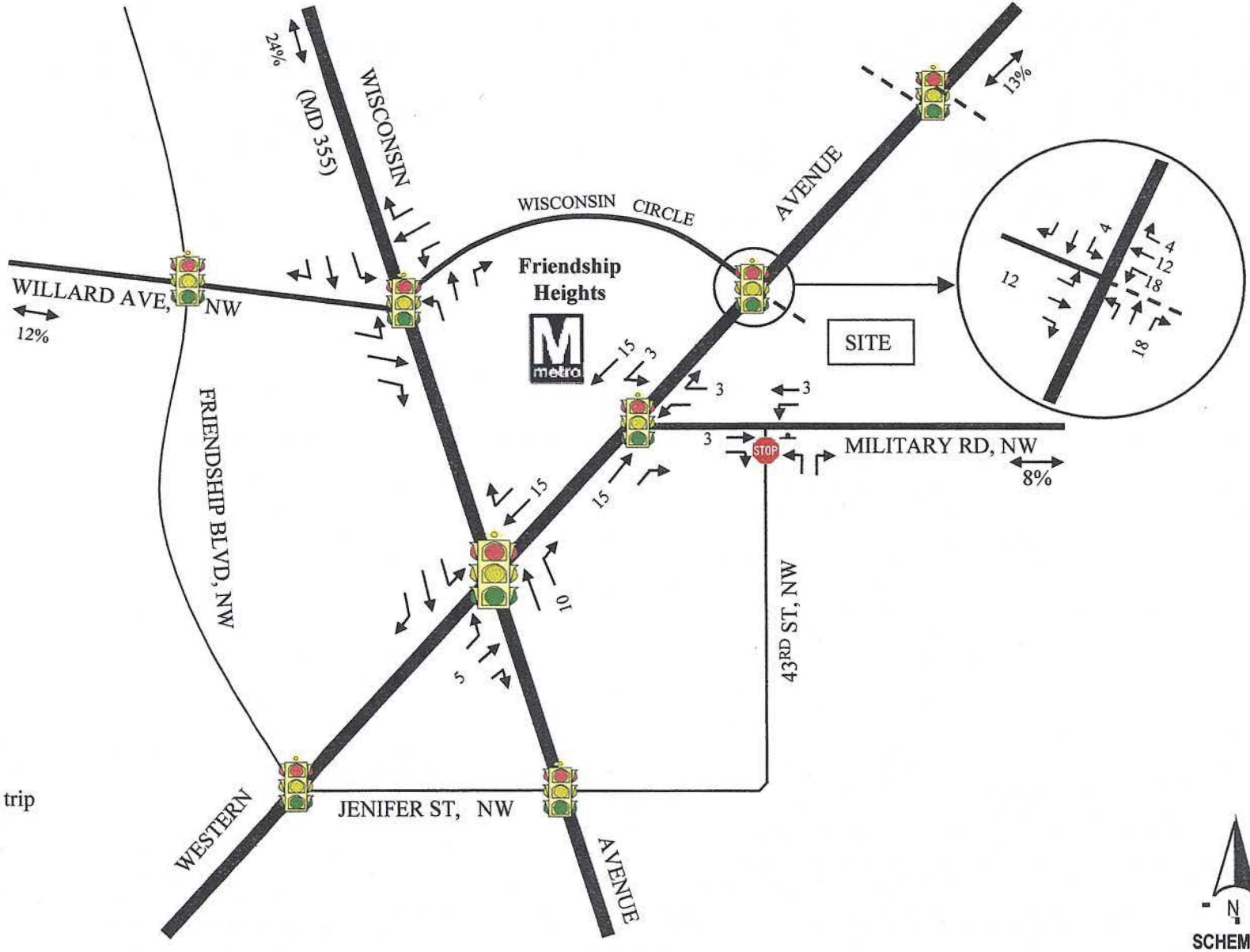
	Peak Hour		
Trip Rates	**In**	**Out**	**Total**
• Trips per Apartment Unit	0.26	0.26	0.52
- With 40% trip reduction **	0.16	0.16	0.32
Trip Generation			
• Trips per 215 Apartment Units	34	34	68

* This refers to the apartments only, as the day care facility would be closed on weekends.

** Based on projected usage of transit and other non single-occupant vehicle modes.

Source: ITE Trip Generation Manual (6th Edition, 1997), and O. R. George & Associates.

The projected year 2006 total weekend (Saturday) traffic situation was derived by combining the year 2006 base traffic volumes (Attachment 4), the background development trips (Attachment 5) and the projected site trip assignment (Exhibit 4). The year 2006 total Saturday traffic situation is shown in Exhibit 5 (on page 12). This situation was analyzed using the Highway Capacity Manual (HCM) procedures. The analysis worksheets are included as Attachment 6. The results are summarized in Table 5 on page 14. For the purposes of comparison, the weekday results are also presented in Table 5.



Note: Based on trip distribution for approved study

IN	OUT
215	196

SCHEMATIC
NOT TO SCALE

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EXHIBIT 4:
Weekend Peak Hour Site Trip Distribution and Assignment
Washington Clinic Planned Unit Development, Northwest Washington, DC

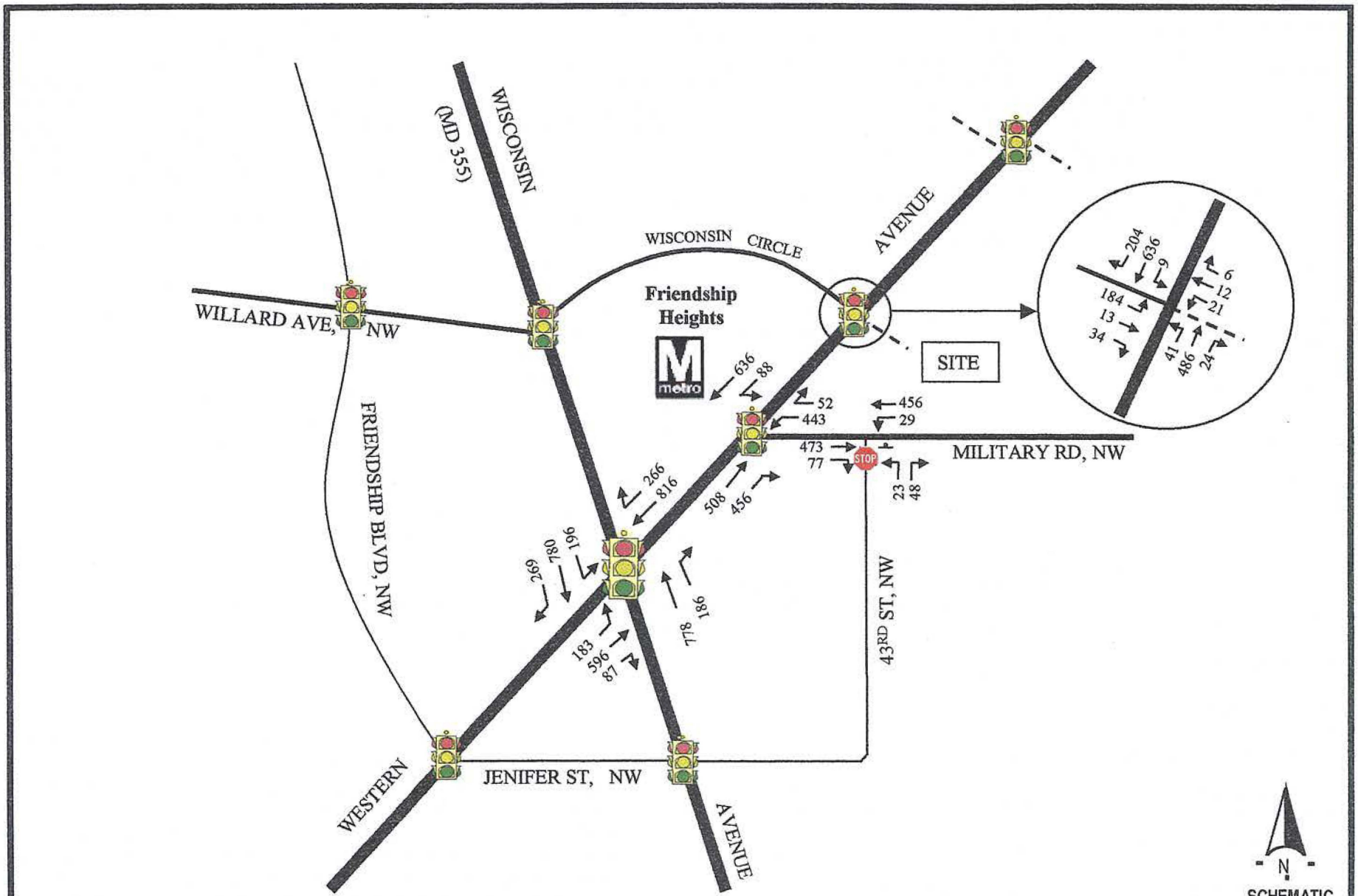

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EXHIBIT 5:
Projected Year 2006 Weekend (Saturday) Peak Hour Volumes – Key Intersections
Washington Clinic Planned Unit Development, Northwest Washington, DC

TABLE 5

SUMMARY OF CAPACITY ANALYSIS RESULTS – PROJECTED YEAR 2006 WEEKEND VS. WEEKDAY TRAFFIC CONDITONS

	Weekend	Weekday
Intersection	**PM Peak**	**PM Peak**
5) Western Ave @ Wisconsin Circle*	B 18.6	C 32.0
6) Western Ave @ Military Road*	C 24.0	C 33.7
7) Wisconsin Ave @ Western Ave*	C 28.2	C 34.1
8) Military Rd @ 43rd St**	C 16.7	C 21.8

xx = Level of Service
000 Average Delay

*Signalized intersection. Results describe the collective operation of all approaches.

**Unsignalized intersection. Results are for the approach with the greatest average delay (in seconds).

Source: O.R. George & Associates.

The data presented in Table 5 indicates that the study area road network would continue to operate at acceptable Levels of Service on weekends, upon build-out of the subject PUD. The data also shows that the weekend operational situation would be somewhat comparable with the projected weekday situation. This can perhaps be expected, given the density of retail and entertainment uses within the Friendship Heights area. The results would also be in keeping with the City's Ward 3 Plan, which recommends Level of Service C as the minimum standard. These findings show that the proposed development would not have an appreciable adverse impact on the study area road network, or on the use of adjacent properties on weekends. It is again noted that the City's criteria for evaluating the adequacy of roadway/transportation facilities, is weekday peak hour traffic conditions. As such, no off-site roadway improvements would be required to accommodate the projected weekend trip generation for the proposed development.

4.0 PARKING ANALYSIS – CURRENT DEVELOPMENT PROPOSAL

As noted earlier, the current proposal calls for the development of a maximum of 215 apartments and a 3,000 SF day care center on the Washington Clinic site. The development plan also proposes the rezoning of the subject site from R-5-B/R-2 to R-5-D. The City's parking ratio requirements for the proposed land uses and zoning category are as follows:

Land Use	No. of Spaces Required
• Apartment	1 per 3 apartment units
• Day Care Center	1 per every 4 teachers and other employees

Based on the above, the required parking spaces are developed in the table following. The parking proposed for the subject development is also shown to facilitate comparison.

Land Use	Required Parking	Proposed Parking
• Apartment (215 Units)	72	237
• Day Care Center (10 Employees)	3	5
Total	**75**	**242**

The above table indicates a parking ratio of approximately 1.1 spaces per apartment unit. This exceeds the required ratio of 0.33 required by the City's Municipal Regulations, by a factor of 3.3. Based on comments provided by residents of the adjacent Friendship Heights community, further analyses were undertaken to determine the appropriateness of the proposed parking supply. These analyses were based on the following:

a) The most current (1990) US Census Data records, regarding vehicle availability within the Census Tract incorporating the Friendships Heights area; and

b) Parking usage data obtained for two (2) comparable land use developments within the City, and one (1) within the Bethesda area of Montgomery County, Maryland.

The subject site is located within Census Tract 11. The adjacent areas to the north and south along Western Avenue lie within Census Tracts 14.1 and 10.1, respectively. The *vehicle availability* ratios for *occupied housing units* within these Census Tracts were determined to be as follows:

Tract	Vehicle Availability Ratio
• No. 11 (including subject site)	1.3
• No. 14.1 (North of #11)	1.1
• No. 10.1 (South of #11)	1.4
Total Area	**1.3**

Based on the above, the proposed development could generate the need for 280+ parking spaces. However, this projection is not realistic, based on the following factors:

a) **Census Data Limitations.** The available census records relate "vehicle availability" to "occupied housing units". The records do not classify vehicle availability by apartment units, apartment units within varying distances of Metrorail/Metrobus Stations, etc., which would have specific application to the proposed development.

b) **Proximity to Transit Facilities.** The proposed development would be located immediately adjacent to the Friendship Heights Metrorail/Metrobus Station. The use of this facility by the prospective users of the proposed development is projected to be in the range of sixty percent (60%), resulting in a significant reduction in parking demand.

c) **Inconsistency with City Plans and Policies.** The parking demand ratio derived from the Census Data would be inconsistent with the recommendations of the Ward 3 Plan as well as the Transit Oriented Development policies of the City. These stipulations call for the reduction of parking, as a means of increasing transit usage and reducing single-occupant vehicle trips and related traffic congestion.

As noted earlier, parking usage surveys were undertaken to determine the parking demand ratios for three (3) comparable land use developments. These developments are as follows:

a) **Saratoga Apartments:** This development is located at 4601 Connecticut Avenue, NW, Washington, DC. This location is approximately three (3) blocks away from the Van Ness Metrorail Station. The development consists of 377 apartment units, and is provided with 198 on-site garage parking spaces.

b) **Park Connecticut Apartments:** This development is located at 4411 Connecticut Avenue, NW. Washington, DC, within a block from the Van Ness Metrorail Station. This development consists of 142 apartments which are served by 127 on-site garage parking spaces.

c) **The Chase Apartment Complex:** This development is situated at 7500 Woodmont Avenue, Bethesda, Maryland. The site is situated immediately adjacent to the Bethesda Metrorail Station. The complex consists of 377 apartment units and 395 on-site garage parking spaces.

The peak parking usage characteristics for the residential facilities noted above were used to determine the parking supply and demand ratios for these developments. These ratios are developed in the Table 6 below.

TABLE 6

PARKING SUPPLY AND DEMAND RATIOS - COMPARABLE APARTMENT DEVELOPMENTS

Development	Apt. Density	Parking Supply	Supply Ratio*	Peak Parking Demand	Demand Ratio**
a) Saratoga Apartments	377	198	0.52	194	0.51
b) Park Connecticut Apartments	142	127	0.89	94	0.66
c) The Chase Apt. Complex	377	395	1.05	387	0.98
• Average (DC Dev.s)	260	163	0.63	144	0.55
• Average (All Dev.s)	299	240	0.80	225	0.75

* Parking supply per apartment unit.

** Peak parking demand per apartment unit.

Source: The Saratoga Apartments, Park Connecticut Apartments and the Chase Apartment Complex site managers, and O. R. George & Associates.

The above table shows that the average parking supply and demand ratios for the developments located within the City, or for all three (3) developments, are significantly lower than the ratio of 1.1 spaces per apartment unit proposed for the subject PUD. In addition, the ratios confirm that the parking ratio indications of the 1990 U.S. Census Records are not applicable to the proposed development.

Based on the above, it is concluded that the proposed parking for the subject PUD would be more than adequate. This provision would easily accommodate projected demand (including visitor trips), and would prevent overflow onto neighboring streets.

5.0 TRANSPORTATION MANAGEMENT PLAN

The traffic analyses presented earlier, have all demonstrated the negligible traffic impacts of the proposed development. However, in keeping with City policies regarding proposed large tract developments, though unusual for residential projects, the Applicant has developed a Transportation Management Plan (TMP) for implementation at the subject development. This plan includes a mix of strategies and measures, which would reduce the single-occupant vehicle trips generated by the proposed PUD, during weekday and weekend peak travel periods.

Typically, a TMP is not required, or provided, for residential land uses. However, the subject TMP was developed in accordance with the Federal Transportation Management Program Handbook (1998), and reflects discussions held with appropriate staff of the Metropolitan Washington Council of Governments (COG) and the Washington Metropolitan Area Transit Authority (WMATA). The Plan also considered the subject site's favorable location adjacent to the Friendship Heights Metrorail/Metrobus Station, as well as a number of significant employment and retail land uses. The proposed TMP strategies and measures are as follows:

- **Transit and Ridesharing Dissemination Services:** The Applicant has indicated that the prospective management company will maintain an on-site transit and ridesharing information program. This program will include the provision of schedules, etc., for Metro bus and rail services, as well as for other local and regional transit services (MARC, AMTRAK, VRE, The Bus, Ride On, Fairfax Connector, etc.). The program will also include activities which match residents seeking to rideshare to/from work, using a single vehicle. Transit and ridership information will also be provided on the development's website, with links to other relevant transit-provider websites.
- **Car-Sharing Services:** Car sharing is an innovative program provided at selected Metrorail Stations by WMATA in partnership with Flexcar (a national car-sharing company). Car sharing allows Metro users to share the ownership and use of vehicles in undertaking various trips on an as-needed basis, to areas not easily accessible via transit. This program is intended to reduce the need for Metro transit users to own personal vehicles. It is expected that that this service would reduce roadway volumes and increase transit ridership. The Applicant plans to provide car-sharing services with the use of the proposed parking garage.
- **Bicycle Racks:** The Applicant plans to provide these facilities within the proposed parking garage, to encourage the use of this mode. Details regarding the location and number of these facilities are shown in the development site plan.

The traffic studies conducted in support of the Washington Clinic PUD have assumed a modal split of 65% for transit and other alternative travel modes. It is estimated that an effective implementation of the TMP measures noted above could increase the modal split to 70-75%. This factor would further reduce the projected site trip generation, parking demand and related impacts.

6.0 TRAFFIC MITIGATION – WISCONSIN AVENUE @ WESTERN AVENUE

The Wisconsin Avenue/Western Avenue intersection was included in the study area network considered in the submitted traffic study, for evaluating the potential traffic impacts of the proposed Washington Clinic site development. Wisconsin Avenue is a major regional route connecting the Friendship Heights area to the City's Downtown and suburban areas within the State of Maryland. Western Avenue separates the District of Columbia from Montgomery County, Maryland. The subject intersection can be considered the "nucleus" of the Friendship Heights area which is a hub of employment, commercial/retail, residential

and institutional activities. It is also noted that the Friendship Heights Metrorail and Metrobus Station is located within the northeastern quadrant of the intersection. Based on these factors, the Wisconsin Avenue/Western Avenue intersection currently serves significant levels of vehicular and pedestrian traffic volumes.

The submitted traffic study indicates that the subject intersection operates at Level-of-Service C under current roadway and traffic conditions. However, under the year 2006 traffic conditions, (including several background/planned developments, regional traffic growth and the proposed development) the intersection is projected to operate at Level-of Service D, during the morning peak hour, with or without the proposed development. As noted on page 7 of the previous study, the District Department of Transportation considers Level-of-Service D as the minimum acceptable standard. However, the City's Ward 3 Plan, which covers the subject development site, recommends Level-of-Service C as the minimum planning standard for the area intersections.

Considering the above, further field investigations and analyses were undertaken to determine the improvements that could be implemented to achieve Level-of-Service C or better. The analysis results show that "***modification of the signal phasing and timing***" would be quite effective, considering the future (year 2006) traffic conditions, including the proposed Washington Clinic PUD. This is shown in Table 7.

TABLE 7

COMPARATIVE CAPACITY ANALYSIS RESULTS FOR YEAR 2006 - WISCONSIN AVENUE @ WESTERN AVENUE INTERSECTION

	AM Peak Hour		PM Peak Hour	
Geometric Conditions	**Level of Service**	**Average (Sec./Veh.)**	**Level of Service**	**Average (Sec./Veh.)**
- Existing	D	37.6	C	34.1
- With signal modification	C	34.1	C	20.2

Source: O. R. George & Associates.

The capacity analysis worksheets for the projected year 2006 morning and afternoon peak hour situations, which reflect the above-noted signalization improvements, are included as Attachments 7-A and 7-B, respectively. For ease of comparison, the analysis worksheets extracted from the submitted traffic study, are included as Attachments 7-C and 7-D.

We trust that the above satisfies your requirements. Should you have any questions, please let us know. Thank you.

ORG/CEE/tdj

Attachments: As noted.

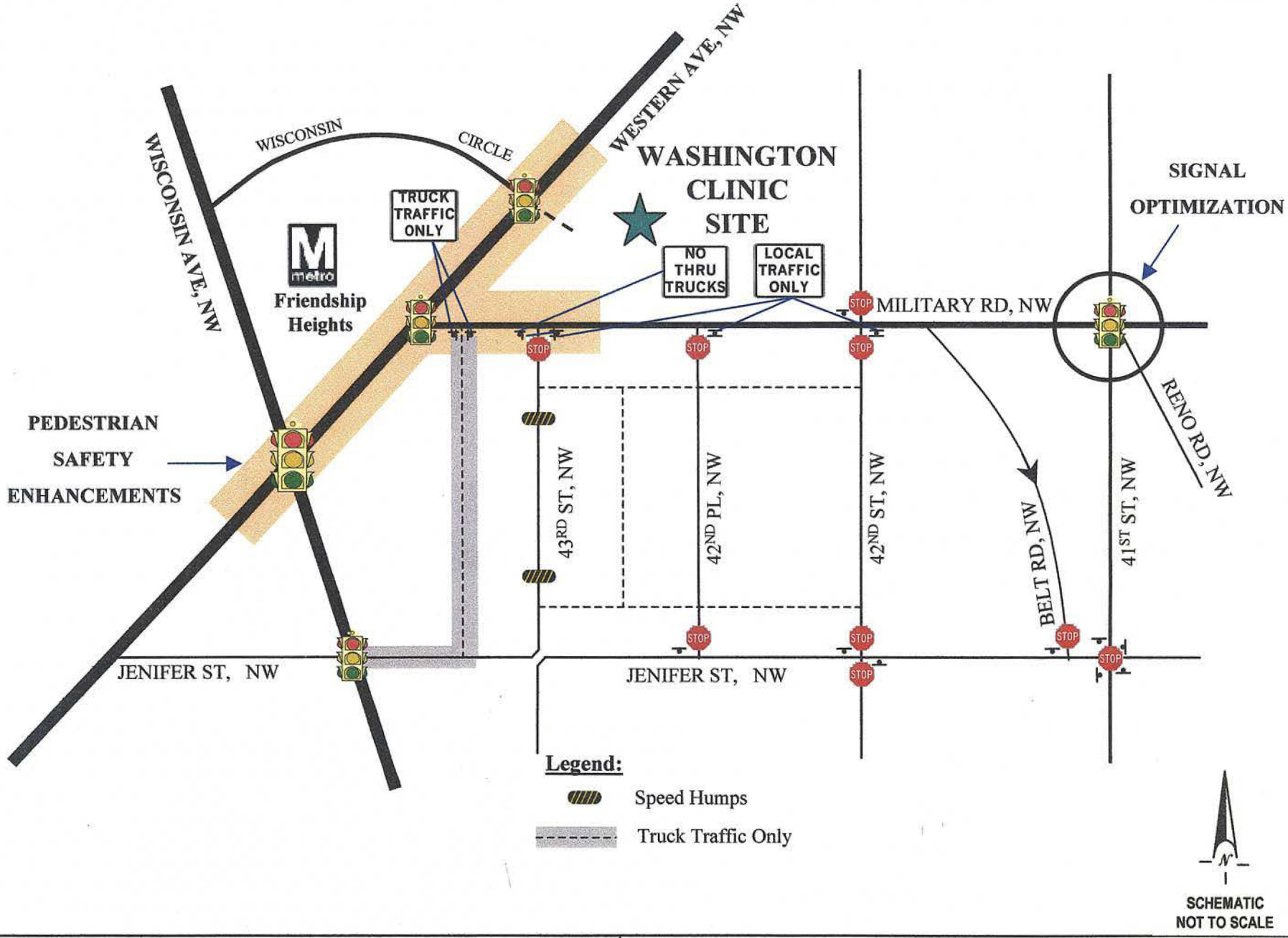

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EXHIBIT 6:
RECOMMENDED TRAFFIC MITIGATION MEASURES
Washington Clinic Neighborhood Mitigation Study, Northwest Washington, DC

ATTACHMENT

1

MECHANICAL TRAFFIC VOLUME
COUNT REPORTS

Volume Count Report

Generated by MSC3000 Version 2.01 Copyright 1990-1992 Mitron Systems Corporation

Location ..... Wisconsin Ave., South of Western Ave.,NB
Location Code 51
County ..... Washington D.C.
Recorder Set 07/24/02 15:39
Recording Start ... 07/25/ 2 00:00
Recording End 07/29/ 2 00:00
Sample Time ..... 15 Minutes
Operator Number ... 41
Machine Number 26
Channel 1
Divide By 2
Summation ..... No
Two-Way ..... No

Thursday 07/25/ 2 Channel: 1 Direction: N

0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Totals
194	150	92	61	55	150	319	580	759	793	702	874	958	968	976	985	1096	1107	1098	932	747	667	551	376	15190
67	38	40	24	13	32	56	117	152	196	162	199	239	249	243	238	292	269	292	228	193	172	162	104	
51	33	22	12	9	34	65	146	196	207	198	216	220	221	251	248	267	291	285	237	203	170	158	107	
44	40	22	14	8	35	98	151	196	228	153	225	261	243	224	242	263	264	265	234	179	161	122	89	
32	39	8	11	25	49	100	166	215	162	189	234	238	255	258	257	274	283	256	233	172	164	109	76	

AM Peak Hour ..... 11:00 to 12:00 (874 vehicles)
AM Peak Hour Factor 93.4%
PM Peak Hour ..... 17:15 to 18:15 (1130 vehicles)
PM Peak Hour Factor 96.7%

Friday 07/26/02 Channel: 1 Direction: N

0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Totals
269	206	163	78	75	164	287	570	802	825	819	857	915	828	937	969	1131	1081	1082	891	872	784	641	593	15839
81	55	60	23	11	28	55	107	197	221	178	209	243	221	244	228	271	257	309	246	200	217	152	167	
74	53	53	25	26	43	58	143	196	219	189	205	230	157	231	227	273	246	261	252	216	199	157	171	
63	45	31	17	20	30	67	157	191	205	202	205	213	237	236	261	317	269	263	156	243	186	172	132	
51	53	19	13	18	63	107	163	218	180	250	238	229	213	226	253	270	309	249	237	213	182	160	123	

AM Peak Hour ..... 10:45 to 11:45 (869 vehicles)
AM Peak Hour Factor 86.9%
PM Peak Hour ..... 17:30 to 18:30 (1148 vehicles)
PM Peak Hour Factor 92.9%

24-Hour Moving Total

01:00- 15265	02:00- 15321	03:00- 15392	04:00- 15409	05:00- 15429	06:00- 15443	07:00- 15411	08:00- 15401
09:00- 15444	10:00- 15476	11:00- 15593	12:00- 15576	13:00- 15533	14:00- 15393	15:00- 15354	16:00- 15338
17:00- 15373	18:00- 15347	19:00- 15331	20:00- 15290	21:00- 15415	22:00- 15532	23:00- 15622	24:00- 15839

1-A

Saturday 07/27/02 Channel: 1 Direction: N

0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Totals
401	261	273	171	113	89	157	226	303	537	677	812	912	919	928	965	943	965	898	810	735	698	603	633	14029
114	86	59	51	36	25	33	50	61	105	146	189	222	220	236	212	233	233	246	231	190	203	120	191	
119	63	66	47	37	20	29	49	58	126	172	220	207	243	245	239	254	251	223	235	159	173	148	135	
89	59	70	47	22	17	51	51	95	145	164	180	248	220	222	255	224	245	198	137	206	159	180	165	
79	53	78	26	18	27	44	76	89	161	195	223	235	236	225	259	232	236	231	207	180	163	155	142	

AM Peak Hour ..... 11:00 to 12:00 (812 vehicles)
AM Peak Hour Factor 91.0%
PM Peak Hour ..... 15:30 to 16:30 (1001 vehicles)
PM Peak Hour Factor 96.6%

24-Hour Moving Total

01:00- 15971	02:00- 16026	03:00- 16136	04:00- 16229	05:00- 16267	06:00- 16192	07:00- 16062	08:00- 15718
09:00- 15219	10:00- 14931	11:00- 14789	12:00- 14744	13:00- 14741	14:00- 14832	15:00- 14823	16:00- 14819
17:00- 14631	18:00- 14515	19:00- 14331	20:00- 14250	21:00- 14113	22:00- 14027	23:00- 13989	24:00- 14029

Sunday 07/28/02 Channel: 1 Direction: N

0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Totals
454	345	319	239	115	75	97	144	205	326	503	611	830	903	783	834	866	856	743	633	568	509	426	308	11692
118	107	69	102	30	15	19	21	40	72	102	130	183	231	214	205	230	216	200	189	131	130	133	80	
121	84	76	57	30	23	27	34	58	59	101	153	209	219	194	222	259	202	157	157	141	149	105	91	
116	87	67	43	24	15	21	46	45	96	141	160	219	219	168	191	167	221	169	122	141	129	94	87	
99	67	107	37	31	22	30	43	62	99	159	168	219	234	207	216	210	217	217	165	155	101	94	50	

AM Peak Hour ..... 11:00 to 12:00 (611 vehicles)
AM Peak Hour Factor 90.9%
PM Peak Hour ..... 13:00 to 14:00 (903 vehicles)
PM Peak Hour Factor 96.5%

24-Hour Moving Total

01:00- 14082	02:00- 14166	03:00- 14212	04:00- 14280	05:00- 14282	06:00- 14268	07:00- 14208	08:00- 14126
09:00- 14028	10:00- 13817	11:00- 13643	12:00- 13442	13:00- 13360	14:00- 13344	15:00- 13199	16:00- 13068
17:00- 12991	18:00- 12882	19:00- 12727	20:00- 12550	21:00- 12383	22:00- 12194	23:00- 12017	24:00- 11692

Volume Count Report

Generated by MSC3000 Version 2.01

Location ..... Wisconsin Ave., South of Western Ave.,SB
Location Code 53
County ..... Washington D.C.
Recorder Set 07/24/02 15:31
Recording Start ... 07/25/ 2 00:00
Recording End 07/29/ 2 00:00
Sample Time ..... 15 Minutes
Operator Number ... 41
Machine Number 51
Channel 1
Divide By 2
Summation ..... No
Two-Way ..... No

Thursday 07/25/ 2 Channel: 1 Direction: S

0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Totals
258	134	71	77	104	232	581	1279	1531	1097	900	958	983	916	978	892	917	991	1084	951	839	792	644	414	17623
82	46	33	19	16	55	93	236	400	302	205	232	217	225	221	211	217	231	236	256	222	200	191	114	
55	38	13	18	18	46	117	325	363	298	236	209	255	230	237	240	238	244	242	235	213	217	177	126	
43	27	9	24	33	57	177	344	372	300	229	260	225	234	262	247	218	254	336	218	198	204	135	94	
78	23	16	16	37	74	194	374	396	197	230	257	286	227	258	194	244	262	270	242	206	171	141	80	

AM Peak Hour ..... 08:00 to 09:00 (1531 vehicles)
AM Peak Hour Factor 95.7%
PM Peak Hour ..... 18:15 to 19:15 (1104 vehicles)
PM Peak Hour Factor 82.1%

Friday 07/26/02 Channel: 1 Direction: S

0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Totals
333	271	82	73	92	220	550	1126	1365	1080	895	929	832	770	787	782	859	1012	971	844	721	701	611	634	16540
91	129	26	21	19	47	87	223	326	257	242	229	227	160	182	180	210	252	255	214	217	184	154	190	
77	72	19	13	14	37	120	265	340	307	196	238	186	193	214	190	212	251	263	244	161	181	162	171	
62	36	24	26	21	54	157	292	347	297	214	214	212	211	203	216	210	226	221	191	174	171	165	156	
103	34	13	13	38	82	186	346	352	219	243	248	207	206	188	196	227	283	232	195	169	165	130	117	

AM Peak Hour ..... 08:00 to 09:00 (1365 vehicles)
AM Peak Hour Factor 96.9%
PM Peak Hour ..... 17:30 to 18:30 (1027 vehicles)
PM Peak Hour Factor 90.7%

24-Hour Moving Total

01:00- 17698	02:00- 17835	03:00- 17846	04:00- 17842	05:00- 17830	06:00- 17818	07:00- 17787	08:00- 17634
09:00- 17468	10:00- 17451	11:00- 17446	12:00- 17417	13:00- 17266	14:00- 17120	15:00- 16929	16:00- 16819
17:00- 16761	18:00- 16782	19:00- 16669	20:00- 16562	21:00- 16444	22:00- 16353	23:00- 16320	24:00- 16540

Saturday 07/27/02 Channel: 1 Direction: S

0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Totals
346	268	195	126	85	103	148	280	357	523	651	775	874	763	975	880	810	389	698	850	753	744	717	656	12966
99	78	58	31	23	26	23	70	84	108	152	187	248	235	218	225	220	133	147	219	212	188	179	180	
86	76	53	32	25	17	35	72	65	132	161	206	199	212	250	214	194	142	95	205	187	190	188	180	
86	44	48	33	17	30	47	75	102	129	157	188	187	174	247	224	215	70	221	213	178	183	178	144	
75	70	36	30	20	30	43	63	106	154	181	194	240	142	260	217	181	44	235	213	176	183	172	152	

AM Peak Hour ..... 11:00 to 12:00 (775 vehicles)
AM Peak Hour Factor 94.1%
PM Peak Hour ..... 14:15 to 15:15 (982 vehicles)
PM Peak Hour Factor 94.4%

24-Hour Moving Total

01:00- 16553	02:00- 16550	03:00- 16663	04:00- 16716	05:00- 16709	06:00- 16592	07:00- 16190	08:00- 15344
09:00- 14336	10:00- 13779	11:00- 13535	12:00- 13381	13:00- 13423	14:00- 13416	15:00- 13604	16:00- 13702
17:00- 13653	18:00- 13030	19:00- 12757	20:00- 12763	21:00- 12795	22:00- 12838	23:00- 12944	24:00- 12966

Sunday 07/28/02 Channel: 1 Direction: S

0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Totals
512	336	232	129	88	68	113	176	322	429	544	512	688	744	810	826	815	792	786	610	581	534	432	313	11392
163	92	78	32	26	20	23	37	55	90	113	94	153	144	206	192	212	166	199	178	154	121	125	83	
133	102	61	37	13	14	24	37	73	102	141	129	177	206	199	189	191	200	190	145	142	138	135	92	
99	78	46	37	19	17	32	53	94	88	146	130	161	198	201	204	177	205	193	151	147	146	82	73	
117	64	47	23	30	17	34	49	100	149	144	159	197	196	204	241	235	221	204	136	138	129	90	65	

AM Peak Hour ..... 09:45 to 10:45 (549 vehicles)
AM Peak Hour Factor 92.1%
PM Peak Hour ..... 15:30 to 16:30 (848 vehicles)
PM Peak Hour Factor 88.0%

24-Hour Moving Total

01:00- 13132	02:00- 13200	03:00- 13237	04:00- 13240	05:00- 13243	06:00- 13208	07:00- 13173	08:00- 13069
09:00- 13034	10:00- 12940	11:00- 12833	12:00- 12570	13:00- 12384	14:00- 12365	15:00- 12200	16:00- 12146
17:00- 12151	18:00- 12554	19:00- 12642	20:00- 12402	21:00- 12230	22:00- 12020	23:00- 11735	24:00- 11392

Volume Count Report

Generated by MSC3000 Version 2.01 Copyright 1990-1992 Mitron Systems Corporation

Location ..... Wisconsin Circle,West of Western Ave, WB
Location Code 14
County ..... Montgomery County
Recorder Set 07/24/02 13:33
Recording Start ... 07/25/ 2 00:00
Recording End 07/29/ 2 00:00
Sample Time ..... 15 Minutes
Operator Number ... 41
Machine Number 16
Channel 1
Divide By 4
Summation ..... No
Two-Way ..... No

Thursday 07/25/ 2 Channel: 1 Direction: W

0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Totals
23	12	10	8	10	27	79	201	332	282	197	202	208	195	229	195	232	248	282	208	121	85	70	39	3495
8	2	1	3	2	3	17	29	76	88	45	48	53	50	70	56	56	58	70	65	40	26	23	11	
6	3	3	0	3	8	17	45	86	68	43	47	52	47	46	36	57	60	70	55	30	19	20	13	
4	4	4	2	3	9	14	66	88	62	51	57	54	47	62	45	66	62	73	42	20	27	8	7	
5	3	2	3	2	7	31	61	82	64	58	50	49	51	51	58	53	68	69	46	31	13	19	8	

AM Peak Hour ..... 08:15 to 09:15 (344 vehicles)
AM Peak Hour Factor 97.7%
PM Peak Hour ..... 18:00 to 19:00 (282 vehicles)
PM Peak Hour Factor 96.6%

Friday 07/26/02 Channel: 1 Direction: W

0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Totals
20	19	5	2	8	36	76	157	251	183	140	133	148	124	130	137	167	177	199	151	93	80	53	48	2537
4	6	3	0	2	2	19	27	59	55	30	27	39	36	33	41	44	46	55	49	22	18	17	16	
3	3	0	1	1	8	13	40	59	47	36	30	36	31	27	30	41	43	50	41	27	17	8	14	
6	6	1	0	4	9	14	36	72	42	39	44	36	33	40	35	41	45	46	33	22	26	16	8	
7	4	1	1	1	17	30	54	61	39	35	32	37	24	30	31	41	43	48	28	22	19	12	10	

AM Peak Hour ..... 08:00 to 09:00 (251 vehicles)
AM Peak Hour Factor 87.2%
PM Peak Hour ..... 18:00 to 19:00 (199 vehicles)
PM Peak Hour Factor 90.5%

24-Hour Moving Total

01:00-	3492	02:00-	3499	03:00-	3494	04:00-	3488	05:00-	3486	06:00-	3495	07:00-	3492	08:00-	3448
09:00-	3367	10:00-	3268	11:00-	3211	12:00-	3142	13:00-	3082	14:00-	3011	15:00-	2912	16:00-	2854
17:00-	2789	18:00-	2718	19:00-	2635	20:00-	2578	21:00-	2550	22:00-	2545	23:00-	2528	24:00-	2537

1-E

Saturday 07/27/02 Channel: 1 Direction: W

0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Totals
32	23	9	20	27	19	32	70	124	131	149	153	164	142	170	182	137	165	138	101	86	69	65	57	2265
8	8	4	7	9	3	2	18	28	31	39	32	45	38	44	49	44	49	28	28	20	13	15	16	
6	5	0	4	6	7	5	11	35	28	31	41	52	39	41	45	37	39	41	27	19	25	17	17	
14	5	2	7	7	4	10	22	23	33	35	34	29	30	39	43	29	39	34	25	19	14	12	12	
4	5	3	2	5	5	15	19	38	39	44	46	38	35	46	45	27	38	35	21	28	17	21	12	

AM Peak Hour ..... 11:00 to 12:00 (153 vehicles)
AM Peak Hour Factor 83.2%
PM Peak Hour ..... 14:45 to 15:45 (183 vehicles)
PM Peak Hour Factor 93.4%

24-Hour Moving Total

01:00-	2549	02:00-	2553	03:00-	2557	04:00-	2575	05:00-	2594	06:00-	2577	07:00-	2533	08:00-	2446								
09:00-	2319	10:00-	2267	11:00-	2276	12:00-	2296	13:00-	2312	14:00-	2330	15:00-	2370	16:00-	2415								
17:00-	2385	18:00-	2373	19:00-	2312	20:00-	2262	21:00-	2255	22:00-	2244	23:00-	2256	24:00-	2265								

Sunday 07/28/02 Channel: 1 Direction: W

0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Totals
34	23	22	14	8	16	25	38	58	73	107	146	123	149	121	129	148	136	114	98	71	53	35	14	1755
10	5	4	4	2	3	7	10	15	16	22	37	28	46	32	36	32	42	32	30	18	14	10	3	
6	6	5	5	3	6	4	3	13	21	30	44	33	37	28	41	42	29	27	34	18	11	6	5	
7	8	6	4	0	3	5	12	14	11	21	28	34	42	29	30	43	31	35	14	15	14	9	3	
11	4	7	1	3	4	9	13	16	25	34	37	28	24	32	22	31	34	20	20	20	14	10	3	

AM Peak Hour ..... 11:00 to 12:00 (146 vehicles)
AM Peak Hour Factor 83.0%
PM Peak Hour ..... 16:15 to 17:15 (158 vehicles)
PM Peak Hour Factor 91.9%

24-Hour Moving Total

01:00-	2267	02:00-	2267	03:00-	2280	04:00-	2274	05:00-	2255	06:00-	2252	07:00-	2245	08:00-	2213								
09:00-	2147	10:00-	2089	11:00-	2047	12:00-	2040	13:00-	1999	14:00-	2006	15:00-	1957	16:00-	1904								
17:00-	1915	18:00-	1886	19:00-	1862	20:00-	1859	21:00-	1844	22:00-	1828	23:00-	1798	24:00-	1755								

Volume Count Report

Location ..... Wisconsin Circle,West of Western Ave, EB
Location Code 12
County ..... Montgomery County
Recorder Set 07/24/02 12:55
Recording Start ... 07/25/ 2 00:00
Recording End 07/29/ 2 00:00
Sample Time ..... 15 Minutes
Operator Number ... 41
Machine Number 10
Channel 1
Divide By 2
Summation ..... No
Two-Way ..... No

Thursday 07/25/ 2 Channel: 1 Direction: E

0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Totals
60	18	0	43	3	38	77	200	284	259	217	266	300	275	359	399	460	586	476	275	182	168	157	57	5159
9	11	0	33	0	6	18	35	61	70	50	64	83	74	92	85	121	166	127	83	55	37	35	28	
11	3	0	1	1	7	22	47	72	66	49	66	75	70	71	85	120	127	135	60	53	40	36	12	
39	1	0	1	2	10	14	45	70	63	52	63	69	73	113	122	94	135	114	72	30	35	22	10	
1	3	0	8	0	15	23	73	81	60	66	73	73	58	83	107	125	158	100	60	44	56	64	7	

AM Peak Hour ..... 08:15 to 09:15 (293 vehicles)
AM Peak Hour Factor 90.4%
PM Peak Hour ..... 17:00 to 18:00 (586 vehicles)
PM Peak Hour Factor 88.3%

Friday 07/26/02 Channel: 1 Direction: E

0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Totals
21	9	12	7	70	34	85	170	247	259	232	236	305	291	350	394	476	577	406	251	192	171	108	107	5010
9	2	4	4	1	1	11	32	55	68	61	65	69	88	81	86	121	149	124	69	58	45	31	19	
2	5	1	2	53	12	20	51	52	83	63	61	78	63	89	102	134	133	110	78	40	34	30	21	
7	0	7	1	5	10	31	44	67	59	55	57	90	69	91	98	104	153	92	54	46	34	19	29	
3	2	0	0	11	11	23	43	73	49	53	53	68	71	89	108	117	142	80	50	48	58	28	38	

AM Peak Hour ..... 08:30 to 09:30 (291 vehicles)
AM Peak Hour Factor 87.7%
PM Peak Hour ..... 17:00 to 18:00 (577 vehicles)
PM Peak Hour Factor 94.3%

24-Hour Moving Total

01:00-	5120	02:00-	5111	03:00-	5123	04:00-	5087	05:00-	5154	06:00-	5150	07:00-	5158	08:00-	5128
09:00-	5091	10:00-	5091	11:00-	5106	12:00-	5076	13:00-	5081	14:00-	5097	15:00-	5088	16:00-	5083
17:00-	5099	18:00-	5090	19:00-	5020	20:00-	4996	21:00-	5006	22:00-	5009	23:00-	4960	24:00-	5010

Saturday 07/27/02 Channel: 1 Direction: E

0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Totals
66	62	39	25	7	43	89	90	90	138	183	210	251	232	259	276	251	287	215	218	161	140	122	94	3548
22	10	9	4	0	4	35	25	18	33	52	53	60	52	54	83	81	66	49	74	38	30	35	22	
8	10	3	13	2	3	9	17	20	29	54	50	53	79	53	61	59	75	61	42	42	37	36	33	
22	39	24	5	3	0	29	25	19	35	39	61	70	53	66	89	63	90	48	55	40	32	31	22	
14	3	3	3	2	36	16	23	33	41	38	46	68	48	86	43	48	56	57	47	41	41	20	17	

AM Peak Hour ..... 11:00 to 12:00 (210 vehicles)
AM Peak Hour Factor 86.1%
PM Peak Hour ..... 14:45 to 15:45 (319 vehicles)
PM Peak Hour Factor 89.6%

24-Hour Moving Total

01:00-	5055	02:00-	5108	03:00-	5135	04:00-	5153	05:00-	5090	06:00-	5099	07:00-	5103	08:00-	5023
09:00-	4866	10:00-	4745	11:00-	4696	12:00-	4670	13:00-	4616	14:00-	4557	15:00-	4466	16:00-	4348
17:00-	4123	18:00-	3833	19:00-	3642	20:00-	3609	21:00-	3578	22:00-	3547	23:00-	3561	24:00-	3548

Sunday 07/28/02 Channel: 1 Direction: E

0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Totals
64	29	18	14	6	16	37	56	81	98	136	158	179	196	180	169	178	200	210	159	107	104	57	35	2487
27	11	4	5	1	2	7	11	18	17	33	25	26	48	48	47	45	53	37	46	28	24	25	14	
18	5	6	0	0	0	2	15	19	29	24	56	50	56	45	48	45	44	51	45	22	38	12	9	
7	6	5	8	0	6	13	15	24	25	33	44	46	38	43	39	42	60	71	34	28	23	10	4	
12	7	3	1	5	8	15	15	20	27	46	33	57	54	44	35	46	43	51	34	29	19	10	8	

AM Peak Hour ..... 10:45 to 11:45 (171 vehicles)
AM Peak Hour Factor 76.3%
PM Peak Hour ..... 18:15 to 19:15 (219 vehicles)
PM Peak Hour Factor 77.1%

24-Hour Moving Total

01:00-	3546	02:00-	3513	03:00-	3492	04:00-	3481	05:00-	3480	06:00-	3453	07:00-	3401	08:00-	3367
09:00-	3358	10:00-	3318	11:00-	3271	12:00-	3219	13:00-	3147	14:00-	3111	15:00-	3032	16:00-	2925
17:00-	2852	18:00-	2765	19:00-	2760	20:00-	2701	21:00-	2647	22:00-	2611	23:00-	2546	24:00-	2487

Volume Count Report

Location ..... Military Rd., East of 43rd Street, EB
Location Code 32
County ..... Washington D.C.
Recorder Set 07/31/02 14:12
Recording Start ... 08/01/ 2 00:00
Recording End 08/05/ 2 00:00
Sample Time ..... 15 Minutes
Operator Number ... 41
Machine Number 53
Channel 1
Divide By 2
Summation ..... No
Two-Way ..... No

08/01/ 2 Channel: 1 Direction: E

0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Totals
58	25	12	10	14	37	96	275	319	339	236	277	292	279	304	373	423	406	384	299	285	209	166	117	5235
15	8	4	0	2	8	16	49	69	90	59	75	84	62	77	97	106	114	113	76	86	58	54	33	
11	5	4	5	1	5	20	53	83	102	54	64	71	71	74	95	104	111	104	75	63	49	42	34	
22	6	0	2	7	11	24	77	96	72	52	67	69	71	76	91	101	82	92	70	70	56	37	30	
10	6	4	3	4	13	36	96	71	75	71	71	68	75	77	90	112	99	75	78	66	46	33	20	

AM Peak Hour ..... 08:30 to 09:30 (359 vehicles)
AM Peak Hour Factor 88.0%
PM Peak Hour ..... 16:30 to 17:30 (438 vehicles)
PM Peak Hour Factor 96.1%

08/02/02 Channel: 1 Direction: E

0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Totals
56	28	14	13	20	40	96	118	184	247	295	372	357	432	487	560	625	619	515	403	386	396	267	253	6783
18	12	7	5	4	9	14	29	33	61	78	88	86	103	125	127	151	153	150	121	119	97	72	84	
15	7	3	4	4	11	22	23	43	65	79	92	89	102	118	146	170	165	128	106	86	109	80	58	
14	4	1	2	6	9	23	31	42	62	65	99	83	109	121	130	148	149	111	92	92	94	66	53	
9	5	3	2	6	11	37	35	66	59	73	93	99	118	123	157	156	152	126	84	89	96	49	58	

AM Peak Hour ..... 11:00 to 12:00 (372 vehicles)
AM Peak Hour Factor 93.9%
PM Peak Hour ..... 16:15 to 17:15 (627 vehicles)
PM Peak Hour Factor 92.2%

24-Hour Moving Total

01:00-	5233	02:00-	5236	03:00-	5238	04:00-	5241	05:00-	5247	06:00-	5250	07:00-	5250	08:00-	5093
09:00-	4958	10:00-	4866	11:00-	4925	12:00-	5020	13:00-	5085	14:00-	5238	15:00-	5421	16:00-	5608
17:00-	5810	18:00-	6023	19:00-	6154	20:00-	6258	21:00-	6359	22:00-	6546	23:00-	6647	24:00-	6783

&±Í]ùUš¡ 08/03/02 Channel: 1 Direction: E

0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Totals
144	82	68	35	22	29	63	128	188	260	304	380	382	454	503	488	503	449	441	310	330	283	253	252	6351
47	29	13	7	5	6	13	31	36	68	81	90	88	107	129	118	140	128	100	87	73	63	77	71	
43	21	19	6	5	11	12	26	41	62	78	87	91	110	120	120	112	115	125	80	89	57	65	64	
31	16	20	12	4	8	17	34	46	67	67	108	86	115	127	127	142	105	103	64	92	75	62	62	
23	16	16	10	8	4	21	37	65	63	78	95	117	122	127	123	109	101	113	79	76	88	49	55	

AM Peak Hour ..... 11:00 to 12:00 (380 vehicles)
AM Peak Hour Factor 88.0%
PM Peak Hour ..... 15:45 to 16:45 (517 vehicles)
PM Peak Hour Factor 91.0%

24-Hour Moving Total

01:00-	6871	02:00-	6925	03:00-	6979	04:00-	7001	05:00-	7003	06:00-	6992	07:00-	6959	08:00-	6969
09:00-	6973	10:00-	6986	11:00-	6995	12:00-	7003	13:00-	7028	14:00-	7050	15:00-	7066	16:00-	6994
17:00-	6872	18:00-	6702	19:00-	6628	20:00-	6535	21:00-	6479	22:00-	6366	23:00-	6352	24:00-	6351

Sunday 08/04/02 Channel: 1 Direction: E

0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Totals
153	62	54	31	27	29	54	101	120	168	197	230	311	371	376	443	482	427	385	330	163	85	134	67	4800
56	15	14	10	8	4	10	26	30	38	46	57	88	87	94	117	111	112	104	83	71	20	30	20	
36	25	12	8	7	11	7	28	21	44	47	54	68	94	96	90	122	104	102	94	24	10	35	27	
34	8	18	6	6	8	14	19	26	44	56	69	66	89	83	105	120	109	96	73	36	37	45	15	
27	14	10	7	6	6	23	28	43	42	48	50	89	101	103	131	129	102	83	80	32	18	24	5	

AM Peak Hour ..... 11:00 to 12:00 (230 vehicles)
AM Peak Hour Factor 83.3%
PM Peak Hour ..... 15:45 to 16:45 (484 vehicles)
PM Peak Hour Factor 92.4%

24-Hour Moving Total

01:00-	6360	02:00-	6340	03:00-	6326	04:00-	6322	05:00-	6327	06:00-	6327	07:00-	6318	08:00-	6291
09:00-	6223	10:00-	6131	11:00-	6024	12:00-	5874	13:00-	5803	14:00-	5720	15:00-	5593	16:00-	5548
17:00-	5527	18:00-	5505	19:00-	5449	20:00-	5469	21:00-	5302	22:00-	5104	23:00-	4985	24:00-	4800

Volume Count Report

Location ..... Military Rd., East of 43rd Street, WB
Location Code 34
County ..... Washington D.C.
Recorder Set 07/31/02 13:59
Recording Start ... 08/01/ 2 00:00
Recording End 08/05/ 2 00:00
Sample Time ..... 15 Minutes
Operator Number ... 41
Machine Number 51
Channel 1
Divide By 2
Summation ..... No
Two-Way ..... No

08/01/ 2 Channel: 1 Direction: W

0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Totals
51	22	21	32	59	185	381	697	844	673	520	496	480	510	580	567	597	662	618	499	353	260	202	108	9417
9	8	4	4	8	33	68	153	208	167	143	126	91	114	129	152	142	121	182	129	105	61	52	38	
16	7	8	5	10	35	94	154	188	197	124	126	116	114	139	151	170	179	154	129	89	67	50	26	
12	4	8	12	14	40	80	190	243	168	116	118	117	136	148	123	137	185	143	137	84	69	54	22	
14	3	1	11	27	77	139	200	205	141	137	126	156	146	164	141	148	177	139	104	75	63	46	22	

AM Peak Hour ..... 08:00 to 09:00 (844 vehicles)
AM Peak Hour Factor 86.8%
PM Peak Hour ..... 17:15 to 18:15 (723 vehicles)
PM Peak Hour Factor 97.7%

08/02/02 Channel: 1 Direction: W

0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Totals
75	44	32	23	60	163	355	557	624	564	562	453	489	384	514	554	535	571	499	414	327	269	218	157	8443
23	13	10	10	13	20	62	135	148	126	141	91	110	97	113	113	132	123	139	118	91	66	56	37	
23	8	14	5	9	40	76	142	146	147	141	126	144	86	126	143	152	148	114	87	88	72	47	30	
14	11	3	3	10	34	106	133	181	159	123	123	129	92	123	158	109	152	127	97	87	68	52	43	
15	12	5	5	28	69	111	147	149	132	157	113	106	109	152	140	142	148	119	112	61	63	63	47	

AM Peak Hour ..... 08:00 to 09:00 (624 vehicles)
AM Peak Hour Factor 86.2%
PM Peak Hour ..... 17:15 to 18:15 (587 vehicles)
PM Peak Hour Factor 96.5%

24-Hour Moving Total

01:00-	9441	02:00-	9463	03:00-	9474	04:00-	9465	05:00-	9466	06:00-	9444	07:00-	9418	08:00-	9278
09:00-	9058	10:00-	8949	11:00-	8991	12:00-	8948	13:00-	8957	14:00-	8831	15:00-	8765	16:00-	8752
17:00-	8690	18:00-	8599	19:00-	8480	20:00-	8395	21:00-	8369	22:00-	8378	23:00-	8394	24:00-	8443

&±Í]ùUš¡ 08/03/02 Channel: 1 Direction: W

0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Totals
77	54	44	46	39	72	139	189	265	349	375	457	435	482	495	506	407	374	352	279	223	215	164	120	6158
17	10	7	13	9	9	19	45	51	78	85	102	128	82	124	125	100	111	89	74	67	46	35	32	
20	16	14	7	5	9	24	40	75	78	99	97	103	116	129	125	88	92	107	59	64	63	51	32	
18	16	17	13	10	28	49	44	74	93	100	118	92	138	124	122	110	81	84	57	48	53	43	19	
22	12	6	13	15	26	47	60	65	100	91	140	112	146	118	134	109	90	72	89	44	53	35	37	

AM Peak Hour ..... 11:00 to 12:00 (457 vehicles)
AM Peak Hour Factor 81.6%
PM Peak Hour ..... 13:30 to 14:30 (537 vehicles)
PM Peak Hour Factor 92.0%

24-Hour Moving Total

01:00-	8445	02:00-	8455	03:00-	8467	04:00-	8490	05:00-	8469	06:00-	8378	07:00-	8162	08:00-	7794
09:00-	7435	10:00-	7220	11:00-	7033	12:00-	7037	13:00-	6983	14:00-	7081	15:00-	7062	16:00-	7014
17:00-	6886	18:00-	6689	19:00-	6542	20:00-	6407	21:00-	6303	22:00-	6249	23:00-	6195	24:00-	6158

Sunday 08/04/02 Channel: 1 Direction: W

0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Totals
95	38	45	29	37	42	93	112	130	172	256	301	404	517	470	495	417	367	279	223	193	162	138	70	5085
30	15	12	7	8	7	10	17	22	31	56	64	95	136	128	116	116	99	72	63	60	48	35	18	
25	6	10	7	5	14	21	22	20	41	53	67	94	132	114	101	102	108	70	47	51	31	36	24	
24	8	14	11	11	6	29	35	41	50	73	80	97	104	123	160	117	75	62	72	42	44	29	15	
16	9	9	4	13	15	33	38	47	50	74	90	118	145	105	118	82	85	75	41	40	39	38	13	

AM Peak Hour ..... 11:00 to 12:00 (301 vehicles)
AM Peak Hour Factor 83.6%
PM Peak Hour ..... 13:00 to 14:00 (517 vehicles)
PM Peak Hour Factor 89.1%

24-Hour Moving Total

01:00-	6176	02:00-	6160	03:00-	6161	04:00-	6144	05:00-	6142	06:00-	6112	07:00-	6066	08:00-	5989
09:00-	5854	10:00-	5677	11:00-	5558	12:00-	5402	13:00-	5371	14:00-	5406	15:00-	5381	16:00-	5370
17:00-	5380	18:00-	5373	19:00-	5300	20:00-	5244	21:00-	5214	22:00-	5161	23:00-	5135	24:00-	5085

Volume Count Report

Location ..... Western Ave,North of Wisconsin Circle,NB
Location Code 21
County ..... Washington D.C.
Recorder Set 07/31/02 16:53
Recording Start ... 08/01/ 2 00:00
Recording End 08/05/ 2 00:00
Sample Time ..... 15 Minutes
Operator Number ... 41
Machine Number 29
Channel 1
Divide By 2
Summation ..... No
Two-Way ..... No

08/01/ 2 Channel: 1 Direction: E

0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Totals
60	40	16	10	24	53	145	252	373	398	356	427	473	488	517	649	674	793	693	453	346	274	226	156	7896
15	12	6	3	4	5	22	46	65	92	93	96	119	115	135	156	174	187	171	123	98	85	82	51	
16	9	1	2	4	15	38	57	93	108	82	102	119	106	114	146	174	207	189	128	74	79	50	42	
16	7	7	3	11	11	38	82	100	108	93	114	114	119	147	178	162	194	186	100	81	57	47	29	
13	12	2	2	5	22	47	67	115	90	88	115	121	148	121	169	164	205	147	102	93	53	47	34	

AM Peak Hour ..... 11:00 to 12:00 (427 vehicles)
AM Peak Hour Factor 92.8%
PM Peak Hour ..... 17:00 to 18:00 (793 vehicles)
PM Peak Hour Factor 95.8%

08/02/02 Channel: 1 Direction: E

0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Totals
73	49	29	15	25	50	142	252	347	416	403	457	475	466	520	671	705	759	683	437	367	294	220	203	8058
38	13	10	3	8	7	24	50	93	103	102	106	115	122	131	173	169	182	192	139	111	74	53	61	
14	13	8	4	2	10	28	54	70	97	112	115	124	99	124	163	185	200	206	112	98	71	63	59	
10	13	7	2	7	15	45	72	92	90	87	126	114	131	146	168	177	188	152	96	83	58	58	50	
11	10	4	6	8	18	45	76	92	126	102	110	122	114	119	167	174	189	133	90	75	91	46	33	

AM Peak Hour ..... 11:00 to 12:00 (457 vehicles)
AM Peak Hour Factor 90.7%
PM Peak Hour ..... 17:30 to 18:30 (775 vehicles)
PM Peak Hour Factor 94.1%

24-Hour Moving Total

01:00-	7909	02:00-	7918	03:00-	7931	04:00-	7936	05:00-	7937	06:00-	7934	07:00-	7931	08:00-	7931
09:00-	7905	10:00-	7923	11:00-	7970	12:00-	8000	13:00-	8002	14:00-	7980	15:00-	7983	16:00-	8005
17:00-	8036	18:00-	8002	19:00-	7992	20:00-	7976	21:00-	7997	22:00-	8017	23:00-	8011	24:00-	8058

1-M

&±Í]ûUš¦ 08/03/02 Channel: 1 Direction: E

0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Totals
105	60	41	56	73	105	230	237	374	524	616	680	678	627	679	657	531	491	468	392	314	253	233	210	8634
37	12	12	17	19	19	35	54	71	99	137	188	183	155	184	165	134	119	116	118	99	64	63	51	
31	13	7	13	21	17	36	41	77	131	156	150	150	141	158	164	146	120	116	99	82	56	58	68	
20	14	9	16	16	22	66	61	98	124	144	160	177	172	175	171	128	128	118	78	70	68	56	43	
17	21	13	10	17	47	93	81	128	170	179	182	168	159	162	157	123	124	118	97	63	65	56	48	

AM Peak Hour ..... 11:00 to 12:00 (680 vehicles)
AM Peak Hour Factor 90.4%
PM Peak Hour ..... 14:00 to 15:00 (679 vehicles)
PM Peak Hour Factor 92.3%

24-Hour Moving Total

01:00-	8090	02:00-	8101	03:00-	8113	04:00-	8154	05:00-	8202	06:00-	8257	07:00-	8345	08:00-	8330
09:00-	8357	10:00-	8465	11:00-	8678	12:00-	8901	13:00-	9104	14:00-	9265	15:00-	9424	16:00-	9410
17:00-	9236	18:00-	8968	19:00-	8753	20:00-	8708	21:00-	8655	22:00-	8614	23:00-	8627	24:00-	8634

Sunday 08/04/02 Channel: 1 Direction: E

0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Totals
101	74	52	44	36	42	93	127	202	331	380	486	552	642	596	603	557	490	465	331	304	278	232	116	7134
27	21	12	8	6	7	18	32	47	73	78	105	154	183	150	145	145	134	108	87	77	77	62	34	
31	20	17	14	9	10	16	31	53	64	83	123	138	143	133	118	127	119	99	82	68	74	64	30	
27	17	8	13	10	7	34	27	45	74	107	135	115	156	147	193	141	120	136	90	81	72	57	27	
16	16	15	9	11	18	25	37	57	120	112	123	145	160	166	147	144	117	122	72	78	55	49	25	

AM Peak Hour ..... 11:00 to 12:00 (486 vehicles)
AM Peak Hour Factor 90.0%
PM Peak Hour ..... 13:00 to 14:00 (642 vehicles)
PM Peak Hour Factor 87.7%

24-Hour Moving Total

01:00-	8630	02:00-	8644	03:00-	8655	04:00-	8643	05:00-	8606	06:00-	8543	07:00-	8406	08:00-	8296
09:00-	8124	10:00-	7931	11:00-	7695	12:00-	7501	13:00-	7375	14:00-	7390	15:00-	7307	16:00-	7253
17:00-	7279	18:00-	7278	19:00-	7275	20:00-	7214	21:00-	7204	22:00-	7229	23:00-	7228	24:00-	7134

Volume Count Report

Location ..... Western Ave,North of Wisconsin Circle,SB
Location Code 23
County ..... Washington D.C.
Recorder Set 07/31/02 16:38
Recording Start ... 08/01/ 2 00:00
Recording End 08/05/ 2 00:00
Sample Time ..... 15 Minutes
Operator Number ... 41
Machine Number 16
Channel 1
Divide By 2
Summation ..... No
Two-Way ..... No

08/01/ 2 Channel: 1 Direction: W

0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Totals
72	51	19	17	41	139	385	716	871	709	605	577	633	608	632	611	620	715	711	485	377	347	260	150	10351
18	25	5	4	3	18	53	167	200	223	160	138	173	149	166	136	161	187	175	152	107	85	70	45	
18	11	8	3	7	37	77	174	219	198	151	165	161	165	140	154	155	168	197	106	92	110	61	40	
24	8	0	4	14	37	103	171	217	147	159	148	148	132	156	164	144	168	171	116	88	74	61	30	
12	7	6	6	17	47	152	204	235	141	135	126	151	162	170	157	160	192	168	111	90	78	68	35	

AM Peak Hour ..... 08:15 to 09:15 (894 vehicles)
AM Peak Hour Factor 95.1%
PM Peak Hour ..... 17:45 to 18:45 (735 vehicles)
PM Peak Hour Factor 93.3%

08/02/02 Channel: 1 Direction: W

0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Totals
72	38	46	17	45	138	406	654	809	708	648	639	635	612	583	610	664	707	642	471	437	303	241	203	10328
21	11	17	5	5	14	49	150	188	229	164	169	151	153	137	159	155	186	164	113	135	88	70	50	
18	9	5	4	6	35	98	154	201	181	161	162	150	148	139	139	159	154	156	132	103	79	68	53	
17	12	12	3	14	34	116	165	201	149	155	147	175	157	169	161	188	187	157	116	88	73	49	58	
16	6	12	5	20	55	143	185	219	149	168	161	159	154	138	151	162	180	165	110	111	63	54	42	

AM Peak Hour ..... 08:15 to 09:15 (850 vehicles)
AM Peak Hour Factor 92.8%
PM Peak Hour ..... 17:00 to 18:00 (707 vehicles)
PM Peak Hour Factor 94.5%

24-Hour Moving Total

01:00- 10351	02:00- 10338	03:00- 10365	04:00- 10365	05:00- 10369	06:00- 10368	07:00- 10389	08:00- 10327
09:00- 10265	10:00- 10264	11:00- 10307	12:00- 10369	13:00- 10371	14:00- 10375	15:00- 10326	16:00- 10325
17:00- 10369	18:00- 10361	19:00- 10292	20:00- 10278	21:00- 10338	22:00- 10294	23:00- 10275	24:00- 10328

&±Í]ùUš¡ 08/03/02 Channel: 1 Direction: W

0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Totals
93	45	33	21	31	58	101	228	376	485	647	864	776	821	820	811	757	753	610	524	496	385	334	251	10320
35	19	11	6	4	11	19	35	79	111	144	185	171	208	184	205	225	214	152	142	123	104	86	79	
15	10	7	5	6	9	26	56	72	117	152	229	201	237	229	201	189	205	174	142	129	111	88	59	
23	9	6	4	9	17	29	60	98	120	189	217	220	203	215	192	164	168	155	119	145	100	86	61	
20	7	9	6	12	21	27	77	127	137	162	233	184	173	192	213	179	166	129	121	99	70	74	52	

AM Peak Hour ..... 11:00 to 12:00 (864 vehicles)
AM Peak Hour Factor 92.7%
PM Peak Hour ..... 12:30 to 13:30 (849 vehicles)
PM Peak Hour Factor 89.6%

24-Hour Moving Total

01:00-	10349	02:00-	10356	03:00-	10343	04:00-	10347	05:00-	10333	06:00-	10253	07:00-	9948	08:00-	9522
09:00-	9089	10:00-	8866	11:00-	8865	12:00-	9090	13:00-	9231	14:00-	9440	15:00-	9677	16:00-	9878
17:00-	9971	18:00-	10017	19:00-	9985	20:00-	10038	21:00-	10097	22:00-	10179	23:00-	10272	24:00-	10320

Sunday 08/04/02 Channel: 1 Direction: W

0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Totals
155	83	84	31	31	25	82	133	237	343	465	605	686	673	665	660	719	701	648	524	427	420	228	173	8798
55	24	18	11	8	10	18	29	50	74	135	101	197	177	162	140	186	211	155	139	103	132	60	50	
35	11	27	4	7	7	14	32	44	64	103	151	171	150	175	175	165	160	169	138	98	103	53	47	
42	24	24	10	7	6	25	41	71	88	104	209	155	176	172	138	190	176	165	134	112	108	69	46	
23	24	15	6	9	2	25	31	72	117	123	144	163	170	156	207	178	154	159	113	114	77	46	30	

AM Peak Hour ..... 11:00 to 12:00 (605 vehicles)
AM Peak Hour Factor 72.4%
PM Peak Hour ..... 15:45 to 16:45 (748 vehicles)
PM Peak Hour Factor 90.3%

24-Hour Moving Total

01:00-	10382	02:00-	10420	03:00-	10471	04:00-	10481	05:00-	10481	06:00-	10448	07:00-	10429	08:00-	10334
09:00-	10195	10:00-	10053	11:00-	9871	12:00-	9612	13:00-	9522	14:00-	9374	15:00-	9219	16:00-	9068
17:00-	9030	18:00-	8978	19:00-	9016	20:00-	9016	21:00-	8947	22:00-	8982	23:00-	8876	24:00-	8798

Volume Count Report

Generated by MSC3000 Version 2.01 Copyright 1990-1992 Mitron Systems Corporation

Location ..... 43rd Street, South of Military Rd., NB
Location Code 41
County ..... Washington D.C.
Recorder Set 07/31/02 14:07
Recording Start ... 08/01/ 2 00:00
Recording End 08/05/ 2 00:00
Sample Time ..... 60 Minutes
Operator Number ... 41
Machine Number 11
Channel 1
Divide By 2
Summation ..... No
Two-Way ..... No

08/01/ 2 Channel: 1 Direction: N

0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Totals
2	2	1	4	4	17	25	63	77	88	81	30	76	68	66	83	81	94	83	83	75	40	21	12	1176

AM Peak Hour ..... 09:00 to 10:00 (88 vehicles)
PM Peak Hour ..... 17:00 to 18:00 (94 vehicles)

08/02/02 Channel: 1 Direction: N

0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Totals
2	3	8	3	8	9	10	36	70	73	62	54	49	61	69	40	84	93	65	104	80	82	61	41	1167

AM Peak Hour ..... 09:00 to 10:00 (73 vehicles)
PM Peak Hour ..... 19:00 to 20:00 (104 vehicles)

24-Hour Moving Total

01:00-	1176	02:00-	1177	03:00-	1184	04:00-	1183	05:00-	1187	06:00-	1179	07:00-	1164	08:00-	1137
09:00-	1130	10:00-	1115	11:00-	1096	12:00-	1120	13:00-	1093	14:00-	1086	15:00-	1089	16:00-	1046
17:00-	1049	18:00-	1048	19:00-	1030	20:00-	1051	21:00-	1056	22:00-	1098	23:00-	1138	24:00-	1167

&±Í]ùUš¡ 08/03/02 Channel: 1 Direction: N

0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Totals
15	13	11	3	8	8	16	26	45	61	93	99	72	106	121	98	93	89	106	90	73	54	47	21	1368

AM Peak Hour ..... 11:00 to 12:00 (99 vehicles)
PM Peak Hour ..... 14:00 to 15:00 (121 vehicles)

24-Hour Moving Total

01:00-	1180	02:00-	1190	03:00-	1193	04:00-	1193	05:00-	1193	06:00-	1192	07:00-	1198	08:00-	1188
09:00-	1163	10:00-	1151	11:00-	1182	12:00-	1227	13:00-	1250	14:00-	1295	15:00-	1347	16:00-	1405
17:00-	1414	18:00-	1410	19:00-	1451	20:00-	1437	21:00-	1430	22:00-	1402	23:00-	1388	24:00-	1368

Sunday 08/04/02 Channel: 1 Direction: N

0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Totals
20	14	5	4	4	8	9	14	21	40	59	66	73	96	96	99	101	69	66	58	43	35	21	9	1030

AM Peak Hour ..... 11:00 to 12:00 (66 vehicles)
PM Peak Hour ..... 16:00 to 17:00 (101 vehicles)

24-Hour Moving Total

01:00-	1373	02:00-	1374	03:00-	1368	04:00-	1369	05:00-	1365	06:00-	1365	07:00-	1358	08:00-	1346
09:00-	1322	10:00-	1301	11:00-	1267	12:00-	1234	13:00-	1235	14:00-	1225	15:00-	1200	16:00-	1201
17:00-	1209	18:00-	1189	19:00-	1149	20:00-	1117	21:00-	1087	22:00-	1068	23:00-	1042	24:00-	1030

TABLE 5

SUMMARY OF CAPACITY ANALYSIS RESULTS – PROJECTED YEAR 2006 WEEKEND VS. WEEKDAY TRAFFIC CONDITONS

	Weekend	Weekday
Intersection	**PM Peak**	**PM Peak**
5) Western Ave @ Wisconsin Circle*	B 18.6	C 32.0
6) Western Ave @ Military Road*	C 24.0	C 33.7
7) Wisconsin Ave @ Western Ave*	C 28.2	C 34.1
8) Military Rd @ 43rd St**	C 16.7	C 21.8

xx = Level of Service
000 Average Delay

*Signalized intersection. Results describe the collective operation of all approaches.

**Unsignalized intersection. Results are for the approach with the greatest average delay (in seconds).

Source: O.R. George & Associates.

The data presented in Table 5 indicates that the study area road network would continue to operate at acceptable Levels of Service on weekends, upon build-out of the subject PUD. The data also shows that the weekend operational situation would be somewhat comparable with the projected weekday situation. This can perhaps be expected, given the density of retail and entertainment uses within the Friendship Heights area. The results would also be in keeping with the City's Ward 3 Plan, which recommends Level of Service C as the minimum standard. These findings show that the proposed development would not have an appreciable adverse impact on the study area road network, or on the use of adjacent properties on weekends. It is again noted that the City's criteria for evaluating the adequacy of roadway/transportation facilities, is weekday peak hour traffic conditions. As such, no off-site roadway improvements would be required to accommodate the projected weekend trip generation for the proposed development.

4.0 PARKING ANALYSIS – CURRENT DEVELOPMENT PROPOSAL

As noted earlier, the current proposal calls for the development of a maximum of 215 apartments and a 3,000 SF day care center on the Washington Clinic site. The development plan also proposes the rezoning of the subject site from R-5-B/R-2 to R-5-D. The City's parking ratio requirements for the proposed land uses and zoning category are as follows:

Land Use	No. of Spaces Required
• Apartment	1 per 3 apartment units
• Day Care Center	1 per every 4 teachers and other employees

Based on the above, the required parking spaces are developed in the table following. The parking proposed for the subject development is also shown to facilitate comparison.

Land Use	Required Parking	Proposed Parking
• Apartment (215 Units)	72	237
• Day Care Center (10 Employees)	3	5
Total	**75**	**242**

The above table indicates a parking ratio of approximately 1.1 spaces per apartment unit. This exceeds the required ratio of 0.33 required by the City's Municipal Regulations, by a factor of 3.3. Based on comments provided by residents of the adjacent Friendship Heights community, further analyses were undertaken to determine the appropriateness of the proposed parking supply. These analyses were based on the following:

a) The most current (1990) US Census Data records, regarding vehicle availability within the Census Tract incorporating the Friendships Heights area; and

b) Parking usage data obtained for two (2) comparable land use developments within the City, and one (1) within the Bethesda area of Montgomery County, Maryland.

The subject site is located within Census Tract 11. The adjacent areas to the north and south along Western Avenue lie within Census Tracts 14.1 and 10.1, respectively. The *vehicle availability* ratios for *occupied housing units* within these Census Tracts were determined to be as follows:

Tract	Vehicle Availability Ratio
• No. 11 (including subject site)	1.3
• No. 14.1 (North of #11)	1.1
• No. 10.1 (South of #11)	1.4
Total Area	**1.3**

Based on the above, the proposed development could generate the need for 280+ parking spaces. However, this projection is not realistic, based on the following factors:

a) **Census Data Limitations.** The available census records relate "vehicle availability" to "occupied housing units". The records do not classify vehicle availability by apartment units, apartment units within varying distances of Metrorail/Metrobus Stations, etc., which would have specific application to the proposed development.

b) **Proximity to Transit Facilities.** The proposed development would be located immediately adjacent to the Friendship Heights Metrorail/Metrobus Station. The use of this facility by the prospective users of the proposed development is projected to be in the range of sixty percent (60%), resulting in a significant reduction in parking demand.

c) **Inconsistency with City Plans and Policies.** The parking demand ratio derived from the Census Data would be inconsistent with the recommendations of the Ward 3 Plan as well as the Transit Oriented Development policies of the City. These stipulations call for the reduction of parking, as a means of increasing transit usage and reducing single-occupant vehicle trips and related traffic congestion.

As noted earlier, parking usage surveys were undertaken to determine the parking demand ratios for three (3) comparable land use developments. These developments are as follows:

a) **Saratoga Apartments:** This development is located at 4601 Connecticut Avenue, NW, Washington, DC. This location is approximately three (3) blocks away from the Van Ness Metrorail Station. The development consists of 377 apartment units, and is provided with 198 on-site garage parking spaces.

b) **Park Connecticut Apartments:** This development is located at 4411 Connecticut Avenue, NW. Washington, DC, within a block from the Van Ness Metrorail Station. This development consists of 142 apartments which are served by 127 on-site garage parking spaces.

c) **The Chase Apartment Complex:** This development is situated at 7500 Woodmont Avenue, Bethesda, Maryland. The site is situated immediately adjacent to the Bethesda Metrorail Station. The complex consists of 377 apartment units and 395 on-site garage parking spaces.

The peak parking usage characteristics for the residential facilities noted above were used to determine the parking supply and demand ratios for these developments. These ratios are developed in the Table 6 below.

TABLE 6

PARKING SUPPLY AND DEMAND RATIOS - COMPARABLE APARTMENT DEVELOPMENTS

Development	Apt. Density	Parking Supply	Supply Ratio*	Peak Parking Demand	Demand Ratio**
a) Saratoga Apartments	377	198	0.52	194	0.51
b) Park Connecticut Apartments	142	127	0.89	94	0.66
c) The Chase Apt. Complex	377	395	1.05	387	0.98
• Average (DC Dev.s)	260	163	0.63	144	0.55
• Average (All Dev.s)	299	240	0.80	225	0.75

* Parking supply per apartment unit.

** Peak parking demand per apartment unit.

Source: The Saratoga Apartments, Park Connecticut Apartments and the Chase Apartment Complex site managers, and O. R. George & Associates.

The above table shows that the average parking supply and demand ratios for the developments located within the City, or for all three (3) developments, are significantly lower than the ratio of 1.1 spaces per apartment unit proposed for the subject PUD. In addition, the ratios confirm that the parking ratio indications of the 1990 U.S. Census Records are not applicable to the proposed development.

Based on the above, it is concluded that the proposed parking for the subject PUD would be more than adequate. This provision would easily accommodate projected demand (including visitor trips), and would prevent overflow onto neighboring streets.

5.0 TRANSPORTATION MANAGEMENT PLAN

The traffic analyses presented earlier, have all demonstrated the negligible traffic impacts of the proposed development. However, in keeping with City policies regarding proposed large tract developments, though unusual for residential projects, the Applicant has developed a Transportation Management Plan (TMP) for implementation at the subject development. This plan includes a mix of strategies and measures, which would reduce the single-occupant vehicle trips generated by the proposed PUD, during weekday and weekend peak travel periods.

Typically, a TMP is not required, or provided, for residential land uses. However, the subject TMP was developed in accordance with the Federal Transportation Management Program Handbook (1998), and reflects discussions held with appropriate staff of the Metropolitan Washington Council of Governments (COG) and the Washington Metropolitan Area Transit Authority (WMATA). The Plan also considered the subject site's favorable location adjacent to the Friendship Heights Metrorail/Metrobus Station, as well as a number of significant employment and retail land uses. The proposed TMP strategies and measures are as follows:

- **Transit and Ridesharing Dissemination Services:** The Applicant has indicated that the prospective management company will maintain an on-site transit and ridesharing information program. This program will include the provision of schedules, etc., for Metro bus and rail services, as well as for other local and regional transit services (MARC, AMTRAK, VRE, The Bus, Ride On, Fairfax Connector, etc.). The program will also include activities which match residents seeking to rideshare to/from work, using a single vehicle. Transit and ridership information will also be provided on the development's website, with links to other relevant transit-provider websites.
- **Car-Sharing Services:** Car sharing is an innovative program provided at selected Metrorail Stations by WMATA in partnership with Flexcar (a national car-sharing company). Car sharing allows Metro users to share the ownership and use of vehicles in undertaking various trips on an as-needed basis, to areas not easily accessible via transit. This program is intended to reduce the need for Metro transit users to own personal vehicles. It is expected that that this service would reduce roadway volumes and increase transit ridership. The Applicant plans to provide car-sharing services with the use of the proposed parking garage.
- **Bicycle Racks:** The Applicant plans to provide these facilities within the proposed parking garage, to encourage the use of this mode. Details regarding the location and number of these facilities are shown in the development site plan.

The traffic studies conducted in support of the Washington Clinic PUD have assumed a modal split of 65% for transit and other alternative travel modes. It is estimated that an effective implementation of the TMP measures noted above could increase the modal split to 70-75%. This factor would further reduce the projected site trip generation, parking demand and related impacts.

6.0 TRAFFIC MITIGATION – WISCONSIN AVENUE @ WESTERN AVENUE

The Wisconsin Avenue/Western Avenue intersection was included in the study area network considered in the submitted traffic study, for evaluating the potential traffic impacts of the proposed Washington Clinic site development. Wisconsin Avenue is a major regional route connecting the Friendship Heights area to the City's Downtown and suburban areas within the State of Maryland. Western Avenue separates the District of Columbia from Montgomery County, Maryland. The subject intersection can be considered the "nucleus" of the Friendship Heights area which is a hub of employment, commercial/retail, residential

and institutional activities. It is also noted that the Friendship Heights Metrorail and Metrobus Station is located within the northeastern quadrant of the intersection. Based on these factors, the Wisconsin Avenue/Western Avenue intersection currently serves significant levels of vehicular and pedestrian traffic volumes.

The submitted traffic study indicates that the subject intersection operates at Level-of-Service C under current roadway and traffic conditions. However, under the year 2006 traffic conditions, (including several background/planned developments, regional traffic growth and the proposed development) the intersection is projected to operate at Level-of Service D, during the morning peak hour, with or without the proposed development. As noted on page 7 of the previous study, the District Department of Transportation considers Level-of-Service D as the minimum acceptable standard. However, the City's Ward 3 Plan, which covers the subject development site, recommends Level-of-Service C as the minimum planning standard for the area intersections.

Considering the above, further field investigations and analyses were undertaken to determine the improvements that could be implemented to achieve Level-of-Service C or better. The analysis results show that "***modification of the signal phasing and timing***" would be quite effective, considering the future (year 2006) traffic conditions, including the proposed Washington Clinic PUD. This is shown in Table 7.

TABLE 7

COMPARATIVE CAPACITY ANALYSIS RESULTS FOR YEAR 2006 - WISCONSIN AVENUE @ WESTERN AVENUE INTERSECTION

	AM Peak Hour		PM Peak Hour	
Geometric Conditions	**Level of Service**	**Average (Sec./Veh.)**	**Level of Service**	**Average (Sec./Veh.)**
- Existing	D	37.6	C	34.1
- With signal modification	C	34.1	C	20.2

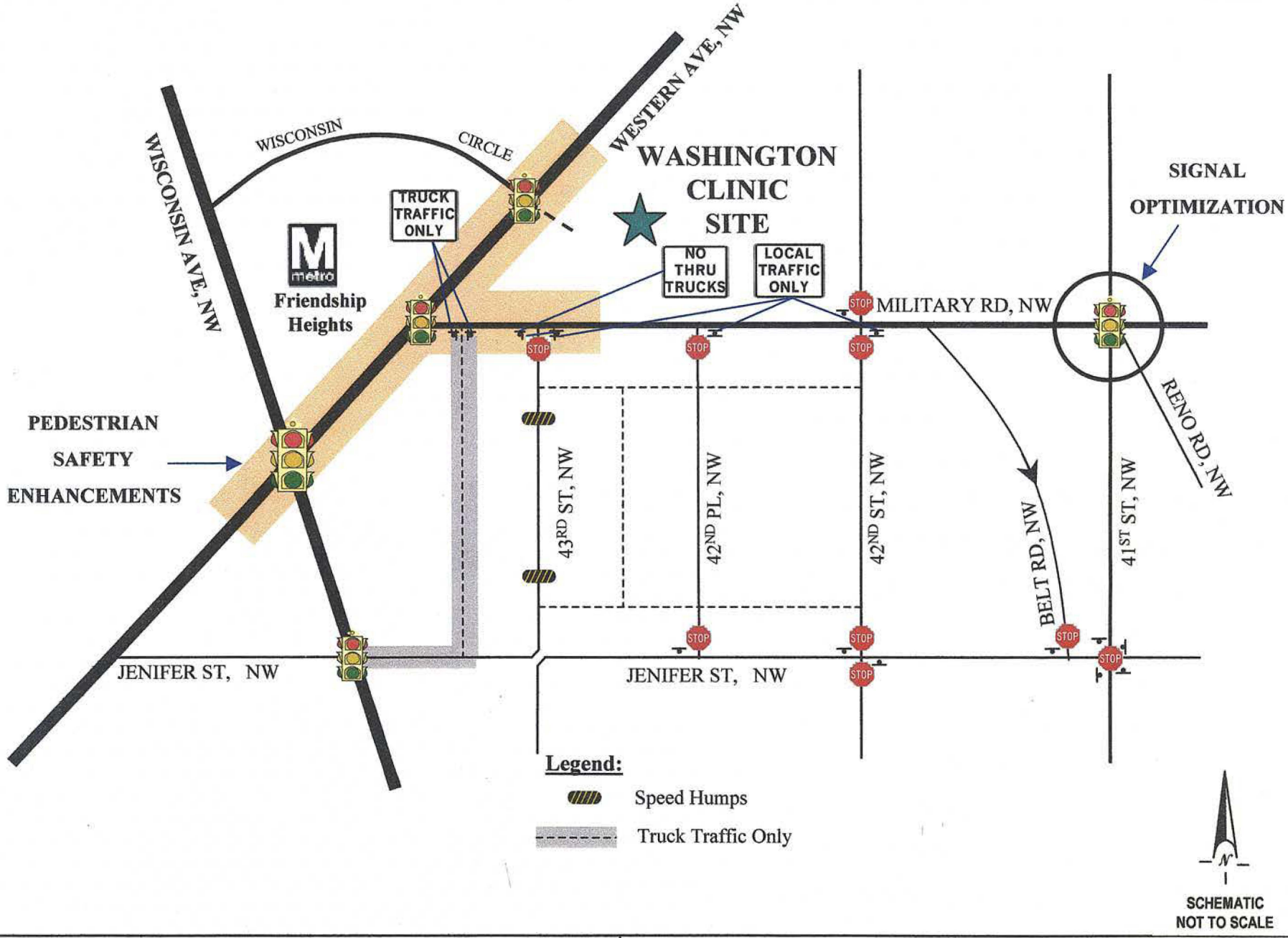
Source: O. R. George & Associates.

The capacity analysis worksheets for the projected year 2006 morning and afternoon peak hour situations, which reflect the above-noted signalization improvements, are included as Attachments 7-A and 7-B, respectively. For ease of comparison, the analysis worksheets extracted from the submitted traffic study, are included as Attachments 7-C and 7-D.

We trust that the above satisfies your requirements. Should you have any questions, please let us know. Thank you.

ORG/CEE/tdj

Attachments: As noted.



O. R. GEORGE &ASSOCIATES, INC.
Traffic Engineers - Transportation Planners

EXHIBIT 6:
RECOMMENDED TRAFFIC MITIGATION MEASURES
Washington Clinic Neighborhood Mitigation Study, Northwest Washington, DC

ATTACHMENT

1

MECHANICAL TRAFFIC VOLUME
COUNT REPORTS

Volume Count Report

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Location ..... Wisconsin Ave., South of Western Ave.,NB
Location Code 51
County ..... Washington D.C.
Recorder Set 07/24/02 15:39
Recording Start ... 07/25/ 2 00:00
Recording End 07/29/ 2 00:00
Sample Time ..... 15 Minutes
Operator Number ... 41
Machine Number 26
Channel 1
Divide By 2
Summation ..... No
Two-Way ..... No

Thursday 07/25/ 2 Channel: 1 Direction: N

0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Totals
194	150	92	61	55	150	319	580	759	793	702	874	958	968	976	985	1096	1107	1098	932	747	667	551	376	15190
67	38	40	24	13	32	56	117	152	196	162	199	239	249	243	238	292	269	292	228	193	172	162	104	
51	33	22	12	9	34	65	146	196	207	198	216	220	221	251	248	267	291	285	237	203	170	158	107	
44	40	22	14	8	35	98	151	196	228	153	225	261	243	224	242	263	264	265	234	179	161	122	89	
32	39	8	11	25	49	100	166	215	162	189	234	238	255	258	257	274	283	256	233	172	164	109	76	

AM Peak Hour ..... 11:00 to 12:00 (874 vehicles)
AM Peak Hour Factor 93.4%
PM Peak Hour ..... 17:15 to 18:15 (1130 vehicles)
PM Peak Hour Factor 96.7%

Friday 07/26/02 Channel: 1 Direction: N

0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Totals
269	206	163	78	75	164	287	570	802	825	819	857	915	828	937	969	1131	1081	1082	891	872	784	641	593	15839
81	55	60	23	11	28	55	107	197	221	178	209	243	221	244	228	271	257	309	246	200	217	152	167	
74	53	53	25	26	43	58	143	196	219	189	205	230	157	231	227	273	246	261	252	216	199	157	171	
63	45	31	17	20	30	67	157	191	205	202	205	213	237	236	261	317	269	263	156	243	186	172	132	
51	53	19	13	18	63	107	163	218	180	250	238	229	213	226	253	270	309	249	237	213	182	160	123	

AM Peak Hour ..... 10:45 to 11:45 (869 vehicles)
AM Peak Hour Factor 86.9%
PM Peak Hour ..... 17:30 to 18:30 (1148 vehicles)
PM Peak Hour Factor 92.9%

24-Hour Moving Total

01:00- 15265	02:00- 15321	03:00- 15392	04:00- 15409	05:00- 15429	06:00- 15443	07:00- 15411	08:00- 15401
09:00- 15444	10:00- 15476	11:00- 15593	12:00- 15576	13:00- 15533	14:00- 15393	15:00- 15354	16:00- 15338
17:00- 15373	18:00- 15347	19:00- 15331	20:00- 15290	21:00- 15415	22:00- 15532	23:00- 15622	24:00- 15839

1-A

Saturday 07/27/02 Channel: 1 Direction: N

0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Totals
401	261	273	171	113	89	157	226	303	537	677	812	912	919	928	965	943	965	898	810	735	698	603	633	14029
114	86	59	51	36	25	33	50	61	105	146	189	222	220	236	212	233	233	246	231	190	203	120	191	
119	63	66	47	37	20	29	49	58	126	172	220	207	243	245	239	254	251	223	235	159	173	148	135	
89	59	70	47	22	17	51	51	95	145	164	180	248	220	222	255	224	245	198	137	206	159	180	165	
79	53	78	26	18	27	44	76	89	161	195	223	235	236	225	259	232	236	231	207	180	163	155	142	

AM Peak Hour ..... 11:00 to 12:00 (812 vehicles)
AM Peak Hour Factor 91.0%
PM Peak Hour ..... 15:30 to 16:30 (1001 vehicles)
PM Peak Hour Factor 96.6%

24-Hour Moving Total

01:00- 15971	02:00- 16026	03:00- 16136	04:00- 16229	05:00- 16267	06:00- 16192	07:00- 16062	08:00- 15718
09:00- 15219	10:00- 14931	11:00- 14789	12:00- 14744	13:00- 14741	14:00- 14832	15:00- 14823	16:00- 14819
17:00- 14631	18:00- 14515	19:00- 14331	20:00- 14250	21:00- 14113	22:00- 14027	23:00- 13989	24:00- 14029

Sunday 07/28/02 Channel: 1 Direction: N

0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Totals
454	345	319	239	115	75	97	144	205	326	503	611	830	903	783	834	866	856	743	633	568	509	426	308	11692
118	107	69	102	30	15	19	21	40	72	102	130	183	231	214	205	230	216	200	189	131	130	133	80	
121	84	76	57	30	23	27	34	58	59	101	153	209	219	194	222	259	202	157	157	141	149	105	91	
116	87	67	43	24	15	21	46	45	96	141	160	219	219	168	191	167	221	169	122	141	129	94	87	
99	67	107	37	31	22	30	43	62	99	159	168	219	234	207	216	210	217	217	165	155	101	94	50	

AM Peak Hour ..... 11:00 to 12:00 (611 vehicles)
AM Peak Hour Factor 90.9%
PM Peak Hour ..... 13:00 to 14:00 (903 vehicles)
PM Peak Hour Factor 96.5%

24-Hour Moving Total

01:00- 14082	02:00- 14166	03:00- 14212	04:00- 14280	05:00- 14282	06:00- 14268	07:00- 14208	08:00- 14126
09:00- 14028	10:00- 13817	11:00- 13643	12:00- 13442	13:00- 13360	14:00- 13344	15:00- 13199	16:00- 13068
17:00- 12991	18:00- 12882	19:00- 12727	20:00- 12550	21:00- 12383	22:00- 12194	23:00- 12017	24:00- 11692

Volume Count Report

Generated by MSC3000 Version 2.01

Location ..... Wisconsin Ave., South of Western Ave.,SB
Location Code 53
County ..... Washington D.C.
Recorder Set 07/24/02 15:31
Recording Start ... 07/25/ 2 00:00
Recording End 07/29/ 2 00:00
Sample Time ..... 15 Minutes
Operator Number ... 41
Machine Number 51
Channel 1
Divide By 2
Summation ..... No
Two-Way ..... No

Thursday 07/25/ 2 Channel: 1 Direction: S

0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Totals
258	134	71	77	104	232	581	1279	1531	1097	900	958	983	916	978	892	917	991	1084	951	839	792	644	414	17623
82	46	33	19	16	55	93	236	400	302	205	232	217	225	221	211	217	231	236	256	222	200	191	114	
55	38	13	18	18	46	117	325	363	298	236	209	255	230	237	240	238	244	242	235	213	217	177	126	
43	27	9	24	33	57	177	344	372	300	229	260	225	234	262	247	218	254	336	218	198	204	135	94	
78	23	16	16	37	74	194	374	396	197	230	257	286	227	258	194	244	262	270	242	206	171	141	80	

AM Peak Hour ..... 08:00 to 09:00 (1531 vehicles)
AM Peak Hour Factor 95.7%
PM Peak Hour ..... 18:15 to 19:15 (1104 vehicles)
PM Peak Hour Factor 82.1%

Friday 07/26/02 Channel: 1 Direction: S

0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Totals
333	271	82	73	92	220	550	1126	1365	1080	895	929	832	770	787	782	859	1012	971	844	721	701	611	634	16540
91	129	26	21	19	47	87	223	326	257	242	229	227	160	182	180	210	252	255	214	217	184	154	190	
77	72	19	13	14	37	120	265	340	307	196	238	186	193	214	190	212	251	263	244	161	181	162	171	
62	36	24	26	21	54	157	292	347	297	214	214	212	211	203	216	210	226	221	191	174	171	165	156	
103	34	13	13	38	82	186	346	352	219	243	248	207	206	188	196	227	283	232	195	169	165	130	117	

AM Peak Hour ..... 08:00 to 09:00 (1365 vehicles)
AM Peak Hour Factor 96.9%
PM Peak Hour ..... 17:30 to 18:30 (1027 vehicles)
PM Peak Hour Factor 90.7%

24-Hour Moving Total

01:00- 17698	02:00- 17835	03:00- 17846	04:00- 17842	05:00- 17830	06:00- 17818	07:00- 17787	08:00- 17634
09:00- 17468	10:00- 17451	11:00- 17446	12:00- 17417	13:00- 17266	14:00- 17120	15:00- 16929	16:00- 16819
17:00- 16761	18:00- 16782	19:00- 16669	20:00- 16562	21:00- 16444	22:00- 16353	23:00- 16320	24:00- 16540

Saturday 07/27/02 Channel: 1 Direction: S

0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Totals
346	268	195	126	85	103	148	280	357	523	651	775	874	763	975	880	810	389	698	850	753	744	717	656	12966
99	78	58	31	23	26	23	70	84	108	152	187	248	235	218	225	220	133	147	219	212	188	179	180	
86	76	53	32	25	17	35	72	65	132	161	206	199	212	250	214	194	142	95	205	187	190	188	180	
86	44	48	33	17	30	47	75	102	129	157	188	187	174	247	224	215	70	221	213	178	183	178	144	
75	70	36	30	20	30	43	63	106	154	181	194	240	142	260	217	181	44	235	213	176	183	172	152	

AM Peak Hour ..... 11:00 to 12:00 (775 vehicles)
AM Peak Hour Factor 94.1%
PM Peak Hour ..... 14:15 to 15:15 (982 vehicles)
PM Peak Hour Factor 94.4%

24-Hour Moving Total

01:00- 16553	02:00- 16550	03:00- 16663	04:00- 16716	05:00- 16709	06:00- 16592	07:00- 16190	08:00- 15344
09:00- 14336	10:00- 13779	11:00- 13535	12:00- 13381	13:00- 13423	14:00- 13416	15:00- 13604	16:00- 13702
17:00- 13653	18:00- 13030	19:00- 12757	20:00- 12763	21:00- 12795	22:00- 12838	23:00- 12944	24:00- 12966

Sunday 07/28/02 Channel: 1 Direction: S

0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Totals
512	336	232	129	88	68	113	176	322	429	544	512	688	744	810	826	815	792	786	610	581	534	432	313	11392
163	92	78	32	26	20	23	37	55	90	113	94	153	144	206	192	212	166	199	178	154	121	125	83	
133	102	61	37	13	14	24	37	73	102	141	129	177	206	199	189	191	200	190	145	142	138	135	92	
99	78	46	37	19	17	32	53	94	88	146	130	161	198	201	204	177	205	193	151	147	146	82	73	
117	64	47	23	30	17	34	49	100	149	144	159	197	196	204	241	235	221	204	136	138	129	90	65	

AM Peak Hour ..... 09:45 to 10:45 (549 vehicles)
AM Peak Hour Factor 92.1%
PM Peak Hour ..... 15:30 to 16:30 (848 vehicles)
PM Peak Hour Factor 88.0%

24-Hour Moving Total

01:00- 13132	02:00- 13200	03:00- 13237	04:00- 13240	05:00- 13243	06:00- 13208	07:00- 13173	08:00- 13069
09:00- 13034	10:00- 12940	11:00- 12833	12:00- 12570	13:00- 12384	14:00- 12365	15:00- 12200	16:00- 12146
17:00- 12151	18:00- 12554	19:00- 12642	20:00- 12402	21:00- 12230	22:00- 12020	23:00- 11735	24:00- 11392

Volume Count Report

Generated by MSC3000 Version 2.01 Copyright 1990-1992 Mitron Systems Corporation

Location ..... Wisconsin Circle,West of Western Ave, WB
Location Code 14
County ..... Montgomery County
Recorder Set 07/24/02 13:33
Recording Start ... 07/25/ 2 00:00
Recording End 07/29/ 2 00:00
Sample Time ..... 15 Minutes
Operator Number ... 41
Machine Number 16
Channel 1
Divide By 4
Summation ..... No
Two-Way ..... No

Thursday 07/25/ 2 Channel: 1 Direction: W

0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Totals
23	12	10	8	10	27	79	201	332	282	197	202	208	195	229	195	232	248	282	208	121	85	70	39	3495
8	2	1	3	2	3	17	29	76	88	45	48	53	50	70	56	56	58	70	65	40	26	23	11	
6	3	3	0	3	8	17	45	86	68	43	47	52	47	46	36	57	60	70	55	30	19	20	13	
4	4	4	2	3	9	14	66	88	62	51	57	54	47	62	45	66	62	73	42	20	27	8	7	
5	3	2	3	2	7	31	61	82	64	58	50	49	51	51	58	53	68	69	46	31	13	19	8	

AM Peak Hour ..... 08:15 to 09:15 (344 vehicles)
AM Peak Hour Factor 97.7%
PM Peak Hour ..... 18:00 to 19:00 (282 vehicles)
PM Peak Hour Factor 96.6%

Friday 07/26/02 Channel: 1 Direction: W

0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Totals
20	19	5	2	8	36	76	157	251	183	140	133	148	124	130	137	167	177	199	151	93	80	53	48	2537
4	6	3	0	2	2	19	27	59	55	30	27	39	36	33	41	44	46	55	49	22	18	17	16	
3	3	0	1	1	8	13	40	59	47	36	30	36	31	27	30	41	43	50	41	27	17	8	14	
6	6	1	0	4	9	14	36	72	42	39	44	36	33	40	35	41	45	46	33	22	26	16	8	
7	4	1	1	1	17	30	54	61	39	35	32	37	24	30	31	41	43	48	28	22	19	12	10	

AM Peak Hour ..... 08:00 to 09:00 (251 vehicles)
AM Peak Hour Factor 87.2%
PM Peak Hour ..... 18:00 to 19:00 (199 vehicles)
PM Peak Hour Factor 90.5%

24-Hour Moving Total

01:00-	3492	02:00-	3499	03:00-	3494	04:00-	3488	05:00-	3486	06:00-	3495	07:00-	3492	08:00-	3448
09:00-	3367	10:00-	3268	11:00-	3211	12:00-	3142	13:00-	3082	14:00-	3011	15:00-	2912	16:00-	2854
17:00-	2789	18:00-	2718	19:00-	2635	20:00-	2578	21:00-	2550	22:00-	2545	23:00-	2528	24:00-	2537

1-E

Saturday 07/27/02 Channel: 1 Direction: W

0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Totals
32	23	9	20	27	19	32	70	124	131	149	153	164	142	170	182	137	165	138	101	86	69	65	57	2265
8	8	4	7	9	3	2	18	28	31	39	32	45	38	44	49	44	49	28	28	20	13	15	16	
6	5	0	4	6	7	5	11	35	28	31	41	52	39	41	45	37	39	41	27	19	25	17	17	
14	5	2	7	7	4	10	22	23	33	35	34	29	30	39	43	29	39	34	25	19	14	12	12	
4	5	3	2	5	5	15	19	38	39	44	46	38	35	46	45	27	38	35	21	28	17	21	12	

AM Peak Hour ..... 11:00 to 12:00 (153 vehicles)
AM Peak Hour Factor 83.2%
PM Peak Hour ..... 14:45 to 15:45 (183 vehicles)
PM Peak Hour Factor 93.4%

24-Hour Moving Total

01:00-	2549	02:00-	2553	03:00-	2557	04:00-	2575	05:00-	2594	06:00-	2577	07:00-	2533	08:00-	2446								
09:00-	2319	10:00-	2267	11:00-	2276	12:00-	2296	13:00-	2312	14:00-	2330	15:00-	2370	16:00-	2415								
17:00-	2385	18:00-	2373	19:00-	2312	20:00-	2262	21:00-	2255	22:00-	2244	23:00-	2256	24:00-	2265								

Sunday 07/28/02 Channel: 1 Direction: W

0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Totals
34	23	22	14	8	16	25	38	58	73	107	146	123	149	121	129	148	136	114	98	71	53	35	14	1755
10	5	4	4	2	3	7	10	15	16	22	37	28	46	32	36	32	42	32	30	18	14	10	3	
6	6	5	5	3	6	4	3	13	21	30	44	33	37	28	41	42	29	27	34	18	11	6	5	
7	8	6	4	0	3	5	12	14	11	21	28	34	42	29	30	43	31	35	14	15	14	9	3	
11	4	7	1	3	4	9	13	16	25	34	37	28	24	32	22	31	34	20	20	20	14	10	3	

AM Peak Hour ..... 11:00 to 12:00 (146 vehicles)
AM Peak Hour Factor 83.0%
PM Peak Hour ..... 16:15 to 17:15 (158 vehicles)
PM Peak Hour Factor 91.9%

24-Hour Moving Total

01:00-	2267	02:00-	2267	03:00-	2280	04:00-	2274	05:00-	2255	06:00-	2252	07:00-	2245	08:00-	2213								
09:00-	2147	10:00-	2089	11:00-	2047	12:00-	2040	13:00-	1999	14:00-	2006	15:00-	1957	16:00-	1904								
17:00-	1915	18:00-	1886	19:00-	1862	20:00-	1859	21:00-	1844	22:00-	1828	23:00-	1798	24:00-	1755								

Volume Count Report

Location ..... Wisconsin Circle,West of Western Ave, EB
Location Code 12
County ..... Montgomery County
Recorder Set 07/24/02 12:55
Recording Start ... 07/25/ 2 00:00
Recording End 07/29/ 2 00:00
Sample Time ..... 15 Minutes
Operator Number ... 41
Machine Number 10
Channel 1
Divide By 2
Summation ..... No
Two-Way ..... No

Thursday 07/25/ 2 Channel: 1 Direction: E

0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Totals
60	18	0	43	3	38	77	200	284	259	217	266	300	275	359	399	460	586	476	275	182	168	157	57	5159
9	11	0	33	0	6	18	35	61	70	50	64	83	74	92	85	121	166	127	83	55	37	35	28	
11	3	0	1	1	7	22	47	72	66	49	66	75	70	71	85	120	127	135	60	53	40	36	12	
39	1	0	1	2	10	14	45	70	63	52	63	69	73	113	122	94	135	114	72	30	35	22	10	
1	3	0	8	0	15	23	73	81	60	66	73	73	58	83	107	125	158	100	60	44	56	64	7	

AM Peak Hour ..... 08:15 to 09:15 (293 vehicles)
AM Peak Hour Factor 90.4%
PM Peak Hour ..... 17:00 to 18:00 (586 vehicles)
PM Peak Hour Factor 88.3%

Friday 07/26/02 Channel: 1 Direction: E

0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Totals
21	9	12	7	70	34	85	170	247	259	232	236	305	291	350	394	476	577	406	251	192	171	108	107	5010
9	2	4	4	1	1	11	32	55	68	61	65	69	88	81	86	121	149	124	69	58	45	31	19	
2	5	1	2	53	12	20	51	52	83	63	61	78	63	89	102	134	133	110	78	40	34	30	21	
7	0	7	1	5	10	31	44	67	59	55	57	90	69	91	98	104	153	92	54	46	34	19	29	
3	2	0	0	11	11	23	43	73	49	53	53	68	71	89	108	117	142	80	50	48	58	28	38	

AM Peak Hour ..... 08:30 to 09:30 (291 vehicles)
AM Peak Hour Factor 87.7%
PM Peak Hour ..... 17:00 to 18:00 (577 vehicles)
PM Peak Hour Factor 94.3%

24-Hour Moving Total

01:00-	5120	02:00-	5111	03:00-	5123	04:00-	5087	05:00-	5154	06:00-	5150	07:00-	5158	08:00-	5128
09:00-	5091	10:00-	5091	11:00-	5106	12:00-	5076	13:00-	5081	14:00-	5097	15:00-	5088	16:00-	5083
17:00-	5099	18:00-	5090	19:00-	5020	20:00-	4996	21:00-	5006	22:00-	5009	23:00-	4960	24:00-	5010

Saturday 07/27/02 Channel: 1 Direction: E

0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Totals
66	62	39	25	7	43	89	90	90	138	183	210	251	232	259	276	251	287	215	218	161	140	122	94	3548
22	10	9	4	0	4	35	25	18	33	52	53	60	52	54	83	81	66	49	74	38	30	35	22	
8	10	3	13	2	3	9	17	20	29	54	50	53	79	53	61	59	75	61	42	42	37	36	33	
22	39	24	5	3	0	29	25	19	35	39	61	70	53	66	89	63	90	48	55	40	32	31	22	
14	3	3	3	2	36	16	23	33	41	38	46	68	48	86	43	48	56	57	47	41	41	20	17	

AM Peak Hour ..... 11:00 to 12:00 (210 vehicles)
AM Peak Hour Factor 86.1%
PM Peak Hour ..... 14:45 to 15:45 (319 vehicles)
PM Peak Hour Factor 89.6%

24-Hour Moving Total

01:00-	5055	02:00-	5108	03:00-	5135	04:00-	5153	05:00-	5090	06:00-	5099	07:00-	5103	08:00-	5023
09:00-	4866	10:00-	4745	11:00-	4696	12:00-	4670	13:00-	4616	14:00-	4557	15:00-	4466	16:00-	4348
17:00-	4123	18:00-	3833	19:00-	3642	20:00-	3609	21:00-	3578	22:00-	3547	23:00-	3561	24:00-	3548

Sunday 07/28/02 Channel: 1 Direction: E

0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Totals
64	29	18	14	6	16	37	56	81	98	136	158	179	196	180	169	178	200	210	159	107	104	57	35	2487
27	11	4	5	1	2	7	11	18	17	33	25	26	48	48	47	45	53	37	46	28	24	25	14	
18	5	6	0	0	0	2	15	19	29	24	56	50	56	45	48	45	44	51	45	22	38	12	9	
7	6	5	8	0	6	13	15	24	25	33	44	46	38	43	39	42	60	71	34	28	23	10	4	
12	7	3	1	5	8	15	15	20	27	46	33	57	54	44	35	46	43	51	34	29	19	10	8	

AM Peak Hour ..... 10:45 to 11:45 (171 vehicles)
AM Peak Hour Factor 76.3%
PM Peak Hour ..... 18:15 to 19:15 (219 vehicles)
PM Peak Hour Factor 77.1%

24-Hour Moving Total

01:00-	3546	02:00-	3513	03:00-	3492	04:00-	3481	05:00-	3480	06:00-	3453	07:00-	3401	08:00-	3367
09:00-	3358	10:00-	3318	11:00-	3271	12:00-	3219	13:00-	3147	14:00-	3111	15:00-	3032	16:00-	2925
17:00-	2852	18:00-	2765	19:00-	2760	20:00-	2701	21:00-	2647	22:00-	2611	23:00-	2546	24:00-	2487

Volume Count Report

Location ..... Military Rd., East of 43rd Street, EB
Location Code 32
County ..... Washington D.C.
Recorder Set 07/31/02 14:12
Recording Start ... 08/01/ 2 00:00
Recording End 08/05/ 2 00:00
Sample Time ..... 15 Minutes
Operator Number ... 41
Machine Number 53
Channel 1
Divide By 2
Summation ..... No
Two-Way ..... No

08/01/ 2 Channel: 1 Direction: E

0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Totals
58	25	12	10	14	37	96	275	319	339	236	277	292	279	304	373	423	406	384	299	285	209	166	117	5235
15	8	4	0	2	8	16	49	69	90	59	75	84	62	77	97	106	114	113	76	86	58	54	33	
11	5	4	5	1	5	20	53	83	102	54	64	71	71	74	95	104	111	104	75	63	49	42	34	
22	6	0	2	7	11	24	77	96	72	52	67	69	71	76	91	101	82	92	70	70	56	37	30	
10	6	4	3	4	13	36	96	71	75	71	71	68	75	77	90	112	99	75	78	66	46	33	20	

AM Peak Hour ..... 08:30 to 09:30 (359 vehicles)
AM Peak Hour Factor 88.0%
PM Peak Hour ..... 16:30 to 17:30 (438 vehicles)
PM Peak Hour Factor 96.1%

08/02/02 Channel: 1 Direction: E

0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Totals
56	28	14	13	20	40	96	118	184	247	295	372	357	432	487	560	625	619	515	403	386	396	267	253	6783
18	12	7	5	4	9	14	29	33	61	78	88	86	103	125	127	151	153	150	121	119	97	72	84	
15	7	3	4	4	11	22	23	43	65	79	92	89	102	118	146	170	165	128	106	86	109	80	58	
14	4	1	2	6	9	23	31	42	62	65	99	83	109	121	130	148	149	111	92	92	94	66	53	
9	5	3	2	6	11	37	35	66	59	73	93	99	118	123	157	156	152	126	84	89	96	49	58	

AM Peak Hour ..... 11:00 to 12:00 (372 vehicles)
AM Peak Hour Factor 93.9%
PM Peak Hour ..... 16:15 to 17:15 (627 vehicles)
PM Peak Hour Factor 92.2%

24-Hour Moving Total

01:00-	5233	02:00-	5236	03:00-	5238	04:00-	5241	05:00-	5247	06:00-	5250	07:00-	5250	08:00-	5093
09:00-	4958	10:00-	4866	11:00-	4925	12:00-	5020	13:00-	5085	14:00-	5238	15:00-	5421	16:00-	5608
17:00-	5810	18:00-	6023	19:00-	6154	20:00-	6258	21:00-	6359	22:00-	6546	23:00-	6647	24:00-	6783

&±Í]ùUš¡ 08/03/02 Channel: 1 Direction: E

0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Totals
144	82	68	35	22	29	63	128	188	260	304	380	382	454	503	488	503	449	441	310	330	283	253	252	6351
47	29	13	7	5	6	13	31	36	68	81	90	88	107	129	118	140	128	100	87	73	63	77	71	
43	21	19	6	5	11	12	26	41	62	78	87	91	110	120	120	112	115	125	80	89	57	65	64	
31	16	20	12	4	8	17	34	46	67	67	108	86	115	127	127	142	105	103	64	92	75	62	62	
23	16	16	10	8	4	21	37	65	63	78	95	117	122	127	123	109	101	113	79	76	88	49	55	

AM Peak Hour ..... 11:00 to 12:00 (380 vehicles)
AM Peak Hour Factor 88.0%
PM Peak Hour ..... 15:45 to 16:45 (517 vehicles)
PM Peak Hour Factor 91.0%

24-Hour Moving Total

01:00-	6871	02:00-	6925	03:00-	6979	04:00-	7001	05:00-	7003	06:00-	6992	07:00-	6959	08:00-	6969
09:00-	6973	10:00-	6986	11:00-	6995	12:00-	7003	13:00-	7028	14:00-	7050	15:00-	7066	16:00-	6994
17:00-	6872	18:00-	6702	19:00-	6628	20:00-	6535	21:00-	6479	22:00-	6366	23:00-	6352	24:00-	6351

Sunday 08/04/02 Channel: 1 Direction: E

0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Totals
153	62	54	31	27	29	54	101	120	168	197	230	311	371	376	443	482	427	385	330	163	85	134	67	4800
56	15	14	10	8	4	10	26	30	38	46	57	88	87	94	117	111	112	104	83	71	20	30	20	
36	25	12	8	7	11	7	28	21	44	47	54	68	94	96	90	122	104	102	94	24	10	35	27	
34	8	18	6	6	8	14	19	26	44	56	69	66	89	83	105	120	109	96	73	36	37	45	15	
27	14	10	7	6	6	23	28	43	42	48	50	89	101	103	131	129	102	83	80	32	18	24	5	

AM Peak Hour ..... 11:00 to 12:00 (230 vehicles)
AM Peak Hour Factor 83.3%
PM Peak Hour ..... 15:45 to 16:45 (484 vehicles)
PM Peak Hour Factor 92.4%

24-Hour Moving Total

01:00-	6360	02:00-	6340	03:00-	6326	04:00-	6322	05:00-	6327	06:00-	6327	07:00-	6318	08:00-	6291
09:00-	6223	10:00-	6131	11:00-	6024	12:00-	5874	13:00-	5803	14:00-	5720	15:00-	5593	16:00-	5548
17:00-	5527	18:00-	5505	19:00-	5449	20:00-	5469	21:00-	5302	22:00-	5104	23:00-	4985	24:00-	4800

Volume Count Report

Location ..... Military Rd., East of 43rd Street, WB
Location Code 34
County ..... Washington D.C.
Recorder Set 07/31/02 13:59
Recording Start ... 08/01/ 2 00:00
Recording End 08/05/ 2 00:00
Sample Time ..... 15 Minutes
Operator Number ... 41
Machine Number 51
Channel 1
Divide By 2
Summation ..... No
Two-Way ..... No

08/01/ 2 Channel: 1 Direction: W

0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Totals
51	22	21	32	59	185	381	697	844	673	520	496	480	510	580	567	597	662	618	499	353	260	202	108	9417
9	8	4	4	8	33	68	153	208	167	143	126	91	114	129	152	142	121	182	129	105	61	52	38	
16	7	8	5	10	35	94	154	188	197	124	126	116	114	139	151	170	179	154	129	89	67	50	26	
12	4	8	12	14	40	80	190	243	168	116	118	117	136	148	123	137	185	143	137	84	69	54	22	
14	3	1	11	27	77	139	200	205	141	137	126	156	146	164	141	148	177	139	104	75	63	46	22	

AM Peak Hour ..... 08:00 to 09:00 (844 vehicles)
AM Peak Hour Factor 86.8%
PM Peak Hour ..... 17:15 to 18:15 (723 vehicles)
PM Peak Hour Factor 97.7%

08/02/02 Channel: 1 Direction: W

0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Totals
75	44	32	23	60	163	355	557	624	564	562	453	489	384	514	554	535	571	499	414	327	269	218	157	8443
23	13	10	10	13	20	62	135	148	126	141	91	110	97	113	113	132	123	139	118	91	66	56	37	
23	8	14	5	9	40	76	142	146	147	141	126	144	86	126	143	152	148	114	87	88	72	47	30	
14	11	3	3	10	34	106	133	181	159	123	123	129	92	123	158	109	152	127	97	87	68	52	43	
15	12	5	5	28	69	111	147	149	132	157	113	106	109	152	140	142	148	119	112	61	63	63	47	

AM Peak Hour ..... 08:00 to 09:00 (624 vehicles)
AM Peak Hour Factor 86.2%
PM Peak Hour ..... 17:15 to 18:15 (587 vehicles)
PM Peak Hour Factor 96.5%

24-Hour Moving Total

01:00-	9441	02:00-	9463	03:00-	9474	04:00-	9465	05:00-	9466	06:00-	9444	07:00-	9418	08:00-	9278
09:00-	9058	10:00-	8949	11:00-	8991	12:00-	8948	13:00-	8957	14:00-	8831	15:00-	8765	16:00-	8752
17:00-	8690	18:00-	8599	19:00-	8480	20:00-	8395	21:00-	8369	22:00-	8378	23:00-	8394	24:00-	8443

&±Í]ùUš¡ 08/03/02 Channel: 1 Direction: W

0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Totals
77	54	44	46	39	72	139	189	265	349	375	457	435	482	495	506	407	374	352	279	223	215	164	120	6158
17	10	7	13	9	9	19	45	51	78	85	102	128	82	124	125	100	111	89	74	67	46	35	32	
20	16	14	7	5	9	24	40	75	78	99	97	103	116	129	125	88	92	107	59	64	63	51	32	
18	16	17	13	10	28	49	44	74	93	100	118	92	138	124	122	110	81	84	57	48	53	43	19	
22	12	6	13	15	26	47	60	65	100	91	140	112	146	118	134	109	90	72	89	44	53	35	37	

AM Peak Hour ..... 11:00 to 12:00 (457 vehicles)
AM Peak Hour Factor 81.6%
PM Peak Hour ..... 13:30 to 14:30 (537 vehicles)
PM Peak Hour Factor 92.0%

24-Hour Moving Total

01:00-	8445	02:00-	8455	03:00-	8467	04:00-	8490	05:00-	8469	06:00-	8378	07:00-	8162	08:00-	7794
09:00-	7435	10:00-	7220	11:00-	7033	12:00-	7037	13:00-	6983	14:00-	7081	15:00-	7062	16:00-	7014
17:00-	6886	18:00-	6689	19:00-	6542	20:00-	6407	21:00-	6303	22:00-	6249	23:00-	6195	24:00-	6158

Sunday 08/04/02 Channel: 1 Direction: W

0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Totals
95	38	45	29	37	42	93	112	130	172	256	301	404	517	470	495	417	367	279	223	193	162	138	70	5085
30	15	12	7	8	7	10	17	22	31	56	64	95	136	128	116	116	99	72	63	60	48	35	18	
25	6	10	7	5	14	21	22	20	41	53	67	94	132	114	101	102	108	70	47	51	31	36	24	
24	8	14	11	11	6	29	35	41	50	73	80	97	104	123	160	117	75	62	72	42	44	29	15	
16	9	9	4	13	15	33	38	47	50	74	90	118	145	105	118	82	85	75	41	40	39	38	13	

AM Peak Hour ..... 11:00 to 12:00 (301 vehicles)
AM Peak Hour Factor 83.6%
PM Peak Hour ..... 13:00 to 14:00 (517 vehicles)
PM Peak Hour Factor 89.1%

24-Hour Moving Total

01:00-	6176	02:00-	6160	03:00-	6161	04:00-	6144	05:00-	6142	06:00-	6112	07:00-	6066	08:00-	5989
09:00-	5854	10:00-	5677	11:00-	5558	12:00-	5402	13:00-	5371	14:00-	5406	15:00-	5381	16:00-	5370
17:00-	5380	18:00-	5373	19:00-	5300	20:00-	5244	21:00-	5214	22:00-	5161	23:00-	5135	24:00-	5085

Volume Count Report

Location ..... Western Ave,North of Wisconsin Circle,NB
Location Code 21
County ..... Washington D.C.
Recorder Set 07/31/02 16:53
Recording Start ... 08/01/ 2 00:00
Recording End 08/05/ 2 00:00
Sample Time ..... 15 Minutes
Operator Number ... 41
Machine Number 29
Channel 1
Divide By 2
Summation ..... No
Two-Way ..... No

08/01/ 2 Channel: 1 Direction: E

0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Totals
60	40	16	10	24	53	145	252	373	398	356	427	473	488	517	649	674	793	693	453	346	274	226	156	7896
15	12	6	3	4	5	22	46	65	92	93	96	119	115	135	156	174	187	171	123	98	85	82	51	
16	9	1	2	4	15	38	57	93	108	82	102	119	106	114	146	174	207	189	128	74	79	50	42	
16	7	7	3	11	11	38	82	100	108	93	114	114	119	147	178	162	194	186	100	81	57	47	29	
13	12	2	2	5	22	47	67	115	90	88	115	121	148	121	169	164	205	147	102	93	53	47	34	

AM Peak Hour ..... 11:00 to 12:00 (427 vehicles)
AM Peak Hour Factor 92.8%
PM Peak Hour ..... 17:00 to 18:00 (793 vehicles)
PM Peak Hour Factor 95.8%

08/02/02 Channel: 1 Direction: E

0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Totals
73	49	29	15	25	50	142	252	347	416	403	457	475	466	520	671	705	759	683	437	367	294	220	203	8058
38	13	10	3	8	7	24	50	93	103	102	106	115	122	131	173	169	182	192	139	111	74	53	61	
14	13	8	4	2	10	28	54	70	97	112	115	124	99	124	163	185	200	206	112	98	71	63	59	
10	13	7	2	7	15	45	72	92	90	87	126	114	131	146	168	177	188	152	96	83	58	58	50	
11	10	4	6	8	18	45	76	92	126	102	110	122	114	119	167	174	189	133	90	75	91	46	33	

AM Peak Hour ..... 11:00 to 12:00 (457 vehicles)
AM Peak Hour Factor 90.7%
PM Peak Hour ..... 17:30 to 18:30 (775 vehicles)
PM Peak Hour Factor 94.1%

24-Hour Moving Total

01:00-	7909	02:00-	7918	03:00-	7931	04:00-	7936	05:00-	7937	06:00-	7934	07:00-	7931	08:00-	7931
09:00-	7905	10:00-	7923	11:00-	7970	12:00-	8000	13:00-	8002	14:00-	7980	15:00-	7983	16:00-	8005
17:00-	8036	18:00-	8002	19:00-	7992	20:00-	7976	21:00-	7997	22:00-	8017	23:00-	8011	24:00-	8058

1-M

&±Í]ûUš¦ 08/03/02 Channel: 1 Direction: E

0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Totals
105	60	41	56	73	105	230	237	374	524	616	680	678	627	679	657	531	491	468	392	314	253	233	210	8634
37	12	12	17	19	19	35	54	71	99	137	188	183	155	184	165	134	119	116	118	99	64	63	51	
31	13	7	13	21	17	36	41	77	131	156	150	150	141	158	164	146	120	116	99	82	56	58	68	
20	14	9	16	16	22	66	61	98	124	144	160	177	172	175	171	128	128	118	78	70	68	56	43	
17	21	13	10	17	47	93	81	128	170	179	182	168	159	162	157	123	124	118	97	63	65	56	48	

AM Peak Hour ..... 11:00 to 12:00 (680 vehicles)
AM Peak Hour Factor 90.4%
PM Peak Hour ..... 14:00 to 15:00 (679 vehicles)
PM Peak Hour Factor 92.3%

24-Hour Moving Total

01:00-	8090	02:00-	8101	03:00-	8113	04:00-	8154	05:00-	8202	06:00-	8257	07:00-	8345	08:00-	8330
09:00-	8357	10:00-	8465	11:00-	8678	12:00-	8901	13:00-	9104	14:00-	9265	15:00-	9424	16:00-	9410
17:00-	9236	18:00-	8968	19:00-	8753	20:00-	8708	21:00-	8655	22:00-	8614	23:00-	8627	24:00-	8634

Sunday 08/04/02 Channel: 1 Direction: E

0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Totals
101	74	52	44	36	42	93	127	202	331	380	486	552	642	596	603	557	490	465	331	304	278	232	116	7134
27	21	12	8	6	7	18	32	47	73	78	105	154	183	150	145	145	134	108	87	77	77	62	34	
31	20	17	14	9	10	16	31	53	64	83	123	138	143	133	118	127	119	99	82	68	74	64	30	
27	17	8	13	10	7	34	27	45	74	107	135	115	156	147	193	141	120	136	90	81	72	57	27	
16	16	15	9	11	18	25	37	57	120	112	123	145	160	166	147	144	117	122	72	78	55	49	25	

AM Peak Hour ..... 11:00 to 12:00 (486 vehicles)
AM Peak Hour Factor 90.0%
PM Peak Hour ..... 13:00 to 14:00 (642 vehicles)
PM Peak Hour Factor 87.7%

24-Hour Moving Total

01:00-	8630	02:00-	8644	03:00-	8655	04:00-	8643	05:00-	8606	06:00-	8543	07:00-	8406	08:00-	8296
09:00-	8124	10:00-	7931	11:00-	7695	12:00-	7501	13:00-	7375	14:00-	7390	15:00-	7307	16:00-	7253
17:00-	7279	18:00-	7278	19:00-	7275	20:00-	7214	21:00-	7204	22:00-	7229	23:00-	7228	24:00-	7134

Volume Count Report

Location ..... Western Ave,North of Wisconsin Circle,SB
Location Code 23
County ..... Washington D.C.
Recorder Set 07/31/02 16:38
Recording Start ... 08/01/ 2 00:00
Recording End 08/05/ 2 00:00
Sample Time ..... 15 Minutes
Operator Number ... 41
Machine Number 16
Channel 1
Divide By 2
Summation ..... No
Two-Way ..... No

08/01/ 2 Channel: 1 Direction: W

0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Totals
72	51	19	17	41	139	385	716	871	709	605	577	633	608	632	611	620	715	711	485	377	347	260	150	10351
18	25	5	4	3	18	53	167	200	223	160	138	173	149	166	136	161	187	175	152	107	85	70	45	
18	11	8	3	7	37	77	174	219	198	151	165	161	165	140	154	155	168	197	106	92	110	61	40	
24	8	0	4	14	37	103	171	217	147	159	148	148	132	156	164	144	168	171	116	88	74	61	30	
12	7	6	6	17	47	152	204	235	141	135	126	151	162	170	157	160	192	168	111	90	78	68	35	

AM Peak Hour ..... 08:15 to 09:15 (894 vehicles)
AM Peak Hour Factor 95.1%
PM Peak Hour ..... 17:45 to 18:45 (735 vehicles)
PM Peak Hour Factor 93.3%

08/02/02 Channel: 1 Direction: W

0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Totals
72	38	46	17	45	138	406	654	809	708	648	639	635	612	583	610	664	707	642	471	437	303	241	203	10328
21	11	17	5	5	14	49	150	188	229	164	169	151	153	137	159	155	186	164	113	135	88	70	50	
18	9	5	4	6	35	98	154	201	181	161	162	150	148	139	139	159	154	156	132	103	79	68	53	
17	12	12	3	14	34	116	165	201	149	155	147	175	157	169	161	188	187	157	116	88	73	49	58	
16	6	12	5	20	55	143	185	219	149	168	161	159	154	138	151	162	180	165	110	111	63	54	42	

AM Peak Hour ..... 08:15 to 09:15 (850 vehicles)
AM Peak Hour Factor 92.8%
PM Peak Hour ..... 17:00 to 18:00 (707 vehicles)
PM Peak Hour Factor 94.5%

24-Hour Moving Total

01:00- 10351	02:00- 10338	03:00- 10365	04:00- 10365	05:00- 10369	06:00- 10368	07:00- 10389	08:00- 10327
09:00- 10265	10:00- 10264	11:00- 10307	12:00- 10369	13:00- 10371	14:00- 10375	15:00- 10326	16:00- 10325
17:00- 10369	18:00- 10361	19:00- 10292	20:00- 10278	21:00- 10338	22:00- 10294	23:00- 10275	24:00- 10328

&±Í]ùUš¡ 08/03/02 Channel: 1 Direction: W

0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Totals
93	45	33	21	31	58	101	228	376	485	647	864	776	821	820	811	757	753	610	524	496	385	334	251	10320
35	19	11	6	4	11	19	35	79	111	144	185	171	208	184	205	225	214	152	142	123	104	86	79	
15	10	7	5	6	9	26	56	72	117	152	229	201	237	229	201	189	205	174	142	129	111	88	59	
23	9	6	4	9	17	29	60	98	120	189	217	220	203	215	192	164	168	155	119	145	100	86	61	
20	7	9	6	12	21	27	77	127	137	162	233	184	173	192	213	179	166	129	121	99	70	74	52	

AM Peak Hour ..... 11:00 to 12:00 (864 vehicles)
AM Peak Hour Factor 92.7%
PM Peak Hour ..... 12:30 to 13:30 (849 vehicles)
PM Peak Hour Factor 89.6%

24-Hour Moving Total

01:00-	10349	02:00-	10356	03:00-	10343	04:00-	10347	05:00-	10333	06:00-	10253	07:00-	9948	08:00-	9522
09:00-	9089	10:00-	8866	11:00-	8865	12:00-	9090	13:00-	9231	14:00-	9440	15:00-	9677	16:00-	9878
17:00-	9971	18:00-	10017	19:00-	9985	20:00-	10038	21:00-	10097	22:00-	10179	23:00-	10272	24:00-	10320

Sunday 08/04/02 Channel: 1 Direction: W

0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Totals
155	83	84	31	31	25	82	133	237	343	465	605	686	673	665	660	719	701	648	524	427	420	228	173	8798
55	24	18	11	8	10	18	29	50	74	135	101	197	177	162	140	186	211	155	139	103	132	60	50	
35	11	27	4	7	7	14	32	44	64	103	151	171	150	175	175	165	160	169	138	98	103	53	47	
42	24	24	10	7	6	25	41	71	88	104	209	155	176	172	138	190	176	165	134	112	108	69	46	
23	24	15	6	9	2	25	31	72	117	123	144	163	170	156	207	178	154	159	113	114	77	46	30	

AM Peak Hour ..... 11:00 to 12:00 (605 vehicles)
AM Peak Hour Factor 72.4%
PM Peak Hour ..... 15:45 to 16:45 (748 vehicles)
PM Peak Hour Factor 90.3%

24-Hour Moving Total

01:00-	10382	02:00-	10420	03:00-	10471	04:00-	10481	05:00-	10481	06:00-	10448	07:00-	10429	08:00-	10334
09:00-	10195	10:00-	10053	11:00-	9871	12:00-	9612	13:00-	9522	14:00-	9374	15:00-	9219	16:00-	9068
17:00-	9030	18:00-	8978	19:00-	9016	20:00-	9016	21:00-	8947	22:00-	8982	23:00-	8876	24:00-	8798

Volume Count Report

Generated by MSC3000 Version 2.01 Copyright 1990-1992 Mitron Systems Corporation

Location ..... 43rd Street, South of Military Rd., NB
Location Code 41
County ..... Washington D.C.
Recorder Set 07/31/02 14:07
Recording Start ... 08/01/ 2 00:00
Recording End 08/05/ 2 00:00
Sample Time ..... 60 Minutes
Operator Number ... 41
Machine Number 11
Channel 1
Divide By 2
Summation ..... No
Two-Way ..... No

08/01/ 2 Channel: 1 Direction: N

0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Totals
2	2	1	4	4	17	25	63	77	88	81	30	76	68	66	83	81	94	83	83	75	40	21	12	1176

AM Peak Hour ..... 09:00 to 10:00 (88 vehicles)
PM Peak Hour ..... 17:00 to 18:00 (94 vehicles)

08/02/02 Channel: 1 Direction: N

0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Totals
2	3	8	3	8	9	10	36	70	73	62	54	49	61	69	40	84	93	65	104	80	82	61	41	1167

AM Peak Hour ..... 09:00 to 10:00 (73 vehicles)
PM Peak Hour ..... 19:00 to 20:00 (104 vehicles)

24-Hour Moving Total

01:00-	1176	02:00-	1177	03:00-	1184	04:00-	1183	05:00-	1187	06:00-	1179	07:00-	1164	08:00-	1137
09:00-	1130	10:00-	1115	11:00-	1096	12:00-	1120	13:00-	1093	14:00-	1086	15:00-	1089	16:00-	1046
17:00-	1049	18:00-	1048	19:00-	1030	20:00-	1051	21:00-	1056	22:00-	1098	23:00-	1138	24:00-	1167

&±Í]ùUš¡ 08/03/02 Channel: 1 Direction: N

0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Totals
15	13	11	3	8	8	16	26	45	61	93	99	72	106	121	98	93	89	106	90	73	54	47	21	1368

AM Peak Hour ..... 11:00 to 12:00 (99 vehicles)
PM Peak Hour ..... 14:00 to 15:00 (121 vehicles)

24-Hour Moving Total

01:00-	1180	02:00-	1190	03:00-	1193	04:00-	1193	05:00-	1193	06:00-	1192	07:00-	1198	08:00-	1188
09:00-	1163	10:00-	1151	11:00-	1182	12:00-	1227	13:00-	1250	14:00-	1295	15:00-	1347	16:00-	1405
17:00-	1414	18:00-	1410	19:00-	1451	20:00-	1437	21:00-	1430	22:00-	1402	23:00-	1388	24:00-	1368

Sunday 08/04/02 Channel: 1 Direction: N

0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Totals
20	14	5	4	4	8	9	14	21	40	59	66	73	96	96	99	101	69	66	58	43	35	21	9	1030

AM Peak Hour ..... 11:00 to 12:00 (66 vehicles)
PM Peak Hour ..... 16:00 to 17:00 (101 vehicles)

24-Hour Moving Total

01:00-	1373	02:00-	1374	03:00-	1368	04:00-	1369	05:00-	1365	06:00-	1365	07:00-	1358	08:00-	1346
09:00-	1322	10:00-	1301	11:00-	1267	12:00-	1234	13:00-	1235	14:00-	1225	15:00-	1200	16:00-	1201
17:00-	1209	18:00-	1189	19:00-	1149	20:00-	1117	21:00-	1087	22:00-	1068	23:00-	1042	24:00-	1030

Volume Count Report

Generated by MSC3000 Version 2.01

Location ..... 43rd Street, South of Military Rd., SB
Location Code 43
County ..... Washington D.C.
Recorder Set 07/31/02 14:22
Recording Start ... 08/01/ 2 00:00
Recording End 08/05/ 2 00:00
Sample Time ..... 60 Minutes
Operator Number ... 41
Machine Number 31
Channel 1
Divide By 2
Summation ..... No
Two-Way ..... No

08/01/ 2 Channel: 1 Direction: S

0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Totals
7	6	2	1	1	2	2	23	30	48	50	72	70	88	70	70	83	109	115	80	71	34	18	13	1065

AM Peak Hour ..... 11:00 to 12:00 (72 vehicles)
PM Peak Hour ..... 18:00 to 19:00 (115 vehicles)

08/02/02 Channel: 1 Direction: S

0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Totals
9	17	6	2	5	7	10	22	34	35	69	65	86	85	73	52	105	109	98	123	72	80	56	26	1246

AM Peak Hour ..... 10:00 to 11:00 (69 vehicles)
PM Peak Hour ..... 19:00 to 20:00 (123 vehicles)

24-Hour Moving Total

01:00-	1067	02:00-	1078	03:00-	1082	04:00-	1083	05:00-	1087	06:00-	1092	07:00-	1100	08:00-	1099
09:00-	1103	10:00-	1090	11:00-	1109	12:00-	1102	13:00-	1118	14:00-	1115	15:00-	1118	16:00-	1100
17:00-	1122	18:00-	1122	19:00-	1105	20:00-	1148	21:00-	1149	22:00-	1195	23:00-	1233	24:00-	1246

&±Í]ùUš¡ 08/03/02 Channel: 1 Direction: S

0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Totals
41	15	22	11	6	5	6	8	27	27	49	69	96	92	113	115	112	76	65	66	53	37	26	21	1158

AM Peak Hour ..... 11:00 to 12:00 (69 vehicles)
PM Peak Hour ..... 15:00 to 16:00 (115 vehicles)

24-Hour Moving Total

01:00-	1278	02:00-	1276	03:00-	1292	04:00-	1301	05:00-	1302	06:00-	1300	07:00-	1296	08:00-	1282
09:00-	1275	10:00-	1267	11:00-	1247	12:00-	1251	13:00-	1261	14:00-	1268	15:00-	1308	16:00-	1371
17:00-	1378	18:00-	1345	19:00-	1312	20:00-	1255	21:00-	1236	22:00-	1193	23:00-	1163	24:00-	1158

Sunday 08/04/02 Channel: 1 Direction: S

0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	Totals
14	25	8	10	5	2	5	6	13	45	56	90	84	105	114	113	74	52	42	32	24	22	8	10	959

AM Peak Hour ..... 11:00 to 12:00 (90 vehicles)
PM Peak Hour ..... 14:00 to 15:00 (114 vehicles)

24-Hour Moving Total

01:00-	1131	02:00-	1141	03:00-	1127	04:00-	1126	05:00-	1125	06:00-	1122	07:00-	1121	08:00-	1119
09:00-	1105	10:00-	1123	11:00-	1130	12:00-	1151	13:00-	1139	14:00-	1152	15:00-	1153	16:00-	1151
17:00-	1113	18:00-	1089	19:00-	1066	20:00-	1032	21:00-	1003	22:00-	988	23:00-	970	24:00-	959

ATTACHMENT

2

INTERSECTION WEEKEND TRAFFIC
TURNING MOVEMENT COUNT SUMMARIES

O.R. George & Associates, Inc.
10210 Greenbelt Road, Suite 310
Greenbelt, MD 20706
Tel: (301) 794-7700 Fax: (301) 794-4400

Counted by:ORGA-NL
Board :D4-2236
City/County:Chevy Chase/Washington DC
Weather :Hot/Sunny/Dry

File Name : WES@WCIR
Site Code : 05162236
Start Date : 08/10/2002

Groups Printed- Passenger Vehicles - Trucks - Buses

	Western Avenue, N.W. From North					Western Avenue, N.W. From South					Washington Clinic Entrance From East					Wisconsin Circle, N.W. From West					
End Time	Left	Thru	Right	U-Turn	App. Total	Left	Thru	Right	U-Turn	App. Total	Left	Thru	Right	U-Turn	App. Total	Left	Thru	Right	U-Turn	App. Total	Int. Total
02:15 PM	0	120	34	0	154	3	74	0	0	77	0	0	0	0	0	26	0	3	0	29	260
02:30 PM	0	134	38	0	172	4	82	0	0	86	0	1	0	0	1	33	1	3	0	37	296
02:45 PM	0	120	47	0	167	11	91	2	0	104	1	0	0	0	1	50	0	15	0	65	337
03:00 PM	4	121	45	0	170	10	88	0	0	98	1	0	1	0	2	48	0	4	0	52	322
Total	4	495	164	0	663	28	335	2	0	365	2	1	1	0	4	157	1	25	0	183	1215
03:15 PM	0	121	62	0	183	13	75	2	0	90	0	0	0	0	0	36	1	3	0	40	313
03:30 PM	1	125	45	0	171	3	87	2	0	92	1	0	1	0	2	46	0	8	0	54	319
03:45 PM	0	123	49	0	172	7	96	2	0	105	2	0	1	0	3	34	0	9	0	43	323
04:00 PM	5	100	48	0	153	4	89	1	0	94	0	0	0	0	0	32	0	10	0	42	289
Total	6	469	204	0	679	27	347	7	0	381	3	0	2	0	5	148	1	30	0	179	1244
Grand Total	10	964	368	0	1342	55	682	9	0	746	5	1	3	0	9	305	2	55	0	362	2459
Apprch %	0.7	71.8	27.4	0.0		7.4	91.4	1.2	0.0		55.6	11.1	33.3	0.0		84.3	0.6	15.2	0.0		
Total %	0.4	39.2	15.0	0.0	54.6	2.2	27.7	0.4	0.0	30.3	0.2	0.0	0.1	0.0	0.4	12.4	0.1	2.2	0.0	14.7	

O.R. George & Associates, Inc.
10210 Greenbelt Road, Suite 310
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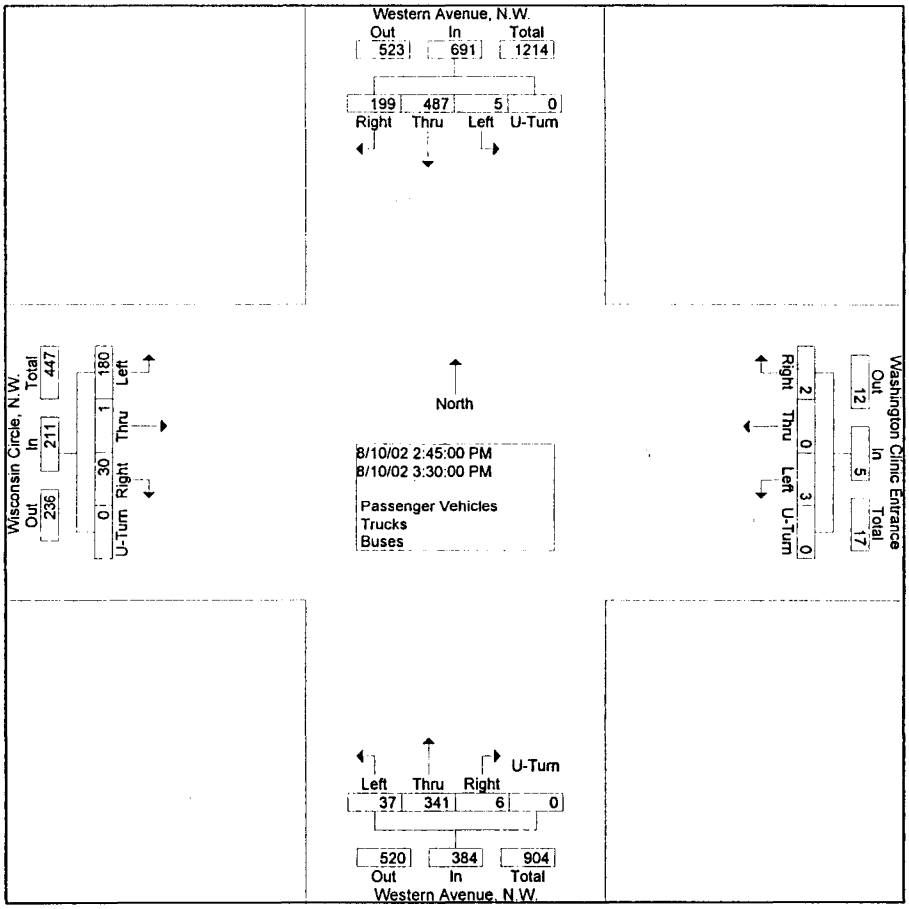
Tel: (301) 794-7700 Fax: (301) 794-4400

Counted by:ORGA-NL
Board :D4-2236
City/County:Chevy Chase/Washington DC
Weather :Hot/Sunny/Dry

File Name : WES@WCIR
Site Code : 05162236
Start Date : 08/10/2002
Page No : 2

	Western Avenue, N.W. From North					Western Avenue, N.W. From South					Washington Clinic Entrance From East					Wisconsin Circle, N.W. From West					
End Time	Left	Thru	Right	U-Turn	App. Total	Left	Thru	Right	U-Turn	App. Total	Left	Thru	Right	U-Turn	App. Total	Left	Thru	Right	U-Turn	App. Total	Int. Total
Peak Hour From 02:15 PM to 04:00 PM - Peak 1 of 1																					
Intersection 02:45 PM																					
Volume	5	487	199	0	691	37	341	6	0	384	3	0	2	0	5	180	1	30	0	211	1291
Percent	0.7	70.5	28.8	0.0		9.6	88.8	1.6	0.0		60.0	0.0	40.0	0.0		85.3	0.5	14.2	0.0		
02:45 Volume	0	120	47	0	167	11	91	2	0	104	1	0	0	0	1	50	0	15	0	65	337
Peak Factor																					0.958
High Int. 03:15 PM						02:45 PM					03:00 PM					02:45 PM					
Volume	0	121	62	0	183	11	91	2	0	104	1	0	1	0	2	50	0	15	0	65	
Peak Factor					0.944					0.923					0.625					0.812	



2-B

O.R. George & Associates, Inc.
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Counted by:ORGA-OS
Board :D4-1576
City/County:Chevy Chase/Washington DC
Weather :Hot/Sunny/Dry

File Name : 06061576
Site Code : 06061576
Start Date : 08/10/2002
Page No : 1

Groups Printed- Passenger Vehicles - Trucks - Buses

	Western Avenue, N.W. From North				Western Avenue, N.W. From South				Military Road, N.W. From East				
End Time	Left	Thru	U-Turn	App. Total	Thru	Right	U-Turn	App. Total	Left	Right	U-Turn	App. Total	Int. Total
02:15 PM	21	121	0	142	83	98	0	181	91	8	0	99	422
02:30 PM	16	135	0	151	87	96	0	183	102	7	1	110	444
02:45 PM	26	109	0	135	88	90	1	179	87	16	0	103	417
03:00 PM	17	108	0	125	90	107	1	198	95	13	0	108	431
Total	80	473	0	553	348	391	2	741	375	44	1	420	1714
03:15 PM	13	99	0	112	74	87	1	162	102	11	0	113	387
03:30 PM	21	117	0	138	91	112	0	203	101	5	2	108	449
03:45 PM	13	119	0	132	88	105	0	193	92	9	1	102	427
04:00 PM	21	97	0	118	91	106	0	197	96	6	3	105	420
Total	68	432	0	500	344	410	1	755	391	31	6	428	1683
Grand Total	148	905	0	1053	692	801	3	1496	766	75	7	848	3397
Apprch %	14.1	85.9	0.0		46.3	53.5	0.2		90.3	8.8	0.8		
Total %	4.4	26.6	0.0	31.0	20.4	23.6	0.1	44.0	22.5	2.2	0.2	25.0	

2-C

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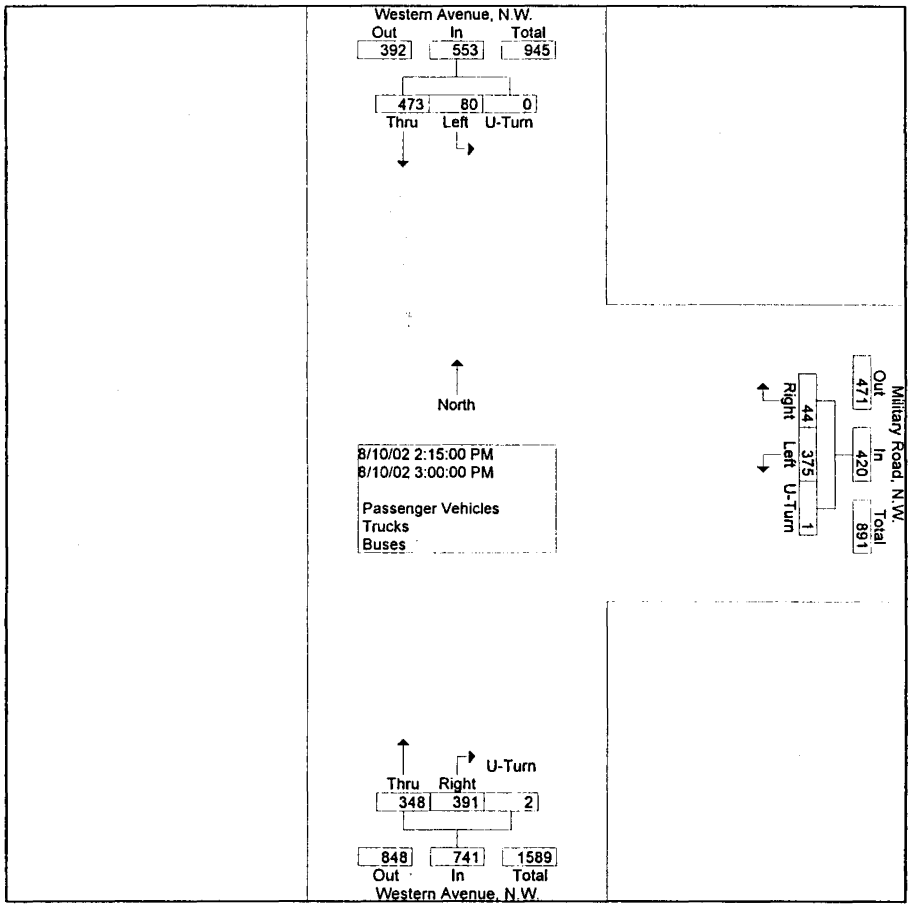
Counted by:ORGA-OS
Board :D4-1576
City/County:Chevy Chase/Washington DC
Weather :Hot/Sunny/Dry

File Name : 06061576
Site Code : 06061576
Start Date : 08/10/2002
Page No : 2

	Western Avenue, N.W. From North				Western Avenue, N.W. From South				Military Road, N.W. From East				
End Time	Left	Thru	U-Turn	App. Total	Thru	Right	U-Turn	App. Total	Left	Right	U-Turn	App. Total	Int. Total
Peak Hour From 02:15 PM to 04:00 PM - Peak 1 of 1													
Intersection	02:15 PM												
Volume	80	473	0	553	348	391	2	741	375	44	1	420	1714
Percent	14.5	85.5	0.0		47.0	52.8	0.3		89.3	10.5	0.2		
02:30 Volume	16	135	0	151	87	96	0	183	102	7	1	110	444
Peak Factor													0.965
High Int.	02:30 PM				03:00 PM				02:30 PM				
Volume	16	135	0	151	90	107	1	198	102	7	1	110	
Peak Factor				0.916				0.936				0.955	



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O.R. George & Associates, Inc.
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Counted by:ORGA-LM
Board :D4-1910
City/County:Chevy Chase/Washington DC
Weather :Hot/Sunny/Dry

File Name : MIL@43
Site Code : 07041910
Start Date : 08/10/2002
Page No : 1

Groups Printed- Passenger Vehicles - Trucks - Buses

	43rd Street, N.W. From South				Military Road, N.W. From East				Military Road, N.W. From West				
End Time	Left	Right	U-Turn	App. Total	Left	Thru	U-Turn	App. Total	Thru	Right	U-Turn	App. Total	Int. Total
02:15 PM	4	20	0	24	6	79	0	85	84	17	0	101	210
02:30 PM	7	17	0	24	7	86	0	93	88	21	0	109	226
02:45 PM	7	15	0	22	10	89	0	99	102	12	0	114	235
03:00 PM	5	15	0	20	13	96	0	109	88	20	0	108	237
Total	23	67	0	90	36	350	0	386	362	70	0	432	908
03:15 PM	7	12	0	19	5	89	0	94	97	19	0	116	229
03:30 PM	6	12	0	18	4	105	0	109	89	24	0	113	240
03:45 PM	7	11	0	18	13	94	0	107	104	16	0	120	245
04:00 PM	3	13	0	16	7	92	0	99	108	18	0	126	241
Total	23	48	0	71	29	380	0	409	398	77	0	475	955
Grand Total	46	115	0	161	65	730	0	795	760	147	0	907	1863
Apprch %	28.6	71.4	0.0		8.2	91.8	0.0		83.8	16.2	0.0		
Total %	2.5	6.2	0.0	8.6	3.5	39.2	0.0	42.7	40.8	7.9	0.0	48.7	

2-E

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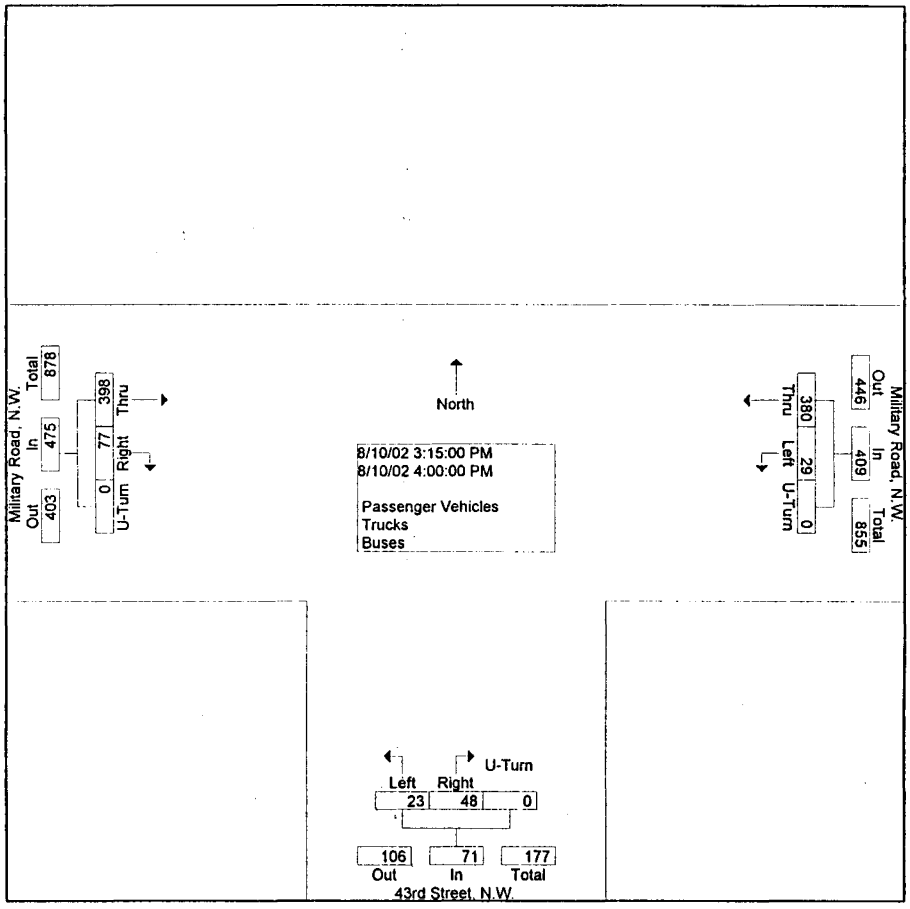
Counted by:ORGA-LM
Board :D4-1910
City/County:Chevy Chase/Washington DC
Weather :Hot/Sunny/Dry

File Name : MIL@43
Site Code : 07041910
Start Date : 08/10/2002
Page No : 2

	43rd Street, N.W. From South				Military Road, N.W. From East				Military Road, N.W. From West				
End Time	Left	Right	U-Turn	App. Total	Left	Thru	U-Turn	App. Total	Thru	Right	U-Turn	App. Total	Int. Total
Peak Hour From 02:15 PM to 04:00 PM - Peak 1 of 1													
Intersection	03:15 PM												
Volume	23	48	0	71	29	380	0	409	398	77	0	475	955
Percent	32.4	67.6	0.0		7.1	92.9	0.0		83.8	16.2	0.0		
03:45 Volume	7	11	0	18	13	94	0	107	104	16	0	120	245
Peak Factor													0.974
High Int.	03:15 PM				03:30 PM				04:00 PM				
Volume	7	12	0	19	4	105	0	109	108	18	0	126	
Peak Factor				0.934				0.938				0.942	



2-F

O.R. George & Associates, Inc.
10210 Greenbelt Road, Suite 310
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Counted by:ORGA-AL, GC
Board :D4-2239, D4-2241
City/County:Chevy Chase/Washington DC
Weather :Hot/Sunny/Dry

File Name : WIS@WES
Site Code : 08222241
Start Date : 08/10/2002
Page No : 1

Groups Printed- Passenger Vehicles - Trucks - Buses

	Wisconsin Avenue, N.W. From North					Wisconsin Avenue, N.W. From South					Western Avenue, N.W. From East					Western Avenue, N.W. From West					
End Time	Left	Thru	Right	U-Turn	App. Total	Left	Thru	Right	U-Turn	App. Total	Left	Thru	Right	U-Turn	App. Total	Left	Thru	Right	U-Turn	App. Total	Int. Total
02:15 PM	42	145	48	0	235	0	183	38	0	221	0	146	53	0	199	25	110	29	0	164	819
02:30 PM	35	160	54	0	249	1	178	42	0	221	0	153	68	1	222	26	94	15	1	136	828
02:45 PM	41	177	61	0	279	1	182	39	0	222	0	146	58	0	204	32	122	22	0	176	881
03:00 PM	40	156	58	0	254	2	171	41	0	214	0	148	63	0	211	28	91	20	0	139	818
Total	158	638	221	0	1017	4	714	160	0	878	0	593	242	1	836	111	417	86	1	615	3346
03:15 PM	47	168	50	0	265	3	175	41	0	219	0	156	61	0	217	34	101	22	0	157	858
03:30 PM	39	174	34	0	247	1	173	44	0	218	0	155	64	0	219	28	103	23	0	154	838
03:45 PM	46	155	33	0	234	2	154	36	0	192	1	157	66	0	224	34	116	22	0	172	822
04:00 PM	49	156	47	0	252	0	202	37	0	239	0	128	61	0	189	36	113	28	0	177	857
Total	181	653	164	0	998	6	704	158	0	868	1	596	252	0	849	132	433	95	0	660	3375
Grand Total	339	1291	385	0	2015	10	1418	318	0	1746	1	1189	494	1	1685	243	850	181	1	1275	6721
Apprch %	16.8	64.1	19.1	0.0		0.6	81.2	18.2	0.0		0.1	70.6	29.3	0.1		19.1	66.7	14.2	0.1		
Total %	5.0	19.2	5.7	0.0	30.0	0.1	21.1	4.7	0.0	26.0	0.0	17.7	7.4	0.0	25.1	3.6	12.6	2.7	0.0	19.0	

2-G

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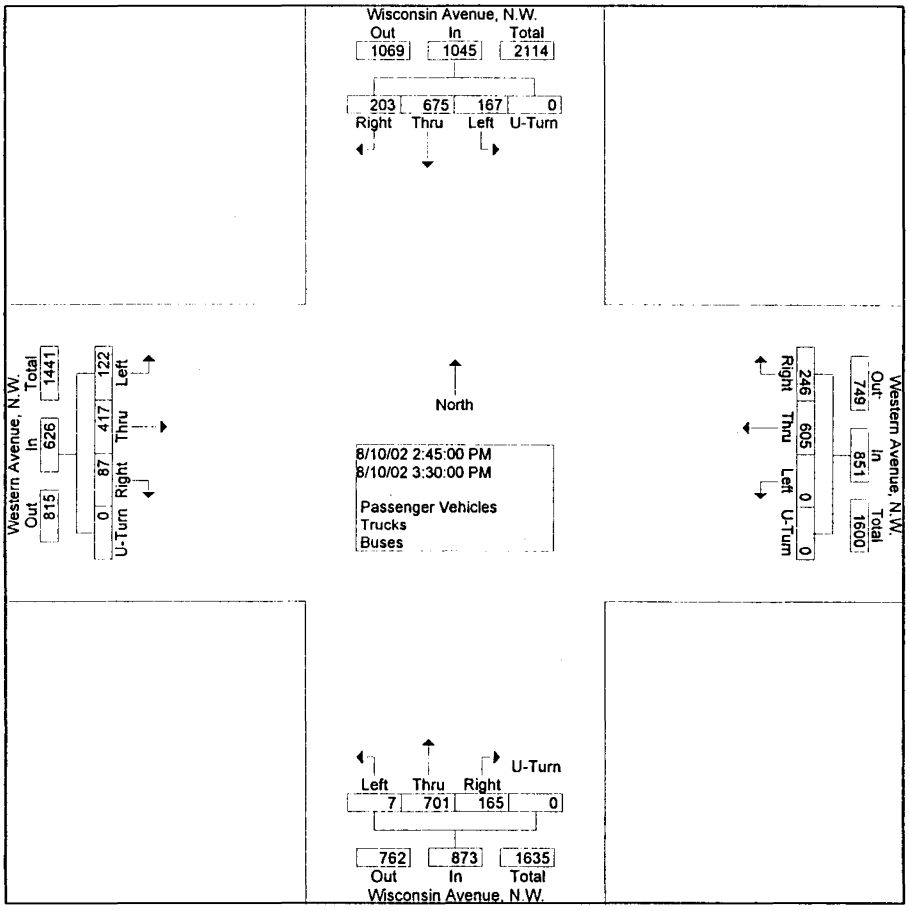
Counted by:ORGA-AL, GC
Board :D4-2239, D4-2241
City/County:Chevy Chase/Washington DC
Weather :Hot/Sunny/Dry

File Name : WIS@WES
Site Code : 08222241
Start Date : 08/10/2002
Page No : 2

	Wisconsin Avenue, N.W. From North					Wisconsin Avenue, N.W. From South					Western Avenue, N.W. From East					Western Avenue, N.W. From West					
End Time	Left	Thru	Right	U-Turn	App. Total	Left	Thru	Right	U-Turn	App. Total	Left	Thru	Right	U-Turn	App. Total	Left	Thru	Right	U-Turn	App. Total	Int. Total
Peak Hour From 02:15 PM to 04:00 PM - Peak 1 of 1																					
Intersection 02:45 PM																					
Volume	167	675	203	0	1045	7	701	165	0	873	0	605	246	0	851	122	417	87	0	626	3395
Percent	16.0	64.6	19.4	0.0		0.8	80.3	18.9	0.0		0.0	71.1	28.9	0.0		19.5	66.6	13.9	0.0		
02:45 Volume	41	177	61	0	279	1	182	39	0	222	0	146	58	0	204	32	122	22	0	176	881
Peak Factor																					0.963
High Int. 02:45 PM						02:45 PM					03:30 PM					02:45 PM					
Volume	41	177	61	0	279	1	182	39	0	222	0	155	64	0	219	32	122	22	0	176	
Peak Factor					0.936					0.983					0.971					0.889	



2-H

ATTACHMENT

3

CAPACITY ANALYSIS WORKSHEETS –
EXISTING WEEKEND TRAFFIC SITUATION

TWO-WAY STOP CONTROL SUMMARY

General Information

Analyst	ORGA/KM
Agency/Co.	O. R. George & Associates
Date Performed	08/10/02 (Saturday)
Analysis Time Period	2:00 PM - 3:00 PM (PM Peak)

Site Information

Intersection	43rd Street @ Military Road
Jurisdiction	District of Columbia
Analysis Year	2002

Project Description: Washington Clinic PUD (Weekend Traffic Volume Analysis)

East/West Street: Military Road, NW | North/South Street: 43rd Street, NW

Intersection Orientation: East-West | Study Period (hrs): 0.25

Vehicle Volumes and Adjustments

Major Street	Eastbound			Westbound		
Movement	1	2	3	4	5	6
	L	T	R	L	T	R
Volume	0	398	77	29	380	0
Peak-Hour Factor, PHF	1.00	0.95	0.95	0.95	0.95	1.00
Hourly Flow Rate, HFR	0	418	81	30	400	0
Percent Heavy Vehicles	0	--	--	3	--	--
Median Type	Undivided					
RT Channelized			0			0
Lanes	0	1	0	0	1	0
Configuration			TR	LT		
Upstream Signal		0			1	

Minor Street	Northbound			Southbound		
Movement	7	8	9	10	11	12
	L	T	R	L	T	R
Volume	23	0	48	0	0	0
Peak-Hour Factor, PHF	0.95	1.00	0.95	1.00	1.00	1.00
Hourly Flow Rate, HFR	24	0	50	0	0	0
Percent Heavy Vehicles	0	0	0	0	0	0
Percent Grade (%)		0			0	
Flared Approach		N			N	
Storage		0			0	
RT Channelized			0			0
Lanes	0	0	0	0	0	0
Configuration		LR				

Delay, Queue Length, and Level of Service

Approach	EB	WB	Northbound			Southbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration		LT		LR				
v (vph)		30		74				
C (m) (vph)		1060		467				
v/c		0.03		0.16				
95% queue length		0.09		0.56				
Control Delay		8.5		14.2				
LOS		A		B				
Approach Delay	--	--	14.2					
Approach LOS	--	--	B					

3-A

SHORT REPORT

General Information		Site Information	
Analyst	ORGA/KM	Intersection	Western Ave @ Military Road
Agency or Co.	O. R. George & Associates	Area Type	All other areas
Date Performed	8/10/02 PM Peak Hour	Jurisdiction	District of Columbia
Time Period	2:00 - 3:00 PM (PM Peak)	Analysis Year	2002

Volume and Timing Input

	EB			WB			NB			SB		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
Num. of Lanes	0	0	0	1	0	0	0	2	0	1	3	0
Lane group				L	LR			TR		L	T	
Volume (vph)				375		44		348	391	80	473	
% Heavy veh				0		0		0	0	0	0	
PHF				0.87		0.87		0.95	0.95	0.93	0.93	
Actuated (P/A)				P		P		P	P	P	P	
Startup lost time				2.0	2.0			2.0		2.0	2.0	
Ext. eff. green				2.0	2.0			2.0		2.0	2.0	
Arrival type				3	3			3		3	3	
Unit Extension				3.0	3.0			3.0		3.0	3.0	
Ped/Bike/RTOR Volume	0			120	0	12	18		225			
Lane Width				11.0	11.0			11.0		11.0	11.0	
Parking/Grade/Parking	N		N	N	0	N	N	0	N	N	0	N
Parking/hr												
Bus stops/hr				0	0			0		0	0	
Unit Extension				3.0	3.0			3.0		3.0	3.0	

Phasing	WB Only	02	03	04	Thru & RT	SB Only	07	08
Timing	G = 32.0	G =	G =	G =	G = 48.0	G = 15.0	G =	G =
	Y = 5	Y =	Y =	Y =	Y = 5	Y = 5	Y =	Y =

Duration of Analysis (hrs) = 0.25 Cycle Length C = 110.0

Lane Group Capacity, Control Delay, and LOS Determination

	EB			WB			NB			SB		
Adj. flow rate				216	252			541		86	509	
Lane group cap.				508	499			1449		231	3100	
v/c ratio				0.43	0.51			0.37		0.37	0.16	
Green ratio				0.29	0.29			0.44		0.14	0.62	
Unif. delay d1				31.6	32.4			20.9		43.2	8.9	
Delay factor k				0.50	0.50			0.50		0.50	0.50	
Increm. delay d2				2.6	3.6			0.7		4.5	0.1	
PF factor				1.000	1.000			1.000		1.000	1.000	
Control delay				34.2	36.0			21.6		47.8	9.0	
Lane group LOS				C	D			C		D	A	
Apprch. delay				35.2			21.6			14.6		
Approach LOS				D			C			B		
Intersec. delay	23.0			Intersection LOS						C		

3-B

SHORT REPORT

General Information		Site Information	
Analyst	ORGA/KM	Intersection	Wisconsin Ave @ Western Ave
Agency or Co.	O. R. George & Associates	Area Type	All other areas
Date Performed	8/10/02 (Saturday)	Jurisdiction	District of Columbia
Time Period	2:00 - 3:00 PM (Peak Period)	Analysis Year	2002

Volume and Timing Input

	EB			WB			NB			SB		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
Num. of Lanes	1	2	0	0	2	1	0	3	0	0	3	0
Lane group	L	TR			T	R		TR			LTR	
Volume (vph)	122	417	87		605	246		701	165	167	675	203
% Heavy veh	0	2	0		1	1		1	2	0	0	0
PHF	0.94	0.94	0.94		0.91	0.91		0.92	0.92	0.96	0.96	0.96
Actuated (P/A)	P	P	P		P	P		P	P	P	P	P
Startup lost time	2.0	2.0			2.0	2.0		2.0			2.0	
Ext. eff. green	2.0	2.0			2.0	2.0		2.0			2.0	
Arrival type	4	4			4	4		4			4	
Unit Extension	3.0	3.0			3.0	3.0		3.0			3.0	
Ped/Bike/RTOR Volume	60	0	0	60	0	0	90	0	34	70	0	38
Lane Width	11.0	11.0			11.0	11.0		11.0			11.0	
Parking/Grade/Parking	N	0	N	N	0	N	N	0	N	N	0	N
Parking/hr												
Bus stops/hr	0	0			0	0		8			0	
Unit Extension	3.0	3.0			3.0	3.0		3.0			3.0	

Phasing	EB Only	EW Perm	03	04	Thru & RT	SB Only	07	08
Timing	G = 12.0	G = 33.0	G =	G =	G = 37.0	G = 10.0	G =	G =
	Y = 4	Y = 5	Y =	Y =	Y = 4	Y = 5	Y =	Y =

Duration of Analysis (hrs) = 0.25 | Cycle Length C = 110.0

Lane Group Capacity, Control Delay, and LOS Determination

	EB			WB			NB			SB		
Adj. flow rate	130	535			662	269		903			1051	
Lane group cap.	326	1490			1037	604		1605			2243	
v/c ratio	0.40	0.36			0.64	0.45		0.56			0.47	
Green ratio	0.45	0.45			0.30	0.39		0.34			0.46	
Unif. delay d1	19.9	20.1			33.3	24.7		29.9			20.2	
Delay factor k	0.50	0.50			0.50	0.50		0.50			0.50	
Increm. delay d2	3.6	0.7			3.0	2.4		1.4			0.7	
PF factor	0.842	0.842			0.986	0.904		0.956			0.819	
Control delay	20.4	17.6			35.9	24.7		30.0			17.3	
Lane group LOS	C	B			D	C		C			B	
Apprch. delay	18.2			32.6			30.0			17.3		
Approach LOS	B			C			C			B		
Intersec. delay	24.7			Intersection LOS						C		

3-C

SHORT REPORT

General Information		Site Information	
Analyst	ORGA/KM	Intersection	Wisconsin Ave @ Wisconsin Cir
Agency or Co.	O. R. George & Associates	Area Type	All other areas
Date Performed	8/10/02 (Saturday)	Jurisdiction	District of Columbia
Time Period	2:00 - 3:00 PM (PM Peak)	Analysis Year	2002

Volume and Timing Input

	EB			WB			NB			SB		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
Num. of Lanes	1	1	0	0	2	0	1	3	0	1	3	0
Lane group	L	TR		DefL	TR		L	TR		L	TR	
Volume (vph)	180	1	30	3	0	2	37	341	6	5	487	199
% Heavy veh	0	0	0	0	0	0	0	0	0	0	0	0
PHF	0.95	0.95	0.95	0.91	0.91	0.91	0.92	0.92	0.92	0.96	0.96	0.96
Actuated (P/A)	P	P	P	P	P	P	P	P	P	P	P	P
Startup lost time	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Ext. eff. green	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Arrival type	3	3		3	3		3	3		3	3	
Unit Extension	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Ped/Bike/RTOR Volume	0	0	0	0	0	0	0	0	5	0	0	5
Lane Width	12.0	12.0		12.0	12.0		12.0	12.0		11.0	11.0	
Parking/Grade/Parking	N	0	N	N	0	N	N	0	N	N	0	N
Parking/hr												
Bus stops/hr	0	0		0	0		0	0		0	0	
Unit Extension	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	

Phasing	EW Perm	02	03	04	NB Only	NS Perm	SB Only	08
Timing	G = 30.0	G =	G =	G =	G = 6.0	G = 20.0	G = 6.0	G =
	Y = 5	Y =	Y =	Y =	Y = 4	Y = 5	Y = 4	Y =

Duration of Analysis (hrs) = 0.25 | Cycle Length C = 80.0

Lane Group Capacity, Control Delay, and LOS Determination

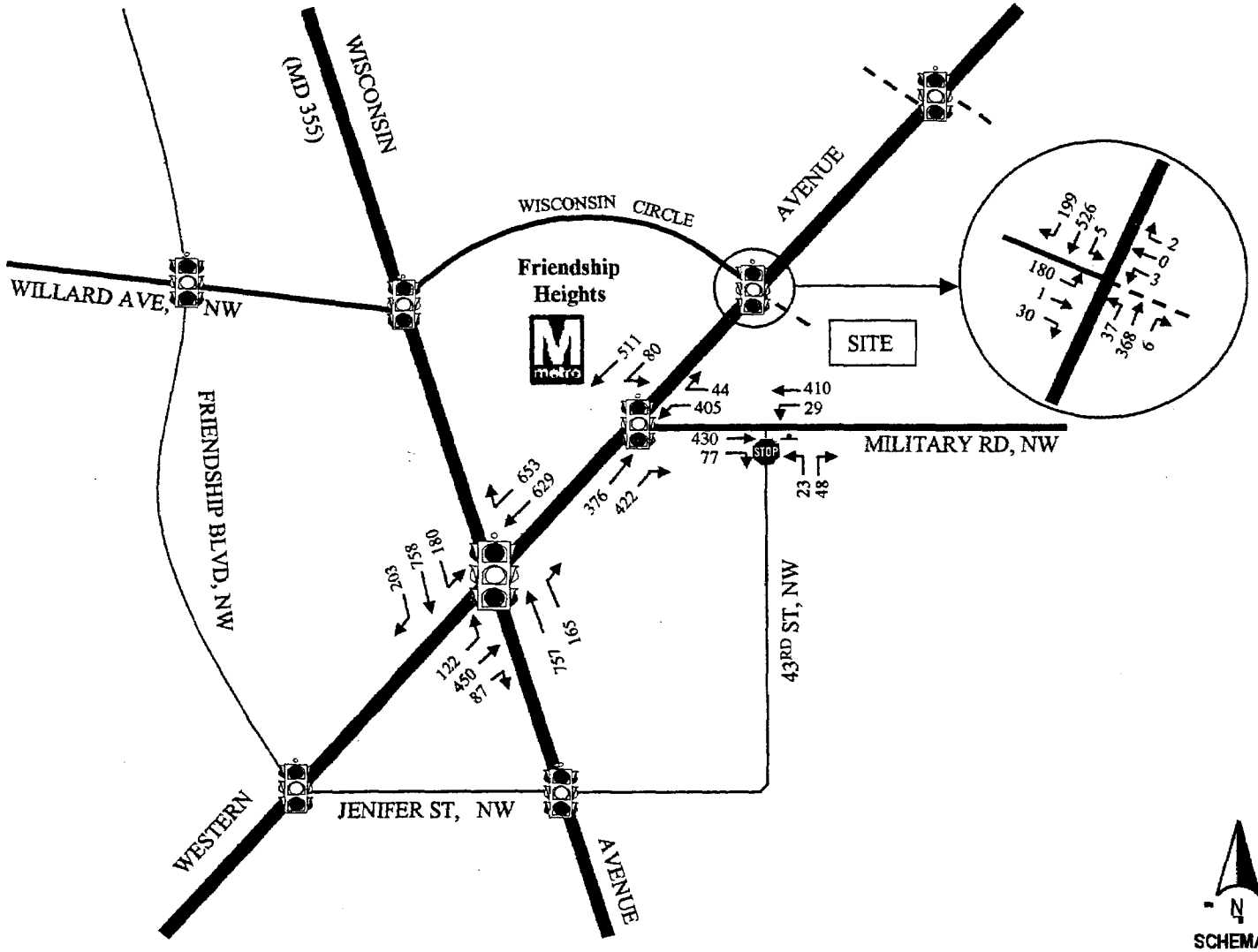
	EB			WB			NB			SB		
Adj. flow rate	189	33		3	2		40	373		5	709	
Lane group cap.	539	609		524	606		288	1944		490	1860	
v/c ratio	0.35	0.05		0.01	0.00		0.14	0.19		0.01	0.38	
Green ratio	0.38	0.38		0.38	0.38		0.38	0.38		0.39	0.39	
Unif. delay d1	18.0	15.9		15.7	15.6		16.4	16.8		15.1	17.6	
Delay factor k	0.50	0.50		0.50	0.50		0.50	0.50		0.50	0.50	
Increm. delay d2	1.8	0.2		0.0	0.0		1.0	0.2		0.0	0.6	
PF factor	1.000	1.000		1.000	1.000		1.000	1.000		1.000	1.000	
Control delay	19.8	16.1		15.7	15.7		17.4	17.1		15.1	18.2	
Lane group LOS	B	B		B	B		B	B		B	B	
Apprch. delay	19.2			15.7			17.1			18.2		
Approach LOS	B			B			B			B		
Intersec. delay	18.0			Intersection LOS						B		

3-D

ATTACHMENT

4

YEAR 2006 BASE TRAFFIC VOLUMES



O. R. GEORGE &ASSOCIATES, INC.
Traffic Engineers - Transportation Planners

Year 2006 Base Traffic Volumes – Key Intersections
Washington Clinic Planned Unit Development, Northwest Washington, DC

ATTACHMENT

5

WEEKEND TRAFFIC ASSIGNMENT SHEETS –
BACKGROUND DEVELOPMENTS CONSIDERED

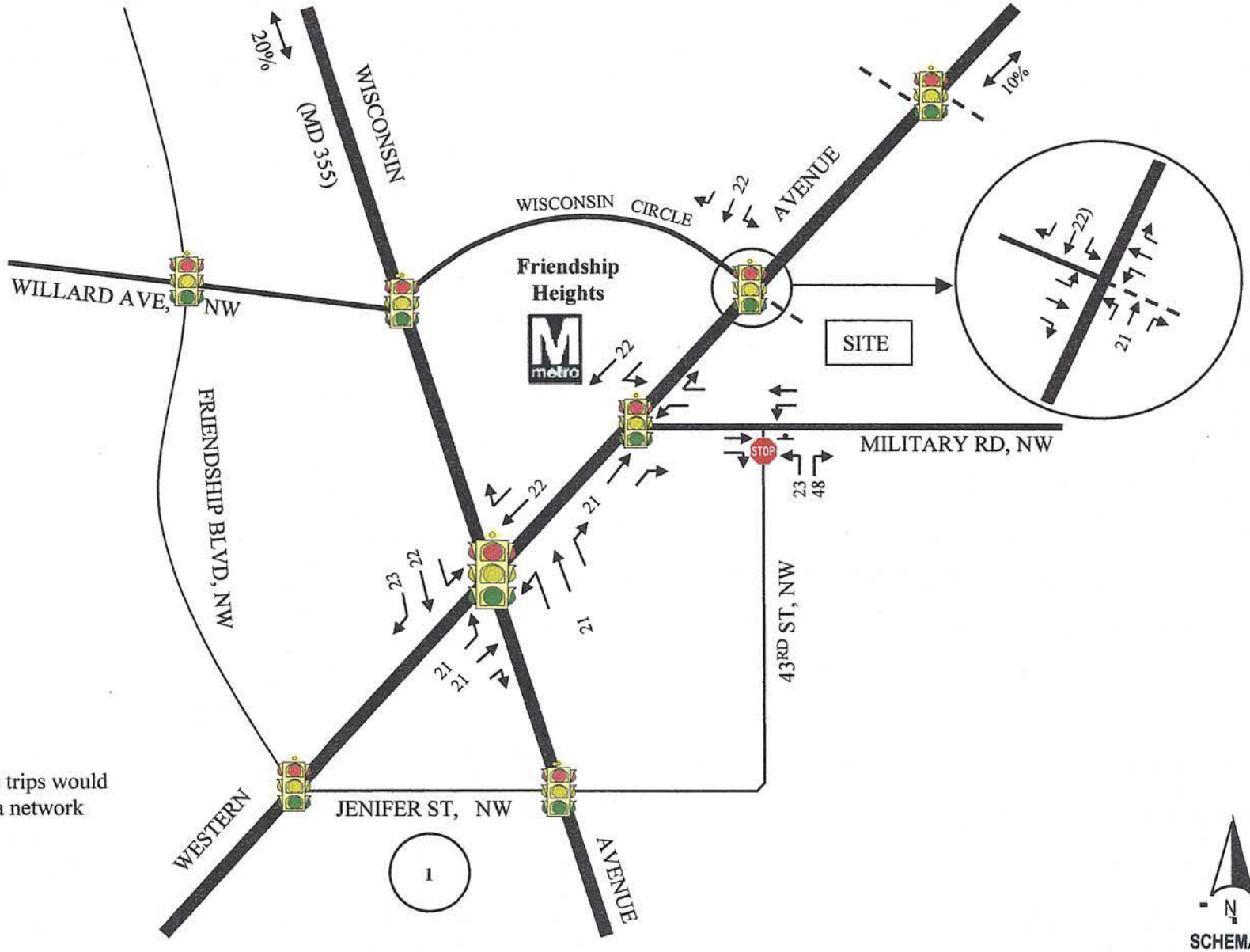
TABLE

PROJECTED WEEKEND (SATURDAY) PEAK HOUR TRIP GENERATION FOR OTHER BACKGROUND DEVELOPMENTS CONSIDERED

	Saturday Peak Hour*		
Development	**In**	**Out**	**Total**
1) WMATA Northwest Bus Garage Redevelopment*			
- 90,000 SF Retail	139	129	268
2) Wisconsin Place (Hecht's)**			
- 123,812 SF Retail	192	177	369
- 40,000 SF Grocery	62	57	119
- 450,000 SF Office	60	51	111
- 275 Apartment Unites	43	43	86
3) Friendship Commons (Geico)**'			
- 295,243 SF Office	39	34	73
- 300 Multi-Family Units	57	47	94
- 200 Townhouse Units	30	26	56
4) Chevy Chase Center**			
- 122,209 SF Retail	190	174	364
- 191,639 SF Office	25	22	47
TOTAL	**911**	**844**	**1,755**

* Reflects application of 40% reduction for use of transit walk and other alternative modes.

Source: ITE Trip Generation Manual, (6th Ed., 1997), & O. R. George & Associates.



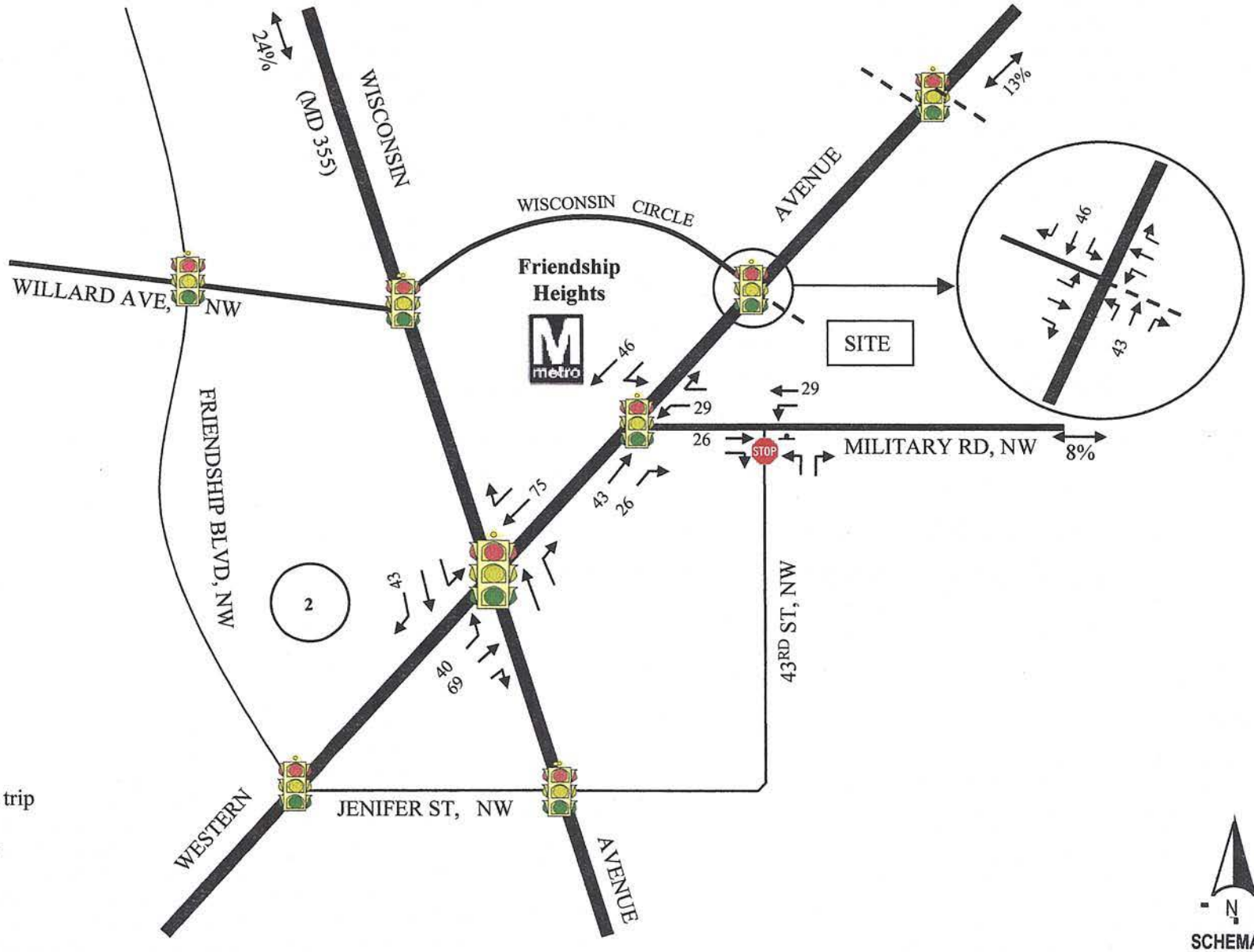
Note: 70% of site trips would not use study area network

SCHEMATIC
NOT TO SCALE

O. R. GEORGE &ASSOCIATES, INC.
Traffic Engineers - Transportation Planners

Site No. 1 (WMATA NW Bus Garage – Trip Distribution and Assignment) – Key Intersections
Washington Clinic Planned Unit Development, Northwest Washington, DC

5-B



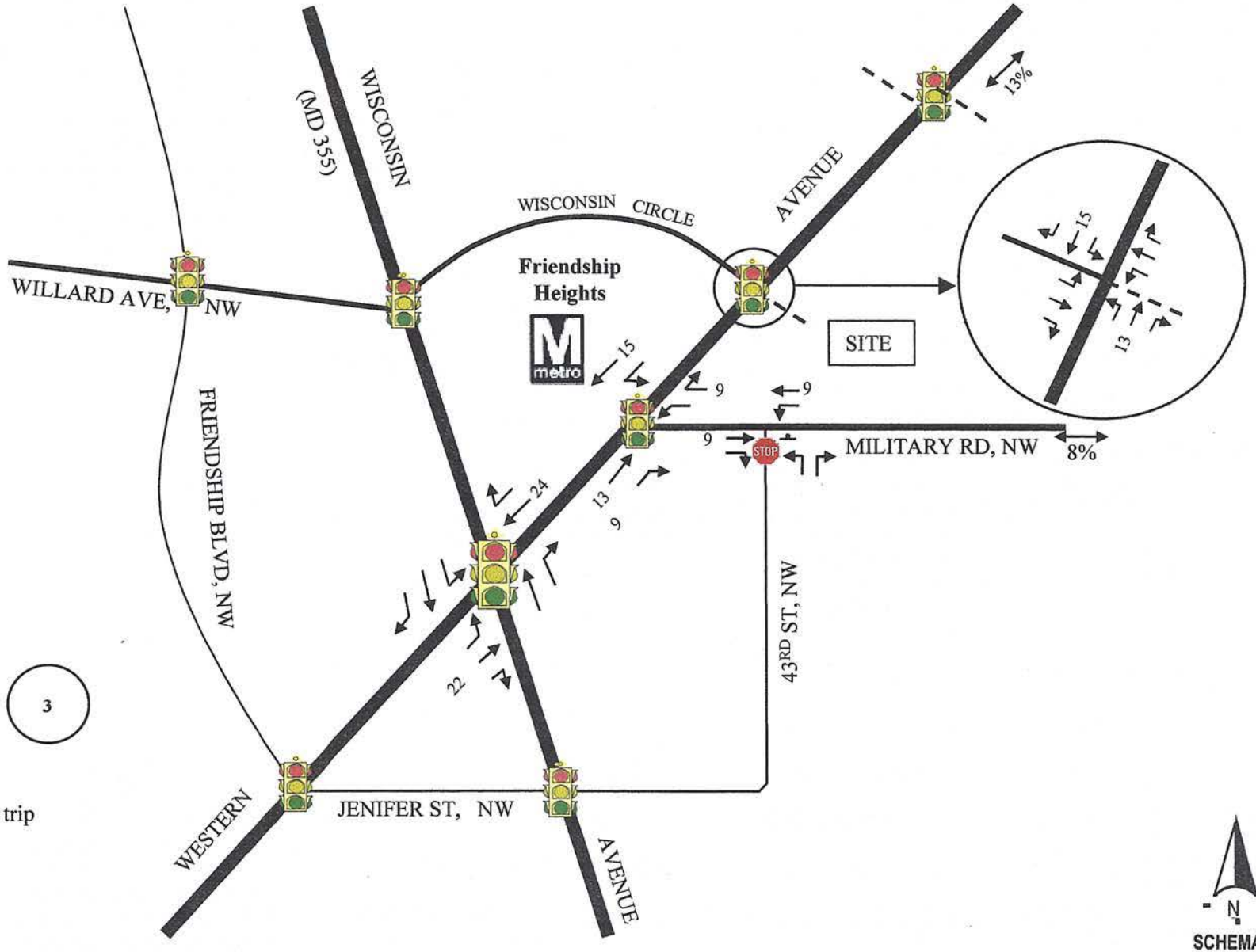
Note: Based on trip distribution for approved study

SCHEMATIC
NOT TO SCALE

S-C

O. R. GEORGE &ASSOCIATES, INC.
Traffic Engineers - Transportation Planners

Site No 2. (Wisconsin Place) – Trip Distribution and Assignment
Washington Clinic Planned Unit Development, Northwest Washington, DC



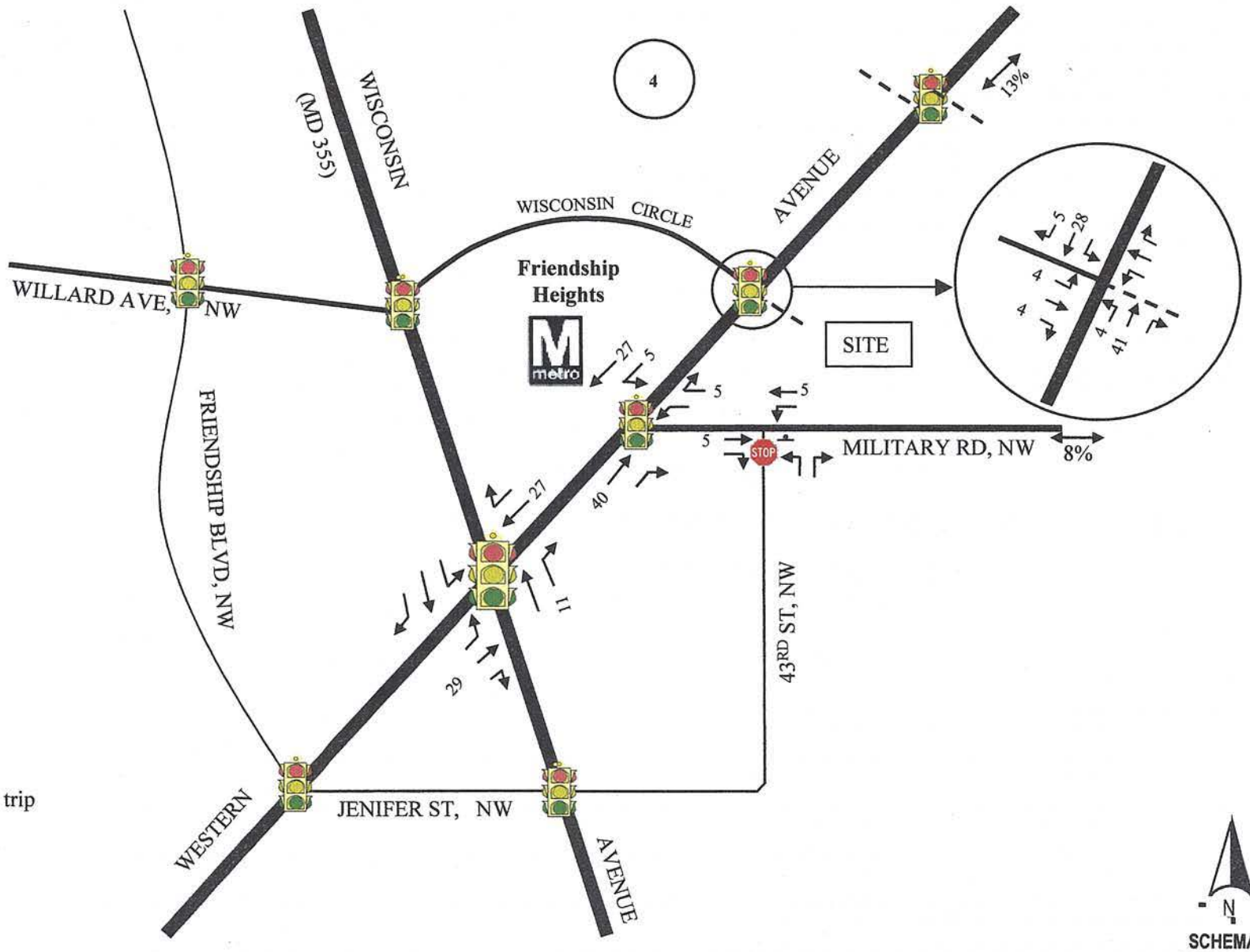
Note: Based on trip distribution for approved study

O. R. GEORGE &ASSOCIATES, INC.

Traffic Engineers - Transportation Planners

Site No 3. (Friendship Commons) – Trip Distribution and Assignment
Washington Clinic Planned Unit Development, Northwest Washington, DC

5-D



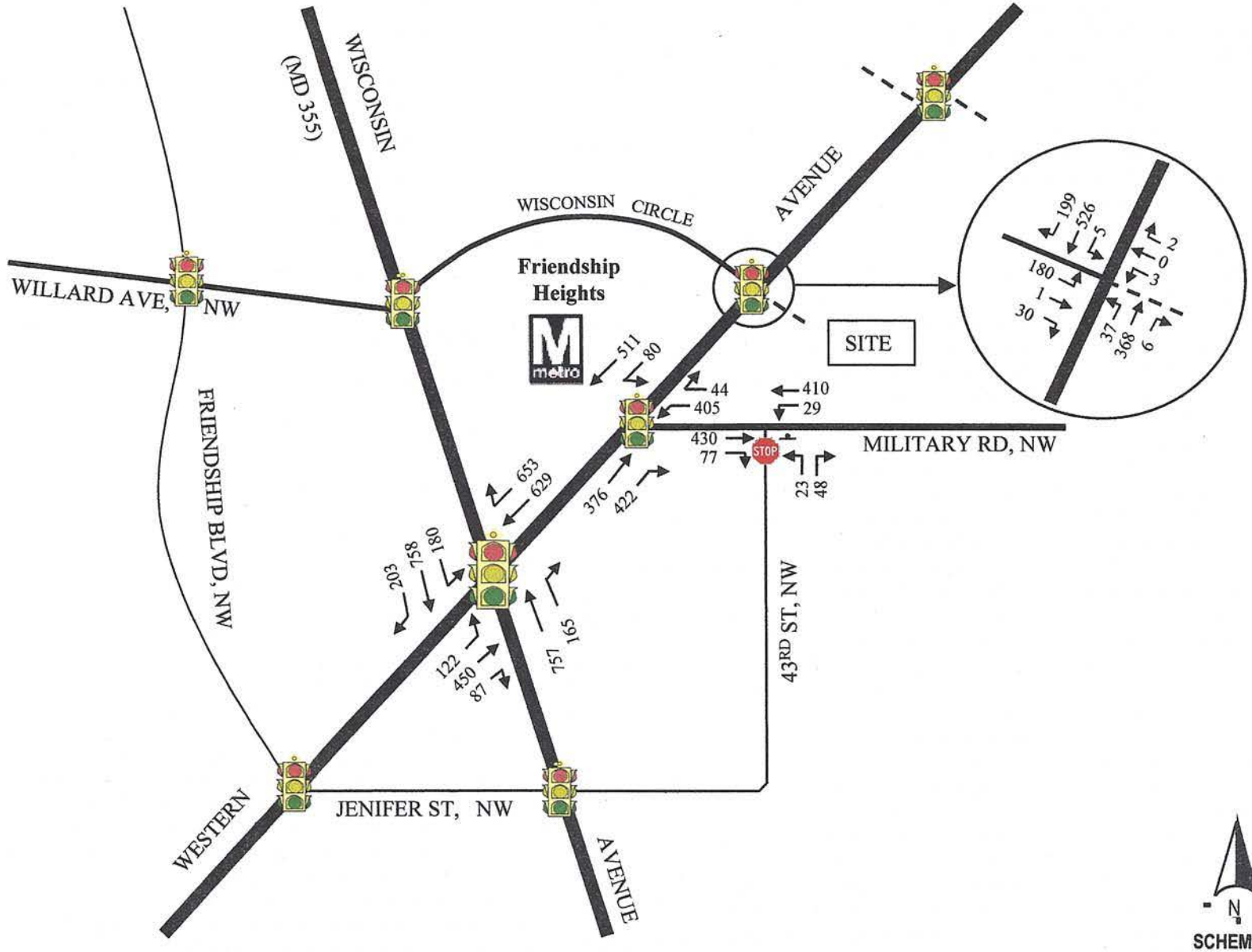
Note: Based on trip distribution for approved study

SCHEMATIC
NOT TO SCALE

5-E

O. R. GEORGE &ASSOCIATES, INC.
Traffic Engineers - Transportation Planners

Site No 4. (Chevy Chase Center) – Trip Distribution and Assignment
Washington Clinic Planned Unit Development, Northwest Washington, DC



O. R. GEORGE &ASSOCIATES, INC.

Traffic Engineers - Transportation Planners

Year 2006 Base Traffic Volumes – Key Intersections
Washington Clinic Planned Unit Development, Northwest Washington, DC

S-F

ATTACHMENT

6

CAPACITY ANALYSIS WORKSHEETS
PROJECTED YEAR 2006 TOTAL
WEEKEND TRAFFIC SITUATION

SHORT REPORT

General Information		Site Information	
Analyst	ORGA/KM	Intersection	Wisconsin Ave @ Wisconsin Cir
Agency or Co.	O. R. George & Associates	Area Type	All other areas
Date Performed	8/12/02	Jurisdiction	District of Columbia
Time Period	2:00 - 3:00 PM (PM Peak)	Analysis Year	2006 (Projected)

Volume and Timing Input

	EB			WB			NB			SB		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
Num. of Lanes	1	1	0	0	2	0	1	3	0	1	3	0
Lane group	L	TR		DefL	TR		L	TR		L	TR	
Volume (vph)	184	13	34	21	12	6	41	486	24	9	636	204
% Heavy veh	0	0	0	0	0	0	0	0	0	0	0	0
PHF	0.95	0.95	0.95	0.91	0.91	0.91	0.92	0.92	0.92	0.96	0.96	0.96
Actuated (P/A)	P	P	P	P	P	P	P	P	P	P	P	P
Startup lost time	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Ext. eff. green	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Arrival type	3	3		3	3		3	3		3	3	
Unit Extension	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Ped/Bike/RTOR Volume	0	0	0	0	0	0	0	0	5	0	0	5
Lane Width	12.0	12.0		12.0	12.0		12.0	12.0		11.0	11.0	
Parking/Grade/Parking	N	0	N	N	0	N	N	0	N	N	0	N
Parking/hr												
Bus stops/hr	0	0		0	0		0	0		0	0	
Unit Extension	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	

Phasing	EW Perm	02	03	04	NB Only	NS Perm	SB Only	08
Timing	G = 30.0	G =	G =	G =	G = 6.0	G = 20.0	G = 6.0	G =
	Y = 5	Y =	Y =	Y =	Y = 4	Y = 5	Y = 4	Y =

Duration of Analysis (hrs) = 0.25 Cycle Length C = 80.0

Lane Group Capacity, Control Delay, and LOS Determination

	EB			WB			NB			SB		
Adj. flow rate	193	50		23	20		45	551		9	870	
Lane group cap.	530	636		516	675		253	1934		452	1874	
v/c ratio	0.36	0.08		0.04	0.03		0.18	0.28		0.02	0.46	
Green ratio	0.38	0.38		0.38	0.38		0.38	0.38		0.39	0.39	
Unif. delay d1	18.1	16.1		15.9	15.8		16.8	17.5		15.2	18.3	
Delay factor k	0.50	0.50		0.50	0.50		0.50	0.50		0.50	0.50	
Increm. delay d2	1.9	0.2		0.2	0.1		1.5	0.4		0.1	0.8	
PF factor	1.000	1.000		1.000	1.000		1.000	1.000		1.000	1.000	
Control delay	20.0+	16.3		16.1	15.9		18.3	17.9		15.3	19.1	
Lane group LOS	C	B		B	B		B	B		B	B	
Apprch. delay	19.3			16.0			17.9			19.1		
Approach LOS	B			B			B			B		
Intersec. delay	18.6			Intersection LOS						B		

6-A

TWO-WAY STOP CONTROL SUMMARY

General Information

Analyst	ORGA/KM
Agency/Co.	O. R. George & Associates
Date Performed	1/24/02 (Saturday)
Analysis Time Period	2:00 PM - 3:00 PM (PM Peak)

Site Information

Intersection	43rd Street @ Military Road
Jurisdiction	District of Columbia
Analysis Year	Washington Clinic NMS

Project Description: Washington Clinic PUD (Projected Year 2006 Weekend Peak

East/West Street: Military Road, NW | North/South Street: 43rd Street, NW

Intersection Orientation: East-West | Study Period (hrs): 0.25

Vehicle Volumes and Adjustments

Major Street	Eastbound			Westbound		
Movement	1	2	3	4	5	6
	L	T	R	L	T	R
Volume	0	473	77	29	456	0
Peak-Hour Factor, PHF	1.00	0.95	0.95	0.95	0.95	1.00
Hourly Flow Rate, HFR	0	497	81	30	480	0
Percent Heavy Vehicles	0	--	--	3	--	--
Median Type	Undivided					
RT Channelized			0			0
Lanes	0	1	0	0	1	0
Configuration			TR	LT		
Upstream Signal		0			1	

Minor Street	Northbound			Southbound		
Movement	7	8	9	10	11	12
	L	T	R	L	T	R
Volume	23	0	48	0	0	0
Peak-Hour Factor, PHF	0.95	1.00	0.95	1.00	1.00	1.00
Hourly Flow Rate, HFR	24	0	50	0	0	0
Percent Heavy Vehicles	0	0	0	0	0	0
Percent Grade (%)		0			0	
Flared Approach		N			N	
Storage		0			0	
RT Channelized			0			0
Lanes	0	0	0	0	0	0
Configuration		LR				

Delay, Queue Length, and Level of Service

Approach	EB	WB	Northbound			Southbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration		LT		LR				
v (vph)		30		74				
C (m) (vph)		991		382				
v/c		0.03		0.19				
95% queue length		0.09		0.71				
Control Delay		8.7		16.7				
LOS		A		C				
Approach Delay	--	--	16.7					
Approach LOS	--	--	C					

6-B

SHORT REPORT

General Information		Site Information	
Analyst	ORGA/KM	Intersection	Western Ave @ Military Road
Agency or Co.	O. R. George & Associates	Area Type	All other areas
Date Performed	8/12/02 PM Peak Hour	Jurisdiction	District of Columbia
Time Period	2:00 - 3:00 PM (PM Peak)	Analysis Year	2006 (Projected)

Volume and Timing Input

	EB			WB			NB			SB		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
Num. of Lanes	0	0	0	1	0	0	0	2	0	1	3	0
Lane group				L	LR			TR		L	T	
Volume (vph)				443		52		508	456	88	636	
% Heavy veh				0		0		0	0	0	0	
PHF				0.87		0.87		0.95	0.95	0.93	0.93	
Actuated (P/A)				P		P		P	P	P	P	
Startup lost time				2.0	2.0			2.0		2.0	2.0	
Ext. eff. green				2.0	2.0			2.0		2.0	2.0	
Arrival type				3	3			3		3	3	
Unit Extension				3.0	3.0			3.0		3.0	3.0	
Ped/Bike/RTOR Volume	0			120	0	12	18		225			
Lane Width				11.0	11.0			11.0		11.0	11.0	
Parking/Grade/Parking	N		N	N	0	N	N	0	N	N	0	N
Parking/hr												
Bus stops/hr				0	0			0		0	0	
Unit Extension				3.0	3.0			3.0		3.0	3.0	

Phasing	WB Only	02	03	04	Thru & RT	SB Only	07	08
Timing	G = 32.0	G =	G =	G =	G = 48.0	G = 15.0	G =	G =
	Y = 5	Y =	Y =	Y =	Y = 5	Y = 5	Y =	Y =

Duration of Analysis (hrs) = 0.25 Cycle Length C = 110.0

Lane Group Capacity, Control Delay, and LOS Determination

	EB			WB			NB			SB		
Adj. flow rate				255	300			778		95	684	
Lane group cap.				508	499			1451		233	3100	
v/c ratio				0.50	0.60			0.54		0.41	0.22	
Green ratio				0.29	0.29			0.44		0.14	0.62	
Unif. delay d1				32.4	33.5			22.8		43.4	9.3	
Delay factor k				0.50	0.50			0.50		0.50	0.50	
Increm. delay d2				3.5	5.3			1.4		5.2	0.2	
PF factor				1.000	1.000			1.000		1.000	1.000	
Control delay				35.9	38.8			24.2		48.7	9.4	
Lane group LOS				D	D			C		D	A	
Apprch. delay				37.5			24.2			14.2		
Approach LOS				D			C			B		
Intersec. delay	24.0			Intersection LOS						C		

6-C

SHORT REPORT

General Information		Site Information	
Analyst	ORGA/KM	Intersection	Wisconsin Ave @ Western Ave
Agency or Co.	O. R. George & Associates	Area Type	All other areas
Date Performed	8/10/02 (Saturday)	Jurisdiction	District of Columbia
Time Period	2:00 - 3:00 PM (Peak Period)	Analysis Year	2006 (Projected)

Volume and Timing Input

	EB			WB			NB			SB		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
Num. of Lanes	1	2	0	0	2	1	0	3	0	0	3	0
Lane group	L	TR			T	R		TR			LTR	
Volume (vph)	183	596	87		816	266		778	186	196	780	269
% Heavy veh	0	2	0		1	1		1	2	0	0	0
PHF	0.94	0.94	0.94		0.91	0.91		0.92	0.92	0.96	0.96	0.96
Actuated (P/A)	P	P	P		P	P		P	P	P	P	P
Startup lost time	2.0	2.0			2.0	2.0		2.0			2.0	
Ext. eff. green	2.0	2.0			2.0	2.0		2.0			2.0	
Arrival type	4	4			4	4		4			4	
Unit Extension	3.0	3.0			3.0	3.0		3.0			3.0	
Ped/Bike/RTOR Volume	60	0	0	60	0	0	90	0	34	70	0	38
Lane Width	11.0	11.0			11.0	11.0		11.0			11.0	
Parking/Grade/Parking	N	0	N	N	0	N	N	0	N	N	0	N
Parking/hr												
Bus stops/hr	0	0			0	0		8			0	
Unit Extension	3.0	3.0			3.0	3.0		3.0			3.0	

Phasing	EB Only	EW Perm	03	04	Thru & RT	SB Only	07	08
Timing	G = 12.0	G = 33.0	G =	G =	G = 37.0	G = 10.0	G =	G =
	Y = 4	Y = 5	Y =	Y =	Y = 4	Y = 5	Y =	Y =

Duration of Analysis (hrs) = 0.25 Cycle Length C = 110.0

Lane Group Capacity, Control Delay, and LOS Determination

	EB			WB			NB			SB		
Adj. flow rate	194	725			893	291		1010			1260	
Lane group cap.	270	1499			1037	604		1604			2233	
v/c ratio	0.72	0.48			0.86	0.48		0.63			0.56	
Green ratio	0.45	0.45			0.30	0.39		0.34			0.46	
Unif. delay d1	23.3	21.6			36.3	25.1		30.7			21.4	
Delay factor k	0.50	0.50			0.50	0.50		0.50			0.50	
Increm. delay d2	15.2	1.1			9.4	2.7		1.9			1.0	
PF factor	0.842	0.842			0.986	0.904		0.956			0.819	
Control delay	34.8	19.3			45.2	25.5		31.3			18.6	
Lane group LOS	C	B			D	C		C			B	
Apprch. delay	22.6			40.3			31.3			18.6		
Approach LOS	C			D			C			B		
Intersec. delay	28.2			Intersection LOS						C		

6-D

ATTACHMENT

7

CAPACITY ANALYSIS WORKSHEETS –
WISCONSIN AVENUE @ WESTERN AVENUE
INTERSECTION

SHORT REPORT

General Information		Site Information	
Analyst	ORGA/AP	Intersection	Wisconsin Ave @ Western Ave
Agency or Co.	O. R. George & Associates	Area Type	All other areas
Date Performed	8/12/02 (Weekday)	Jurisdiction	District of Columbia
Time Period	5:00 - 6:00 PM (PM Peak Hour)	Analysis Year	Washinton Clinic Site - PUD

Volume and Timing Input

	EB			WB			NB			SB		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
Num. of Lanes	1	2	0	0	2	1	0	3	0	0	3	0
Lane group	L	TR			T	R		TR			LTR	
Volume (vph)	198	1003	133		809	352		1110	151	381	909	227
% Heavy veh	0	2	0		1	1		1	2	0	0	0
PHF	0.94	0.94	0.94		0.91	0.91		0.92	0.92	0.96	0.96	0.96
Actuated (P/A)	P	P	P		P	P		P	P	P	P	P
Startup lost time	2.0	2.0			2.0	2.0		2.0			2.0	
Ext. eff. green	2.0	2.0			2.0	2.0		2.0			2.0	
Arrival type	4	4			4	4		4			4	
Unit Extension	3.0	3.0			3.0	3.0		3.0			3.0	
Ped/Bike/RTOR Volume	60	0	0	60	0	0	90	0	34	70	0	38
Lane Width	11.0	11.0			11.0	11.0		11.0			11.0	
Parking/Grade/Parking	N	0	N	N	0	N	N	0	N	N	0	N
Parking/hr												
Bus stops/hr	0	0			0	0		8			0	
Unit Extension	3.0	3.0			3.0	3.0		3.0			3.0	

Phasing	EW Perm	02	03	04	Thru & RT	SB Only	07	08
Timing	G = 30.0	G =	G =	G =	G = 26.0	G = 10.0	G =	G =
	Y = 5	Y =	Y =	Y =	Y = 4	Y = 5	Y =	Y =

Duration of Analysis (hrs) = 0.25 Cycle Length C = 80.0

Lane Group Capacity, Control Delay, and LOS Determination

	EB			WB			NB			SB		
Adj. flow rate	210	1207			885	385		1332			1544	
Lane group cap.	140	1263			1296	870		1569			2423	
v/c ratio	1.50	0.96			0.68	0.44		0.85			0.64	
Green ratio	0.38	0.38			0.38	0.56		0.32			0.50	
Unif. delay d1	25.0	24.4			21.0	10.2		25.2			14.7	
Delay factor k	0.50	0.50			0.50	0.50		0.50			0.50	
Increm. delay d2	258.6	16.7			2.9	1.6		5.9			1.3	
PF factor	0.920	0.920			0.920	0.657		0.965			0.767	
Control delay	281.6	39.1			22.3	8.3		30.2			12.5	
Lane group LOS	F	D			C	A		C			B	
Apprch. delay	75.0			18.0			30.2			12.5		
Approach LOS	E			B			C			B		
Intersec. delay	34.0			Intersection LOS						C		

7-A

SHORT REPORT

General Information		Site Information	
Analyst	ORGA/AP	Intersection	Wisconsin Ave @ Western Ave
Agency or Co.	Washington, D.C.	Area Type	All other areas
Date Performed	8/7/02 (Weekday)	Jurisdiction	District of Columbia
Time Period	8:00 - 9:00 AM (AM Peak Hour)	Analysis Year	Washinton Clinic Site - PUD

Volume and Timing Input

	EB			WB			NB			SB		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
Num. of Lanes	1	2	0	0	2	1	0	3	0	0	3	0
Lane group	L	TR			T	R		TR			LTR	
Volume (vph)	108	679	50		1056	468		993	115	342	1334	151
% Heavy veh	1	2	0		3	3		1	1	2	2	2
PHF	0.92	0.92	0.92		0.98	0.98		0.95	0.95	0.92	0.92	0.92
Actuated (P/A)	P	P	P		P	P		P	P	P	P	P
Startup lost time	2.0	2.0			2.0	2.0		2.0			2.0	
Ext. eff. green	2.0	2.0			2.0	2.0		2.0			2.0	
Arrival type	4	4			4	4		4			4	
Unit Extension	3.0	3.0			3.0	3.0		3.0			3.0	
Ped/Bike/RTOR Volume	60	0	0	60	0	0	90	0	24	70	0	25
Lane Width	11.0	11.0			11.0	11.0		11.0			11.0	
Parking/Grade/Parking	N	0	N	N	0	N	N	0	N	N	0	N
Parking/hr												
Bus stops/hr	0	0			0	0		8			0	
Unit Extension	3.0	3.0			3.0	3.0		3.0			3.0	

Phasing	EW Perm	02	03	04	Thru & RT	SB Only	07	08
Timing	G = 31.0	G =	G =	G =	G = 20.0	G = 15.0	G =	G =
	Y = 5	Y =	Y =	Y =	Y = 4	Y = 5	Y =	Y =

Duration of Analysis (hrs) = 0.25 | Cycle Length C = 80.0

Lane Group Capacity, Control Delay, and LOS Determination

	EB			WB			NB			SB		
Adj. flow rate	117	792		1082	480		1146			1952		
Lane group cap.	90	1314		1313	966		1210			2345		
v/c ratio	1.30	0.60		0.82	0.50		0.95			0.83		
Green ratio	0.39	0.39		0.39	0.64		0.25			0.49		
Unif. delay d1	24.5	19.6		22.0	7.7		29.5			17.7		
Delay factor k	0.50	0.50		0.50	0.50		0.50			0.50		
Increm. delay d2	195.0	2.1		6.0	1.8		15.9			3.6		
PF factor	0.907	0.907		0.907	0.476		1.000			0.785		
Control delay	217.2	19.8		26.0	5.5		45.4			17.5		
Lane group LOS	F	B		C	A		D			B		
Apprch. delay	45.2			19.7			45.4			17.5		
Approach LOS	D			B			D			B		
Intersec. delay	28.4			Intersection LOS						C		

7-B

HCS: Signalized Intersections Release 3.2

Inter: Wisconsin Ave @ Western Ave
Analyst: ORGA/KM
Date: 3/1/02 AM Peak Hour
E/W St: Westren Avenue, NW

City/St: Washington, D.C.
Proj #: Washinton Clinic Site - PUD
Period: 8:00 AM - 9:00 AM (Background)
N/S St: Wisconsin Avenue, NW

SIGNALIZED INTERSECTION SUMMARY

	Eastbound			Westbound			Northbound			Southbound		
	L	T	R	L	T	R	L	T	R	L	T	R
No. Lanes	1	2	0	0	2	1	0	3	0	0	3	0
LGConfig	L	TR			T	R		TR			LTR	
Volume	108	679	50		1056	468		993	115	342	1334	151
Lane Width	11.0	11.0			11.0	11.0		11.0			11.0	
RTOR Vol			0			0			24			25

Duration 0.25 Area Type: All other areas

Signal Operations

Phase Combination		1	2	3	4			5	6	7	8
EB	Left	P	P			NB	Left				
	Thru	P	P				Thru	P			
	Right	P	P				Right	P			
	Peds		X				Peds	X			
WB	Left					SB	Left		P		
	Thru		P				Thru	P	P		
	Right		P				Right	P	P		
	Peds		X				Peds	X			
NB	Right					EB	Right				
SB	Right					WB	Right		P		
Green		6.0	35.0					32.0	19.0		
Yellow		4.0	4.0					4.0	4.0		
All Red		0.0	1.0					0.0	1.0		

Cycle Length: 110.0 secs

Intersection Performance Summary

Appr/ Lane Grp	Lane Group Capacity	Adj Sat Flow Rate (s)	Ratios v/c	Ratios g/C	Lane Group Delay	Lane Group LOS	Approach Delay	Approach LOS
Eastbound								
L	160		0.73	0.409	51.8	D		
TR	1387	3391	0.57	0.409	26.8	C	30.0	C
Westbound								
T	1078	3388	1.00	0.318	65.8	E	53.3	D
R	744	1516	0.65	0.491	25.1	C		
Northbound								
TR	1409	4845	0.81	0.291	41.5	D	41.5	D
Southbound								
LTR	2408	4816	0.81	0.500	26.2	C	26.2	C

Intersection Delay = 37.6 (sec/veh) Intersection LOS = D

7-C

HCS: Signalized Intersections Release 3.2

Inter: Wisconsin Ave @ Western Ave
Analyst: ORGA/KM
Date: 3/1/02 PM Peak Hour
E/W St: Westren Avenue, NW

City/St: Washington, D.C.
Proj #: Washinton Clinic Site - PUD
Period: 5:00 PM - 6:00 PM (Background)
N/S St: Wisconsin Avenue, NW

SIGNALIZED INTERSECTION SUMMARY

	Eastbound			Westbound			Northbound			Southbound		
	L	T	R	L	T	R	L	T	R	L	T	R
No. Lanes	1	2	0	0	2	1	0	3	0	0	3	0
LGConfig	L	TR			T	R		TR			LTR	
Volume	198	1003	133		809	352		1110	151	381	909	227
Lane Width	11.0	11.0			11.0	11.0		11.0			11.0	
RTOR Vol			0			0			34			38

Duration 0.25 Area Type: All other areas

Signal Operations

Phase Combination		1	2	3	4			5	6	7	8
EB	Left		P			NB	Left				
	Thru		P				Thru	P			
	Right		P				Right	P			
	Peds		X				Peds	X			
WB	Left					SB	Left		P		
	Thru		P				Thru	P	P		
	Right		P				Right	P	P		
	Peds		X				Peds	X			
NB	Right					EB	Right				
SB	Right					WB	Right		P		
Green		12.0	33.0					37.0	10.0		
Yellow		4.0	4.0					4.0	4.0		
All Red		0.0	1.0					0.0	1.0		

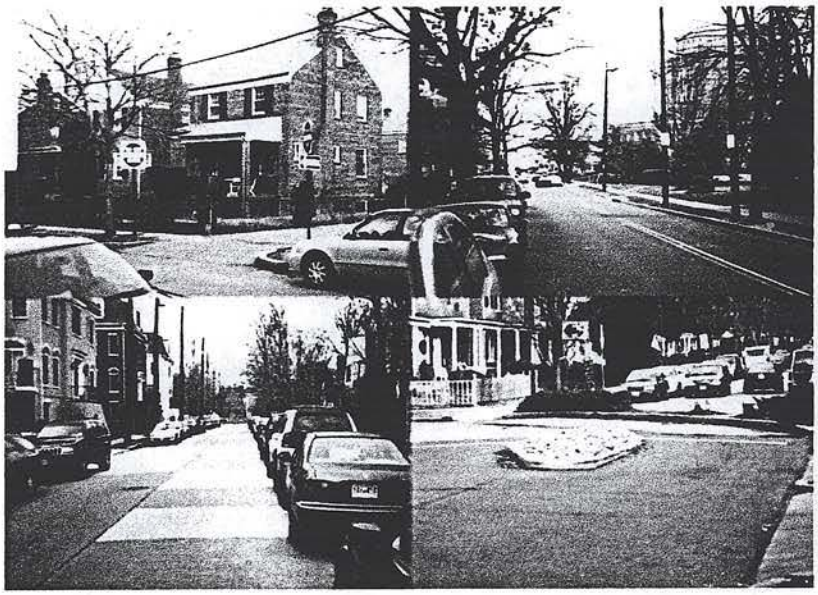
Cycle Length: 110.0 secs

Intersection Performance Summary

Appr/ Lane Grp	Lane Group Capacity	Adj Sat Flow Rate (s)	Ratios v/c	Ratios g/C	Lane Group Delay	Lane Group LOS	Approach Delay	Approach LOS
Eastbound								
L	257		0.82	0.445	49.2	D		
TR	1501	3369	0.80	0.445	31.0	C	33.7	C
Westbound								
T	1037	3455	0.85	0.300	45.1	D	41.2	D
R	604	1546	0.64	0.391	32.3	C		
Northbound								
TR	1625	4832	0.82	0.336	38.2	D	38.2	D
Southbound								
LTR	2249	4850	0.69	0.464	24.9	C	24.9	C

Intersection Delay = 34.1 (sec/veh) Intersection LOS = C

5401WESTERN AVENUE DEVELOPMENT - NEIGHBORHOOD TRAFFIC MITIGATON STUDY, FRIENDSHIP HEIGHTS, NORTHWEST, WASHINGTON, D.C.



Prepared for:

STONEBRIDGE ASSOCIATES, INC
Two Bethesda Metro Center, Suite 220
Bethesda, MD 20814 - 5332
Attn: Mr. Douglas Firstenberg

Prepared by:

O. R. GEORGE & ASSOCIATES, INC.
Transportation Planning & Engineering Consultants
10210 Greenbelt Road, Suite 310
Greenbelt, Maryland 20706

August 15, 2002

O. R. GEORGE & ASSOCIATES, INC.

Traffic Engineers – Transportation Planners

10210 Greenbelt Road, Suite # 310 • Lanham, Maryland 20706
Tel: (301) 794-7700 • Fax: (301) 794-4400
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TECHNICAL MEMORANDUM

DATE: August 15, 2002

TO: Mr. Douglas M. Firstenberg, Principal
STONEBRIDGE ASSOCIATES, INC.

FROM: Mr. Cullen E. Elias

RE: Friendship Heights Neighborhood Traffic Mitigation Study, Northwest Washington, D.C.

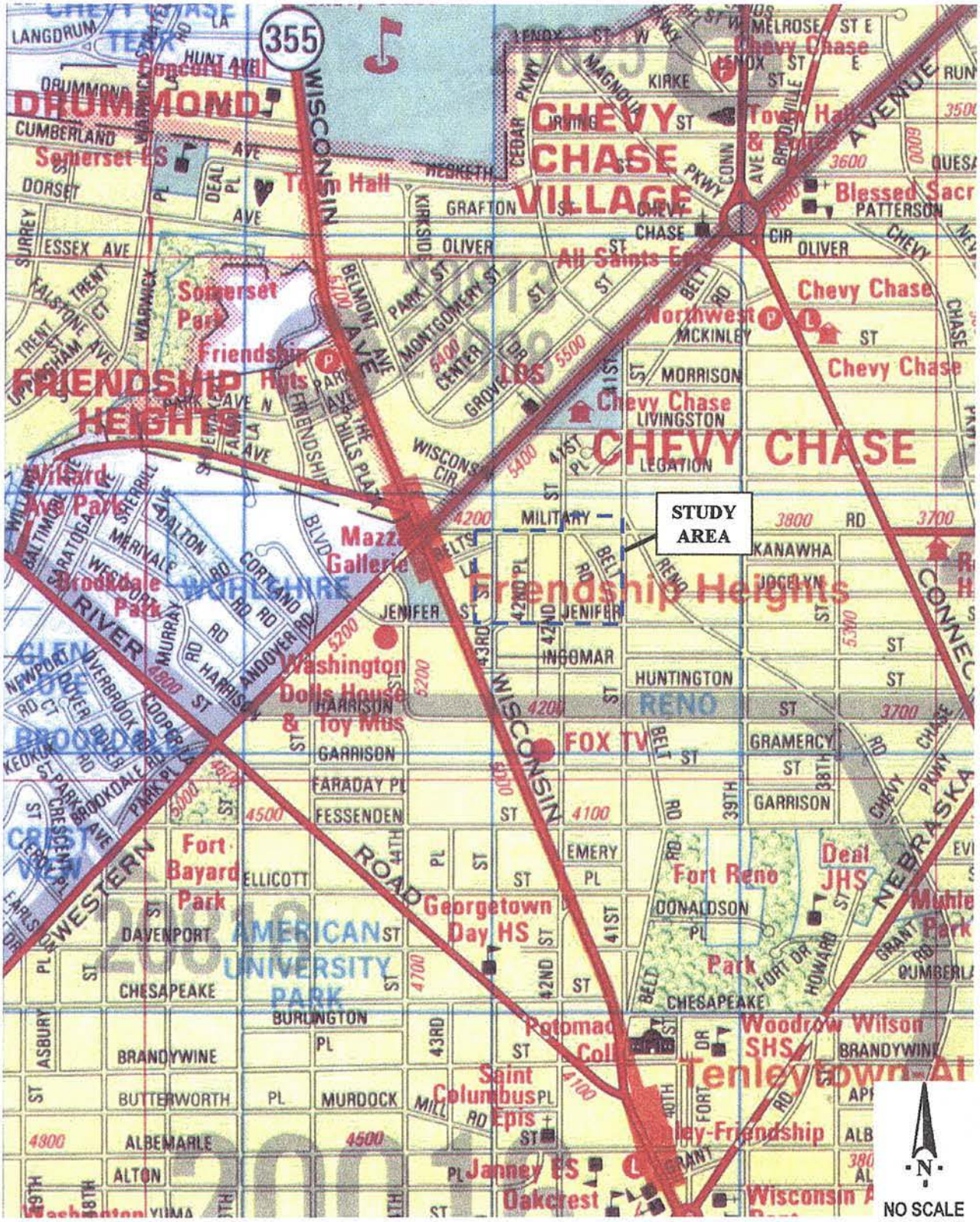
1.0 INTRODUCTION AND BACKGROUND

This neighborhood traffic mitigation study was undertaken primarily to address identified traffic operational and safety issues within a section of the Friendship Heights area, in Northwest Washington, D.C. The general study area is bounded by Military Road to the north, Reno Road to the east, Jenifer Street to the south, and 43rd Street to the west. The focal area studied included Military Road, between 41st Street (to the east) and Western Avenue (to the west), and the 43rd Street - Jenifer Street roadway between Military Road (to the north) and Wisconsin Avenue (to the south). The subject sub-area, within its local setting, is shown in Exhibit 1.

As background, it is noted that the study area is situated immediately south of 5401 Western Avenue site, which is located within the northeast quadrant of the Western Avenue/Military Road intersection. Stonebridge Associates, Inc., (hereinafter "the Owner") has ownership interests in that property; and has submitted an application to rezone and redevelop the site with a mix of residential and retail uses, within the City's Planned Unit Development (PUD) review guidelines.

The 5401 Western Avenue site development team has held several meetings with a "working group" of representatives from the adjacent community. During these meetings, members of the working group identified a desire to address existing traffic calming issues within their community, with particular reference to the Military Road and 43rd Street - Jenifer Street roadway segments defined above. The Owner has proffered this study, as part of the "public amenities" package for the prospective PUD application approval by the City Zoning Commission. This Consultant has also performed a separate analysis for the proposed development which concluded that the proposed development would have no adverse impacts on the immediate area. This study is intended to improve traffic conditions, in the adjacent neighborhood, which are not related to the proposed development.

The subject study therefore reflects the concerns and suggestions of representative of the impacted community, as presented to the development team via several meetings and correspondence. The study is also based on the following factors:



O. R. GEORGE & ASSOCIATES, INC.	**EXHIBIT 1:** STUDY AREA LOCATION MAP Friendship Heights, Washington, DC, NW

a) Field observations and surveys of weekday and weekend peak and off-peak traffic volume and parking conditions within the study area, particularly along the defined Military Road and 43rd Street-Jenifer Street roadways;

b) Meetings and telephone discussions held with appropriate staff of various divisions within the District of Columbia Department of Transportation (DDOT) Office of Transportation Policy and Planning;

c) Discussions held with, and review of relevant documents received from representatives of Advisory Neighborhood Commission (ANC) 3E; and

d) Discussions held with property managers or chief engineers of the commercial land uses located immediately to the west, between 43rd Street and Western Avenue.

The remainder of this memorandum presents the findings and recommendations of the subject neighborhood traffic mitigation study.

2.0 EXISTING CONDITIONS

2.1 Existing Land Use Situation

The study area is zoned residential, and is occupied primarily by single-family detached residential units, except along the west side of 43rd Street where the land uses consist of townhouses and a daycare facility. Forty-Third Street in particular, consists of thirty-two (32) townhouses and eleven (11) single-family-detached units. The Washington Clinic, Lisner Home and a mix of townhouses as well as single-family-residential units are the key land uses situated immediately north of the study area. The area situated immediately to the west of the sub-area, and bounded by Military Road, 43rd Street, Jenifer Street and Western Avenue, is developed with significant commercial land uses. These include the Chevy Chase Plaza, the Chevy Chase Pavilion, and the Embassy Suites Hotel. Western Avenue serves as the boundary line separating Northwest Washington, D.C. from Montgomery County within the State of Maryland. The Friendship Heights Metrorail Station on the Washington Metropolitan Area Transit Authority (WMATA) Red Line system is located along Western Avenue at the western terminus of Military Road. The areas situated to the east of the study area are developed with single-family-detached and other low-density residential land uses.

2.2 Study Area Road Network

The regional setting of the study area, from a transportation perspective, is highlighted primarily by Military Road to the north, Western Avenue to the west and north, and Wisconsin Avenue to the west and south. The subject sub-area primarily consists of a network of local streets on the City's roadway grid system. These roadways which are designed to primarily serve only the abutting land uses, are supplemented by a network of alleyways.

As noted earlier, the focus of the study was the segments of Military Road and 43rd Street – Jenifer Road, within the study area. The physical and service characteristics of these roadways are described below:

- **Military Road, N.W.**: Within the study area, this two-lane road is designated as a Minor Arterial on the City's Roadway System. Unmetered parking is allowed along the south side within the City's Residential Parking Permit (RPP) system. This facility links with Missouri Avenue and Riggs Road to the east to form the only east-west connector within the northern section of the City. It is also noted that this connector intersects with several major north-south arterials serving the Washington D.C. – Maryland region. The subject section of Military Road therefore serves significant volumes of through/commuter traffic. Current Average Daily Traffic (ADT) volumes along this segment of Military Road are in the range of 12,600 vehicles. The posted speed is 25 MPH.
- **Forty-Third Street – Jenifer Street, N.W.:** Forty-Third Street runs north-south and Jenifer Street runs east-west, within the study area. The segments under consideration in this study, are 43rd Street, north of Jenifer Street, and Jenifer Street west of 43rd Street. These linked segments are separated from the other segments of these streets by a traffic diverter (see Exhibit 2).

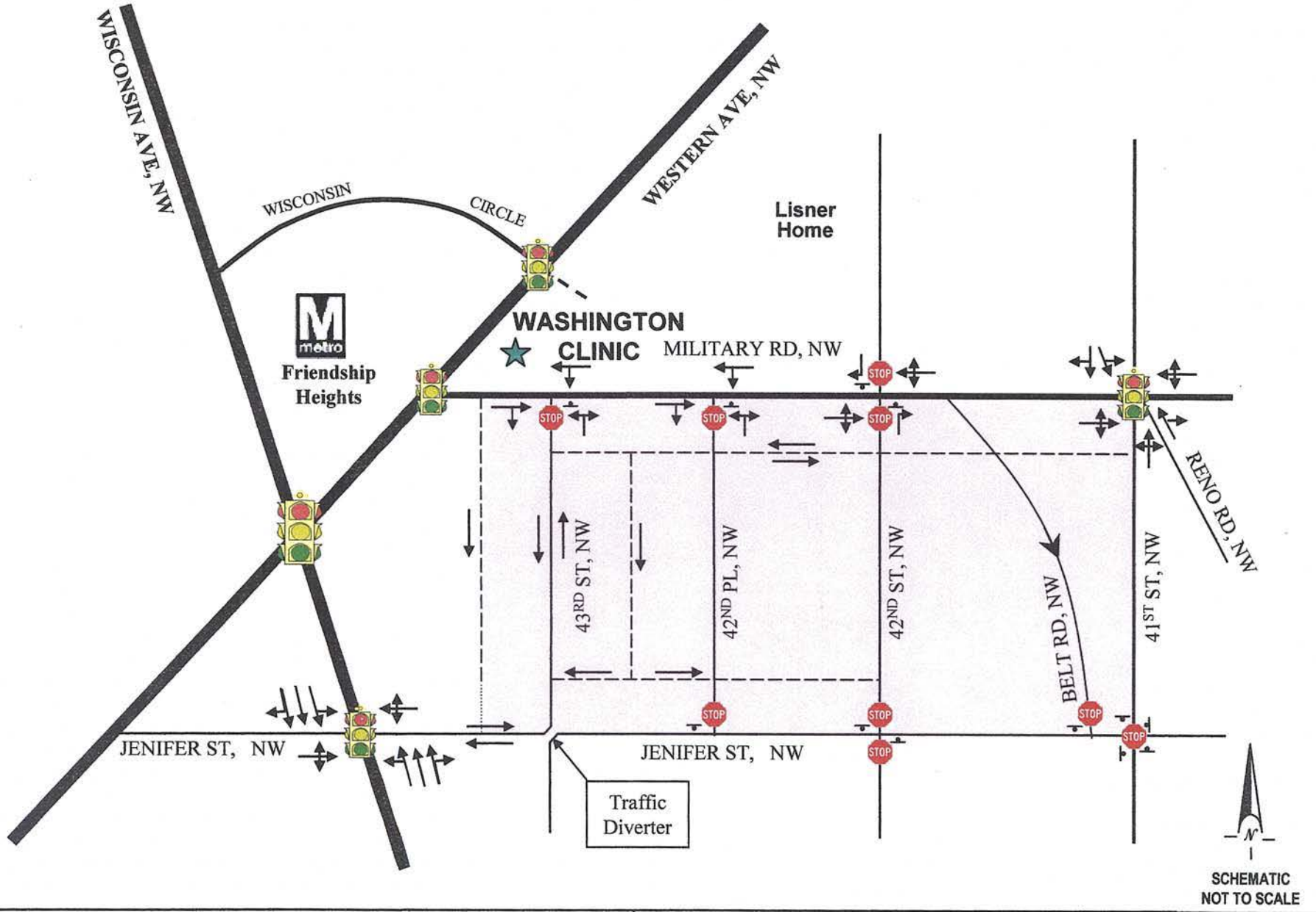
The 43rd Street – Jenifer Street roadway is designated as a Collector on the City's Roadway System. Forty-Third Street provides a single lane of travel (for two-way traffic movements) and parking on both sides, within a 30-foot wide pavement cross-section. Jenifer Street provides a single lane of travel in both directions within a 40-foot wide pavement section. The 43rd Street – Jenifer Road roadway link serves ADT Volumes ranging from 1,700 vehicles along 43rd Street, to 2,100 vehicles along Jenifer Street. The posted speed is 25 MPH.

The other key roadways within the study area are all local facilities, each providing a single lane of travel for two-way traffic movements, as well as parking on both sides. As noted earlier, these roadways are all connected by a system of north-south and east-west alleyways. These facilities also provide for bi-directional traffic movements, except for the southern east-west alley between 43rd Street and 42nd Place where split directional one-way traffic flow is allowed.

Field observations indicate that through trucks are prohibited from utilizing all the study area roadways and alleyways, except for the following three (3) locations:

1) Forty-Third Street where only trucks 1-1/4 tons and above are prohibited;
2) Jenifer Street where there is no truck prohibition; and
3) The alleyway connecting Military Road to Jenifer Street, to the west of 43rd Street, which serves as an exclusive access way (in the southbound direction only), for trucks accessing the adjacent commercial developments.

The study area roadway lane configuration and intersection control devices are shown in Exhibit 2. Exhibit 3 shows the regulatory signage provided in the study area.



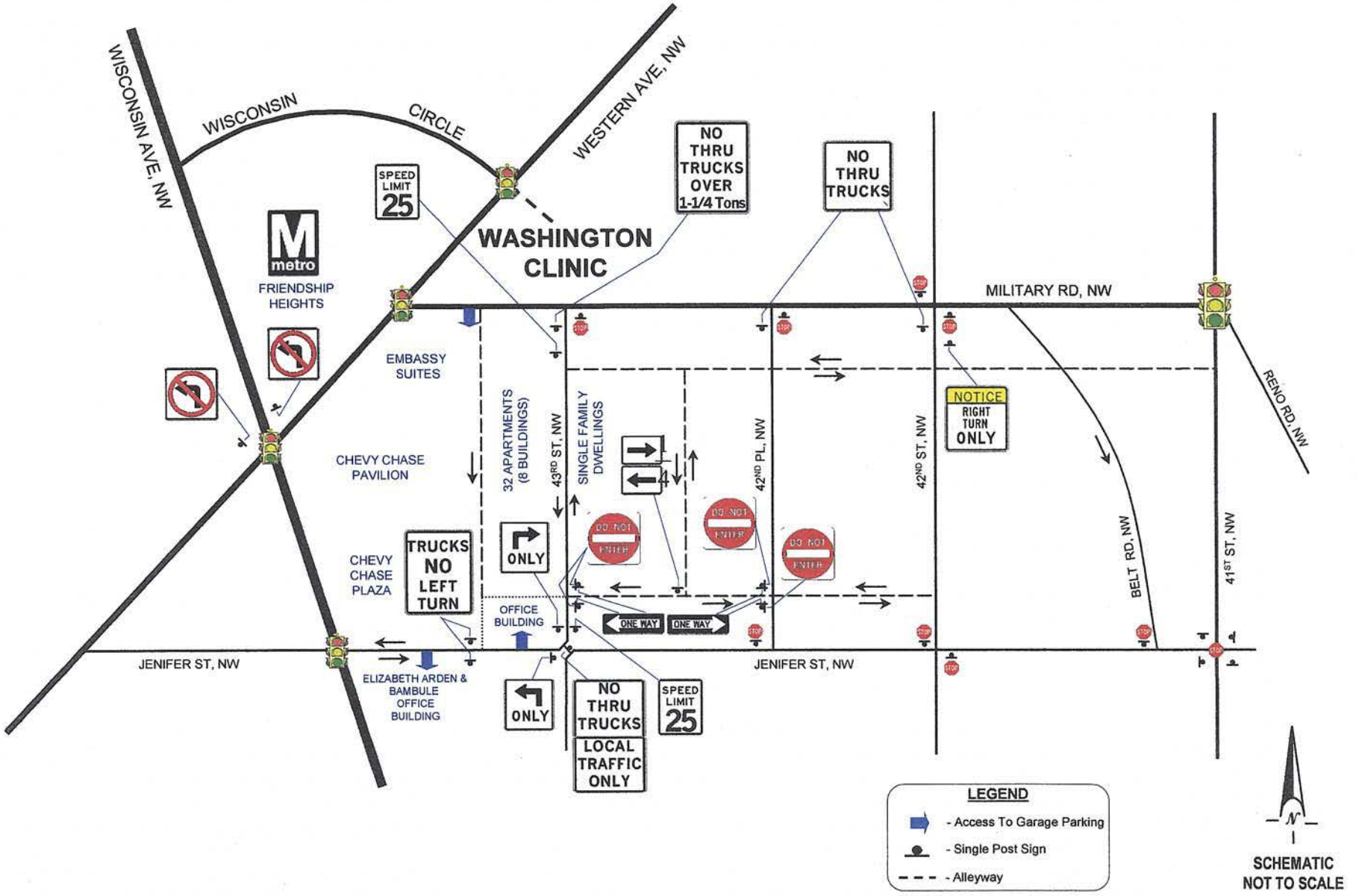
O. R. GEORGE &ASSOCIATES, INC.

Traffic Engineers - Transportation Planners

EXHIBIT 2:

EXISTING ROADWAY LANE CONFIGURATION – STUDY AREA ROAD NETWORK

Washington Clinic Neighborhood Mitigation Study, Northwest Washington, DC



O. R. GEORGE &ASSOCIATES, INC.
Traffic Engineers - Transportation Planners

EXHIBIT 3:
EXISTING SIGNAGE – STUDY AREA ROAD NETWORK
Washington Clinic Neighborhood Mitigation Study, Northwest Washington, DC

2.3 Existing Traffic Situation

In order to assess the existing traffic situation within the study area, and particularly along the Military Road and 43rd Street-Jenifer Street roadway segments, extensive field observations and data collection activities were conducted during the morning and afternoon peak periods of typical weekdays, as well as on weekends. The primary task elements included the following:

a) Observations of traffic flow conditions along the segments of Military Road, 43rd Street – Jenifer Street, Western Avenue and Wisconsin Avenue, within and adjacent to the study area;

b) Performance of peak period traffic turning movement counts at the Military Road/43rd Street and Wisconsin Avenue/Jenifer Street intersections. These counts included a breakdown of passenger cars and trucks;

c) Queuing observations along Military Road;

d) Generalized parking usage surveys along both Military Road and 43rd Street – Jenifer Street;

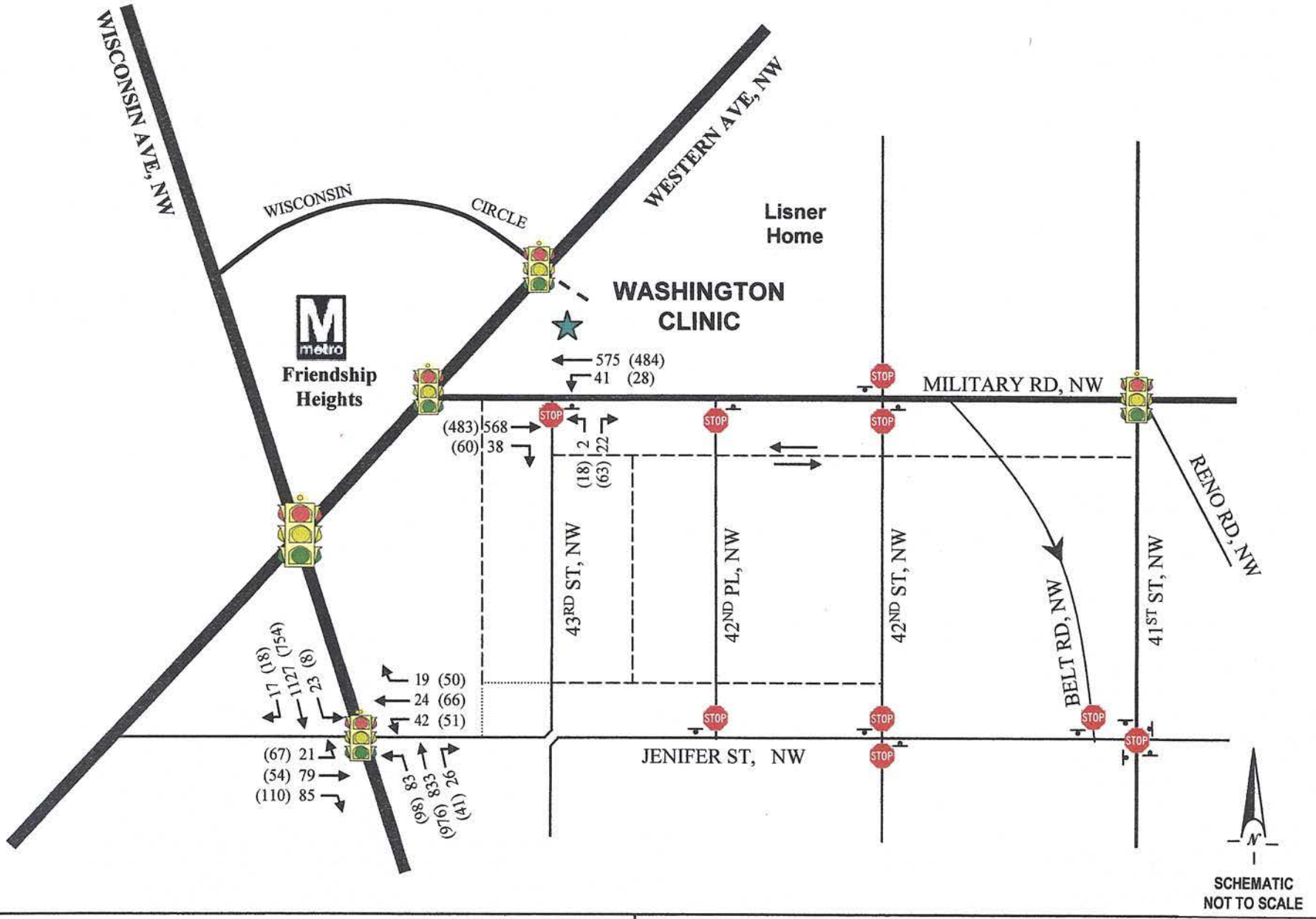
e) Observations of vehicle turning movement opportunities and constraints at the adjacent intersections along Wisconsin and Western Avenues; and

f) Observations of pedestrian activity and related safety deficiencies along Military Road, Western Avenue and Wisconsin Avenue.

The weekday morning and afternoon peak hour volumes derived from Item (b) above are shown in Exhibit 4. The count summaries are presented in Attachment 1. These volumes were analyzed using appropriate Highway Capacity Manual (HCM) procedures, per the requirements of the District of Columbia Department of Transportation (DDOT) Office of Transportation Policy and Planning. The results show that both intersections currently operate acceptably at Level of Service C, during both the morning and afternoon peak periods. The capacity analyses worksheets are also included as Attachment 1.

Field observations indicate that the other key study area intersections also operate at acceptable Levels of Service. This considers the occurrence of moderate queuing along Military Road, by westbound vehicles between Western Avenue and 43rd Street during the morning peak period, and by eastbound vehicles between 41st Street/Reno Road and 42nd Place during the afternoon peak period.

The field observations noted above also indicate that there are several traffic operational and safety issues that could be addressed to provide a better quality of life for the study area residents. These are discussed in the following section.



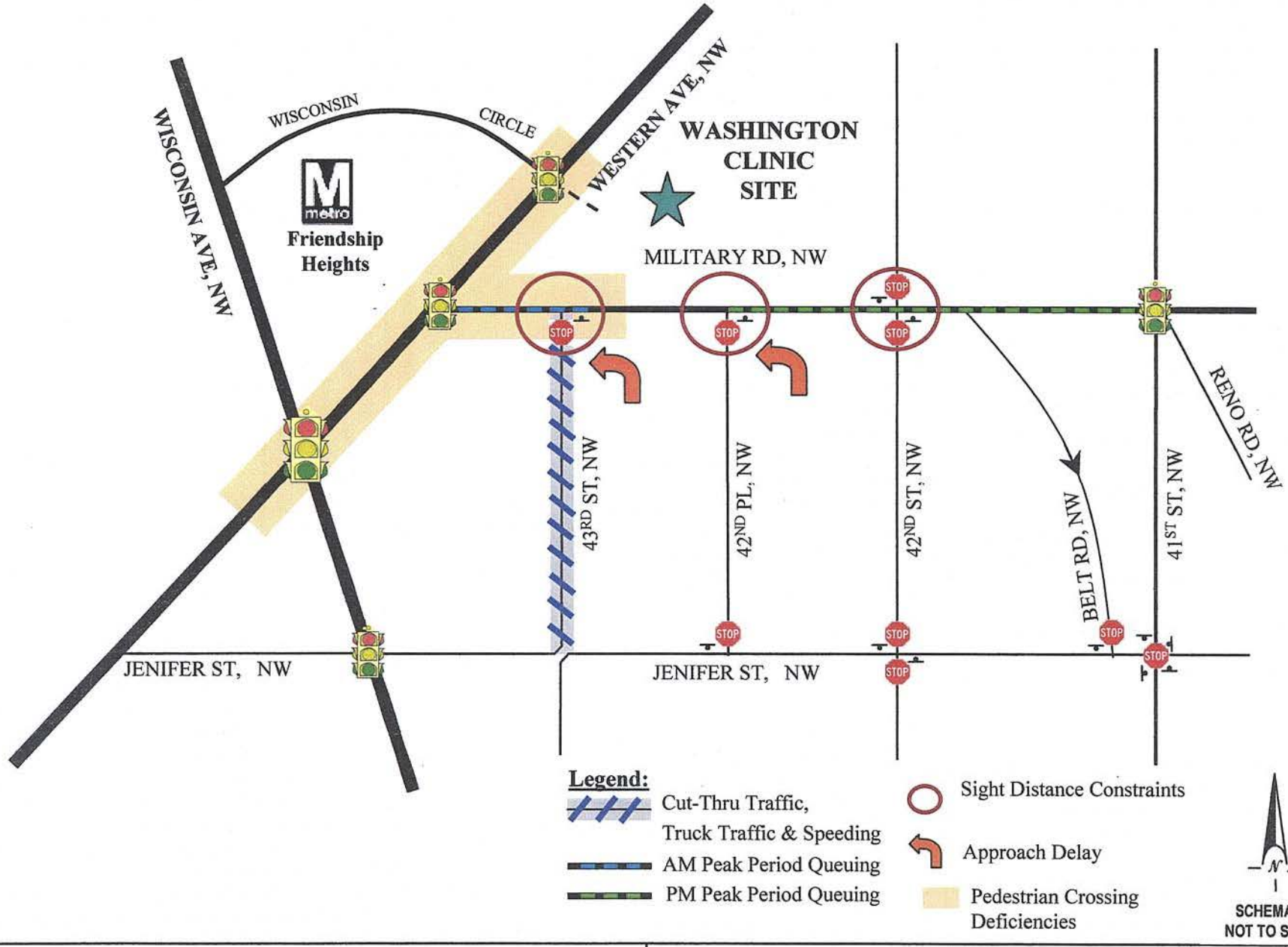
O. R. GEORGE &ASSOCIATES, INC.

Traffic Engineers - Transportation Planners

EXHIBIT 4:

EXISTING WEEKDAY PEAK HOUR TURNING MOVEMENT VOLUMES

Washington Clinic Neighborhood Mitigation Study, Northwest Washington, DC



O. R. GEORGE &ASSOCIATES, INC.
Traffic Engineers - Transportation Planners

EXHIBIT 5:
LOCATION OF IDENTIFIED TRAFFIC ISSUES
Washington Clinic Neighborhood Mitigation Study, Northwest Washington, DC

3.0 TRAFFIC OPERATIONAL/SAFETY ISSUES

As noted earlier, this study is the outcome of several meetings and correspondence between the 5401 Western Avenue PUD team and the "working group" representing the adjacent Friendship Heights neighborhood. This interfacing highlighted traffic operational and safety issues that are of primary concern to the area residents. These issues were submitted by the area Advisory Neighborhood Commission (i.e., ANC-3E) for discussion/consideration in the Ward 3 Traffic Summit held on January 28, 2002. Copy of the ANC-3E submission is included as Attachment 2. The subject traffic issues are discussed below, in the context of the field observations and surveys conducted as part of this study.

A) Traffic Levels

Field observations and the weekday peak hour traffic turning movement data presented in Exhibit 4, confirm that there is some cut-through traffic usage of 43rd Street in the southbound direction during the morning peak period, and in both directions during the afternoon peak period. The contributory factors include the following:

a) The office and retail developments, as well as the day care center located in the block bounded by Military Road, Jenifer Street, 43rd Street, and Wisconsin Avenue, which have access off these roadways;

b) The No-Left-Turn restriction along the westbound approach of Western Avenue at Wisconsin Avenue which results in vehicles using a combination of Jenifer and 43 Streets from westbound Military Road and Western Avenue to access southbound Wisconsin Avenue.

B) Excessive Vehicle Speeds

The posted speed limit for the study area roadways is 25 MPH. Field observations indicate that a moderate percentage of vehicles travel at excessive speeds (i.e., beyond 30 MPH) along Military Road and 43rd Street – Jenifer Street.

C) Truck Usage

This issue pertains to the residential streets. As shown in Exhibit 3, signage is provided to prohibit trucks from utilizing the study area roadways, except for along 43rd Street where through trucks less than 1-1/4 tons are allowed. Field observations indicate that this signage is quite effective, even with respect to 43rd Street. This is also supported by discussions held with property owners and chief engineers of the adjacent commercial facilities to

the west and south. These discussions indicate that trucks accessing those land uses utilize the alleyway connecting Military Road with Jenifer Street, as well as the section of Jenifer Street, west of 43rd Street.

D) Parking Intrusion

Parking provided along the study area roadways is restricted to two-hours, except for Zone 3 residents. Field observations noted that the parking spaces were heavily utilized at all times on weekdays and weekends. It was also noted that the parking regulations were violated to a considerable extent by patrons of the adjacent commercial uses as well as the Friendship Heights Metrorail Station.

E) Pedestrian Crossing Hazards

The area residents had identified pedestrian crossing along Military Road and Western Avenue as a safety hazard. Pedestrian crosswalks are provided across Military Road at 43rd Street and across the side streets at Military Road. Pedestrian signals and crosswalks are provided at the Western Avenue/Military Road intersection.

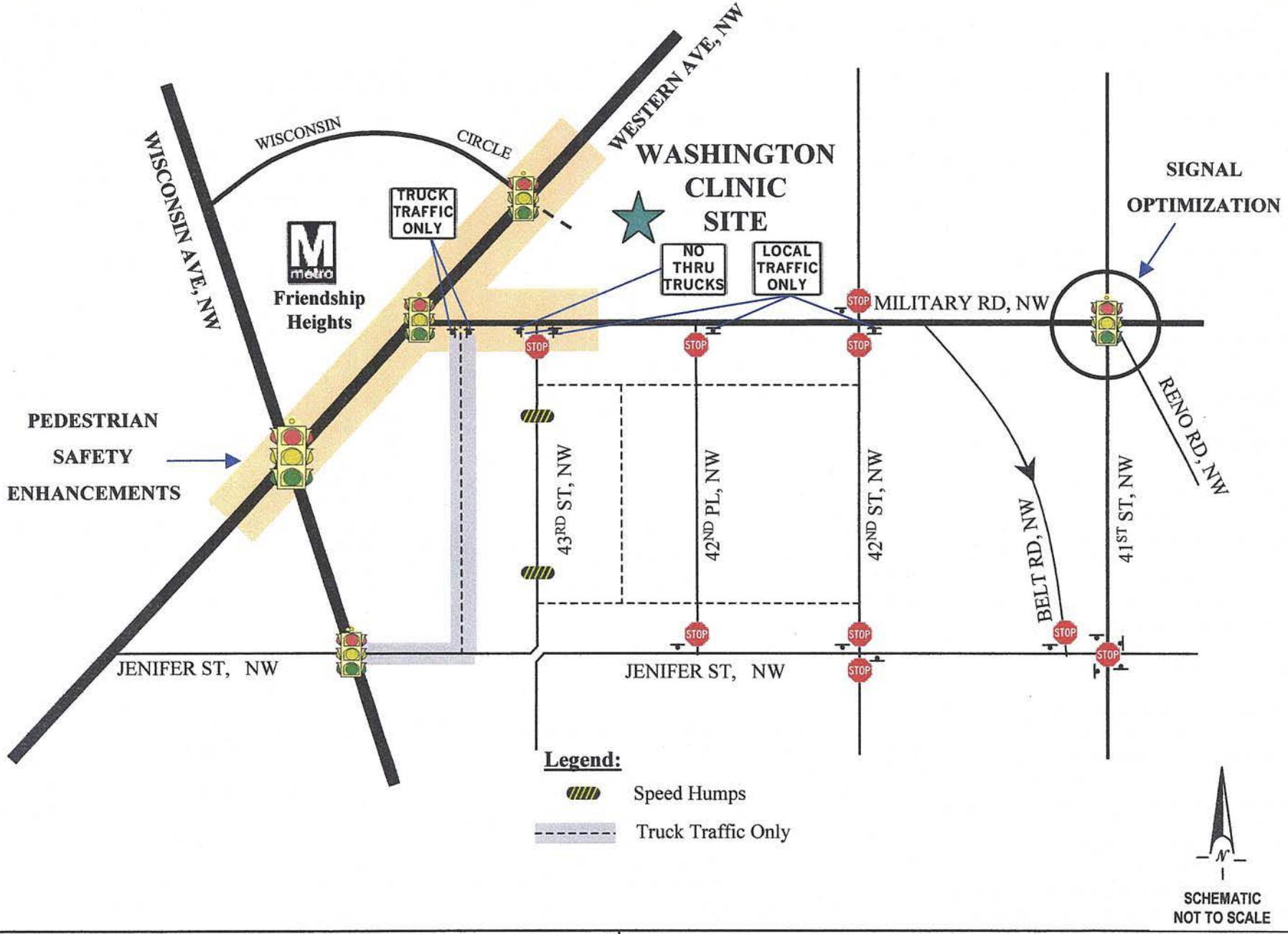
F) Sight Distance Restrictions

Sight distance constraints and resulting excessive delays were observed for vehicles accessing Military Road from 42nd Place and 43rd Street. These constraints were due to vehicles parked along the south side of Military Road.

G) Vehicle Queuing

As noted earlier, moderate peak directional queuing was observed along Military Road, particularly in the eastbound direction from Reno Road, during weekday afternoon and Saturday peak periods. These queues were observed to adversely impact vehicular access from and to 41st Street, 42nd Place and 42nd Street. Regarding the eastbound queuing along Military Road, it was observed that the primary contributing factor is the inefficient operation of the traffic signal provided at the Military Road/Reno Road intersection.

The locations of the traffic issues highlighted above are shown in Exhibit 5. The foregoing discussion regarding the traffic operational and safety issues provided the basis for identifying potential traffic calming/mitigation improvements for the study area. These measures are discussed in Section 4 following.



O. R. GEORGE &ASSOCIATES, INC.
Traffic Engineers - Transportation Planners

EXHIBIT 6:
RECOMMENDED TRAFFIC MITIGATION MEASURES
Washington Clinic Neighborhood Mitigation Study, Northwest Washington, DC

4.0 POTENTIAL MITIGATION STRATEGIES AND EFFECTIVENESS

Traffic calming is a combination of physical and operational measures that reduce the negative effects of motor vehicle use, alter driver behavior, improve conditions for non-motorized street users, as well as the quality of life for residential neighborhoods. Some of the specific objectives of traffic calming include:

- Reducing vehicle speeds;
- Reducing collision frequency and severity;
- Increasing the safety and the perception of safety for non-motorized traffic;
- Enhancing the street environment;
- Reducing the need for police enforcement; and
- Reducing cut-through motor vehicle traffic.

Various traffic-calming measures are available to achieve the above objectives, and several of these have been identified for application within the study area. These improvements were also recommended by the study area residents at various forums, including the recent Ward 3 Traffic Summit. The measures considered are as follows:

a) **Speed Humps**: The speed hump is a typical speed control and cut-through traffic mitigation measure. It is traditionally used on residential streets to counter the problem of speeding along the roadway. Speed humps are typically 12 to 14 feet in length and 3 – 3.5 inches in height, with shapes varying from circular to parabolic. According to the Institute of Transportation Engineers (ITE) - Traffic Calming Measures, speed humps placed in series (typically spaced 300 to 600 feet apart) could reduce speeds up to 24% and volumes up to 18%. ***(This measure is recommended for 43rd Street.)***

b) **No Through Trucks**: This traffic restriction is not a traditional traffic calming measure. This measure is intended to eliminate the through movements of heavy vehicles and enhance safety along residential streets. ***(This measure is recommended for 43rd Street.)***

c) **Warning/Regulatory Signs**: Warning/regulatory signs are used as a traffic calming measure to control volume and speed. This measure is popular because it is inexpensive. However, it is difficult to implement without enforcement. Signs such as turn restrictions, one way, do not enter, local traffic only, etc., are used in general to reduce cut-through traffic. In most situations, these signs are implemented in combination with other traffic calming measures to eliminate heavy vehicle through traffic and enhance safety along residential streets. ***(This measure, comprising "NO THRU TRUCKS", "TRUCK TRAFFIC ONLY", and "LOCAL TRAFFIC ONLY" signs is recommended along Military Road at the street and alleyway intersections.)***

d) **Truck Management Plans**: This measure is used to regulate truck trips in and out of an area. Planning the arrival and departure of trucks to occur in off-peak hours, will enhance the performance of the roadway network as well as synchronize the trips. This could also reduce impacts on residential areas. ***(This measure pertains to the study area and its environs.)***

Additional information on traffic calming measures is provided in Attachment 3. Other supplementary measures were identified for addressing the operational and safety issues noted in Section 3. These are as follows:

e) **Signal Optimization**

Field observations and further capacity/operational analysis indicate that the optimization of the traffic signal provided at the Military Road/Reno Road intersection would significantly reduce eastbound queuing along Military Road.

f) **Pedestrian Safety Improvements**

Field observations indicate that physical and signalization improvements could be implemented along Western Avenue at the Military Road and Wisconsin Road intersections, and along Military Road at 43rd Street, to enhance pedestrian safety at these locations. These could include pedestrian push buttons, striped or raised (concrete or cobble stone) crosswalks and upgraded pedestrian crossing signs.

g) **Wayfinding Signage**

The provision of signage directing trucks to access the commercial developments to the west, via the Military Road - Jenifer Road service alleyway, would also serve to eliminate through truck traffic usage of 43rd Street, in particular.

The advantages and disadvantages of the mitigation measures noted above, with regard to their location-specific applicability, are summarized in the following table. This table indicates that the traffic mitigation measures could be implemented at minimal costs. It is also shown that these measures are not mutually exclusive alternatives, and need to be implemented collectively for optimum effectiveness.

TABLE

COMPARISON OF POTENTIAL MITIGATION MEASURES

MEASURE	ADVANTAGES	DISADVANTAGES	REMARKS
a) Speed Humps	• Effective speed and volume control • Mostly portable and inexpensive	• Possible increase in noise from braking and acceleration • Approximate increase of 10 sec for emergency vehicles	• Would be effective along 43rd Street
b) No Through Trucks Signage	• Eliminates heavy vehicle traffic • Creates safer environment • Inexpensive measure	• Needs alternate route(s) for trucks • Diversion of heavy vehicles onto other local roads • Needs good warning/regulatory signs	• Would be effective at the terminals points of 43rd Street
c) Other Traffic Calming Signage	• Inexpensive • Volume and speed control • Can be in combination with other measures	• Confusing • Large amount of information to comprehend • Susceptible to vandalism	• Would be effective along 43rd Street
d) Truck Management Plan	• Staggered arrival/departures • Truck traffic only during off-peak hours • Efficient roadway operation	• Need consensus from different people and truck users • Off-peak deliveries may not suite all kinds of deliveries	• Could reduce truck traffic along 43rd Street, but would require significant regional planning effort

COMPARISON OF POTENTIAL MITIGATION MEASURES (cont'd...)

MEASURE	ADVANTAGES	DISADVANTAGES	REMARKS
e) Signal Optimization	• Inexpensive measure • Reduces delay and queuing • Reduces cut through traffic	• None identified	• Would reduce eastbound queuing along Military Road at Reno Road
f) Pedestrian Safety Improvements	• Improves driver awareness and enhances pedestrian safety • Low to moderate cost • Easy to implement	• None identified	• Would improve pedestrian safety along Western Avenue and Military Road
g) Wayfinding Signage for Service Alleyway Usage	• Eliminates truck traffic on local roads • Creates safer environment • Inexpensive measure	• Would increase truck traffic at adjacent intersections	• Could supplement the effectiveness of Item 4 measure

Source: O. R. George & Associates.

4.0 CONCLUSION AND RECOMMENDATION

This study has examined the existing traffic operational and safety conditions within the Friendship Heights neighborhood situated immediately southeast of the 5401 Western Avenue Planned Unit Development (PUD) site. The study has identified several traffic calming and other traffic related issues, as well as potential measures which could be implemented to mitigate such problems. These were discussed in Sections 3 and 4 of the report, respectively. Based on the above, the recommendations of the study are as follows:

A. Forty-Third Street, N.W.

1) **Speed Humps**: Install two (2) speed humps, spaced 600 feet or more apart, within the mid-block section of 43rd Street. Provide complementary advance and locational "SPEED HUMP" signs.

2) **No Through Truck Signage**: Replace the "NO THRU TRUCKS OVER 1-1/4 TONS" signage at the terminus points of 43rd Street, with "NO THRU TRUCKS" signage.

3) **Local Traffic Signage**: Provide "LOCAL TRAFFIC" signage along 43rd Street, 42nd Place and 42nd Street at their Military Road intersections, and at the southern terminus of 43rd Street at Jenifer Street.

B. Military Road, N.W.

a) **Signal Optimization**: Optimize traffic signal operations at the Military Road/Reno Road intersection.

b) **Portable Speed Monitoring**: Undertake portable monitoring of vehicle speeds in both directions along Military Road, between 41st Street and Western Avenue.

c) **Pedestrian Safety Improvements:** Upgrade the pedestrian crossing facilities provided along Military Road at 43rd Street.

C. Military Road-Jenifer Street Alleyway

- **Wayfinding Signage**: Provide appropriate signage that would increase the usage of this alleyway by trucks accessing the commercial developments to the west.

D. Western Avenue

- **Pedestrian Safety Improvements**: Upgrade the pedestrian crossing facilities provided along Western Avenue at Wisconsin Avenue, Military Road and Wisconsin Circle.

The recommended improvements are illustrated in Exhibit 6. It is noted that the City is in the process of finalizing a Traffic Calming Manual, which would outline requirements and procedures for the implementation of such measures, including those noted above. It is also noted that DDOT plans to conduct a traffic study for the Friendship Heights Area, which would address traffic calming and other issues. The schedule for the preparation of this study is not known at this time. However, in the interim, the findings of this study, as presented above, could form the basis for further representations, by the residential community and the area Advisory Neighborhood Commission, for the implementation of the identified measures by the DDOT.

We trust that the above satisfies your requirements. Should you have any questions, or comments, please let us know. Thanks.

CEE/ORG/gw

ATTACHMENT

1

TURNING MOVEMENT COUNT SUMMARIES
CAPACITY ANALYSIS WORKSHEETS
EXISTING TRAFFIC SITUATION

O.R. George & Associates, Inc.
10210 Greenbelt Road, Suite 310
Greenbelt, MD 20706
Tel: (301) 794-7700 Fax: (301) 794-4400

Counted by :ORGA-NL
Board :D4-2239
City/County:Bethesda/Montgomery
Weather :Warm/Clear/Dry

File Name : MILIT@43
Site Code : 26162239
Start Date : 01/24/2002
Page No : 1

Groups Printed- Passenger Vehicles - Trucks - Buses

	43rd Street From South				Military Road From East				Military Road From West				
End Time	Left	Right	U-Turn	App. Total	Left	Thru	U-Turn	App. Total	Thru	Right	U-Turn	App. Total	Int. Total
07:15 AM	0	3	0	3	15	108	0	123	79	12	0	91	217
07:30 AM	0	4	0	4	7	119	0	126	116	10	0	126	256
07:45 AM	2	10	0	12	8	148	0	156	141	7	0	148	316
08:00 AM	0	5	0	5	11	149	0	160	146	10	0	156	321
Total	2	22	0	24	41	524	0	565	482	39	0	521	1110
08:15 AM	0	5	0	5	15	142	0	157	135	10	0	145	307
08:30 AM	0	2	0	2	7	136	0	143	146	11	0	157	302
08:45 AM	2	6	0	8	9	136	0	145	140	8	0	148	301
09:00 AM	3	6	0	9	18	138	0	156	137	19	0	156	321
Total	5	19	0	24	49	552	0	601	558	48	0	606	1231
04:15 PM	8	13	0	21	5	95	0	100	106	10	0	116	237
04:30 PM	4	18	0	22	6	104	0	110	121	16	0	137	269
04:45 PM	4	9	0	13	10	108	0	118	141	9	0	150	281
05:00 PM	2	12	0	14	6	101	0	107	105	11	0	116	237
Total	18	52	0	70	27	408	0	435	473	46	0	519	1024
05:15 PM	2	16	0	18	5	125	0	130	132	20	0	152	300
05:30 PM	6	11	0	17	10	105	0	115	106	14	0	120	252
05:45 PM	6	20	0	26	4	113	0	117	131	16	0	147	290
06:00 PM	4	16	0	20	9	141	0	150	114	10	0	124	294
Total	18	63	0	81	28	484	0	512	483	60	0	543	1136
Grand Total	43	156	0	199	145	1968	0	2113	1996	193	0	2189	4501
Apprch %	21.6	78.4	0.0		6.9	93.1	0.0		91.2	8.8	0.0		
Total %	1.0	3.5	0.0	4.4	3.2	43.7	0.0	46.9	44.3	4.3	0.0	48.6	

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City/County:Bethesda/Montgomery
Weather :Warm/Clear/Dry

File Name : MILIT@43
Site Code : 26162239
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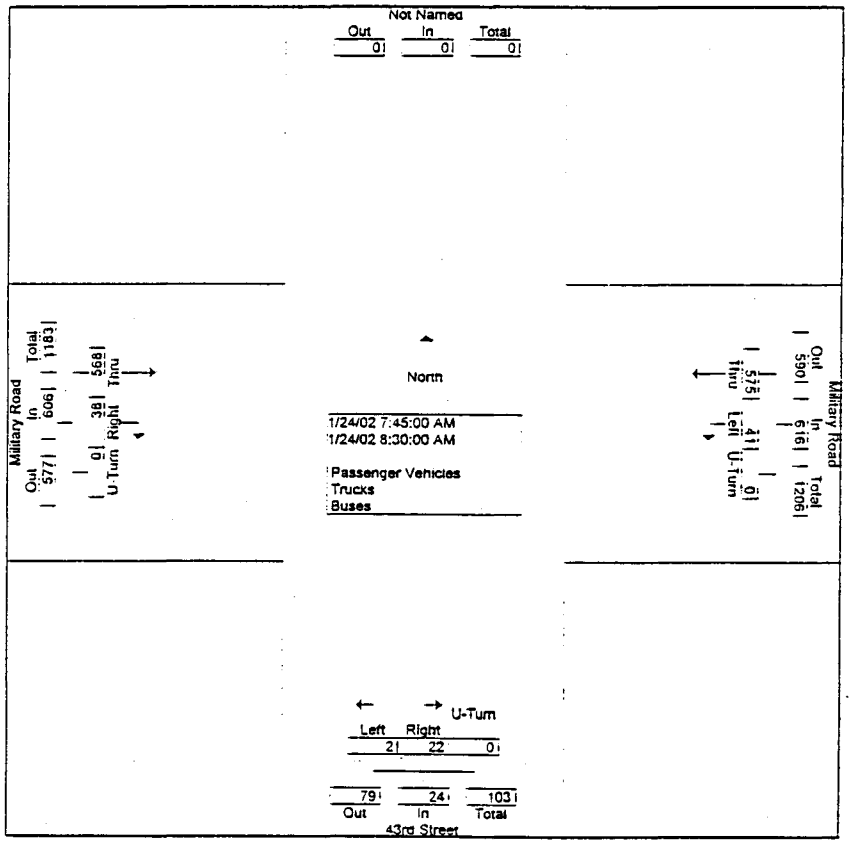
Page No : 2

	43rd Street From South				Military Road From East				Military Road From West				
End Time	Left	Right	U-Turn	App. Total	Left	Thru	U-Turn	App. Total	Thru	Right	U-Turn	App. Total	Int. Total
Peak Hour From 07:15 AM to 09:00 AM - Peak 1 of 1													
Intersection 07:45 AM													
Volume	2	22	0	24	41	575	0	616	568	38	0	606	1246
Percent	8.3	91.7	0.0		6.7	93.3	0.0		93.7	6.3	0.0		
08:00 Volume	0	5	0	5	11	149	0	160	146	10	0	156	321
Peak Factor													0.970
High Int. 07:45 AM					08:00 AM				08:30 AM				
Volume	2	10	0	12	11	149	0	160	146	11	0	157	
Peak Factor				0.500				0.963				0.965	



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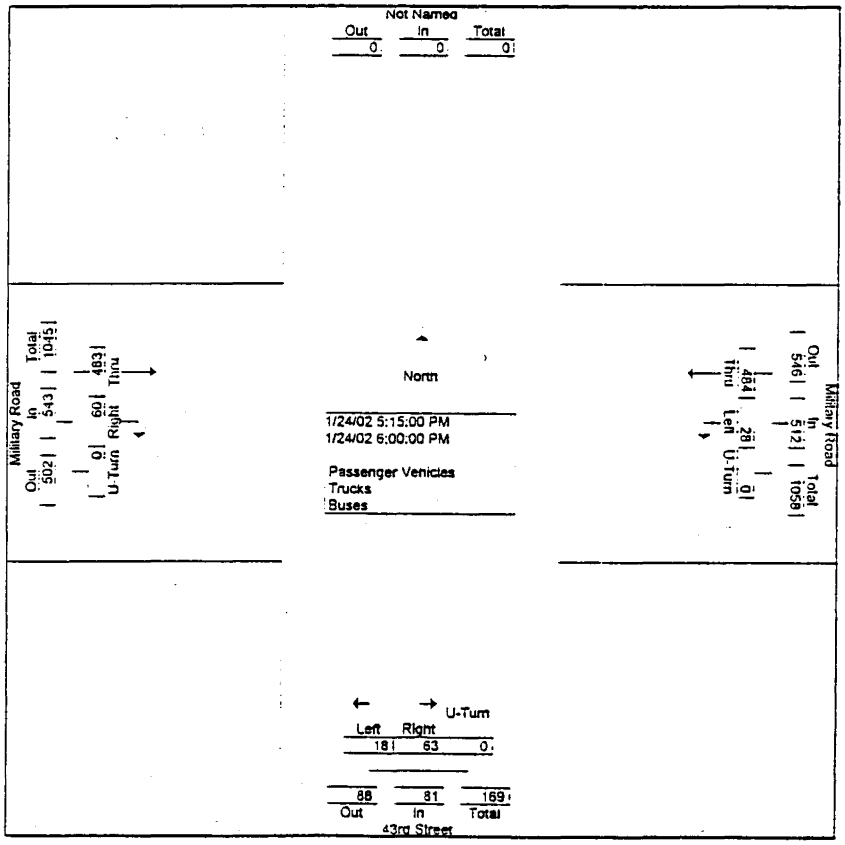
Page No : 3

	43rd Street From South				Military Road From East				Military Road From West				
End Time	Left	Right	U-Turn	App. Total	Left	Thru	U-Turn	App. Total	Thru	Right	U-Turn	App. Total	Int. Total
Peak Hour From 04:00 PM to 06:00 PM - Peak 1 of 1													
Intersection	05:15 PM												
Volume	18	63	0	81	28	484	0	512	483	60	0	543	1136
Percent	22.2	77.8	0.0		5.5	94.5	0.0		89.0	11.0	0.0		
05:15 Volume	2	16	0	18	5	125	0	130	132	20	0	152	300
Peak Factor													0.947
High Int.	05:45 PM				06:00 PM				05:15 PM				
Volume	6	20	0	26	9	141	0	150	132	20	0	152	
Peak Factor				0.779				0.853				0.893	



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Counted by :ORGA-LM, CU
Board : D4-2241, D4-2237
City/County: Bethesda/Montgomery
Weather : Warm/Clear/Dry

File Name : WIS@JEN
Site Code : 25182237
Start Date : 01/24/2002
Page No : 1

Groups Printed- Passenger Vehicles - Trucks - Buses

	Wisconsin Ave From North					Wisconsin Ave From South					Jenifer Street From East					Jenifer Street From West					
End Time	Left	Thru	Right	U-Turn	App. Total	Left	Thru	Right	U-Turn	App. Total	Left	Thru	Right	U-Turn	App. Total	Left	Thru	Right	U-Turn	App. Total	Int. Total
07:15 AM	4	158	4	0	166	2	85	1	0	88	5	4	4	0	13	9	3	2	0	14	281
07:30 AM	4	234	2	0	240	7	113	3	0	123	6	4	1	0	11	6	11	7	0	24	398
07:45 AM	4	291	3	0	298	15	173	6	0	194	6	4	1	0	11	4	8	12	0	24	527
08:00 AM	7	291	2	0	300	20	182	5	0	207	8	6	4	0	18	10	9	10	0	29	554
Total	19	974	11	0	1004	44	553	15	0	612	25	18	10	0	53	29	31	31	0	91	1760
08:15 AM	1	302	3	0	306	13	193	9	0	215	13	4	5	0	22	3	22	21	0	46	589
08:30 AM	9	313	3	0	325	24	227	4	0	255	10	7	3	0	20	3	19	16	0	38	638
08:45 AM	5	259	6	0	270	26	213	5	0	244	8	5	6	0	19	9	23	17	0	49	582
09:00 AM	8	253	5	0	266	20	200	8	0	228	11	8	5	0	24	6	15	31	0	52	570
Total	23	1127	17	0	1167	83	833	26	0	942	42	24	19	0	85	21	79	85	0	185	2379
04:15 PM	3	157	3	0	163	28	199	20	0	247	16	9	9	0	34	15	14	31	0	60	504
04:30 PM	3	178	7	0	188	14	219	13	0	246	10	10	6	0	26	19	9	39	0	67	527
04:45 PM	6	156	11	0	173	32	178	8	0	218	11	12	7	0	30	12	5	28	0	45	466
05:00 PM	6	190	6	0	202	18	196	17	0	231	10	13	9	0	32	13	12	22	0	47	512
Total	18	681	27	0	726	92	792	58	0	942	47	44	31	0	122	59	40	120	0	219	2009
05:15 PM	0	177	4	0	181	19	235	9	0	263	12	21	10	0	43	20	15	29	0	64	551
05:30 PM	2	185	6	0	193	25	270	5	0	300	16	17	14	0	47	17	16	27	0	60	600
05:45 PM	4	202	4	0	210	24	234	13	0	271	10	13	12	0	35	16	16	29	0	61	577
06:00 PM	2	190	4	0	196	30	237	14	0	281	13	15	14	0	42	14	7	25	0	46	565
Total	8	754	18	0	780	98	976	41	0	1115	51	66	50	0	167	67	54	110	0	231	2293
Grand Total	68	3536	73	0	3677	317	3154	140	0	3611	165	152	110	0	427	176	204	346	0	726	8441
Apprch %	1.8	96.2	2.0	0.0		8.8	87.3	3.9	0.0		38.6	35.6	25.8	0.0		24.2	28.1	47.7	0.0		
Total %	0.8	41.9	0.9	0.0	43.6	3.8	37.4	1.7	0.0	42.8	2.0	1.8	1.3	0.0	5.1	2.1	2.4	4.1	0.0	8.6	

Peak Hour From Intersection Volume Percent 05:30 Volume Peak Factor High Int. Volume Peak Factor

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Board : D4-2241, D4-2237
City/County: Bethesda/Montgomery
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File Name : WIS@JEN
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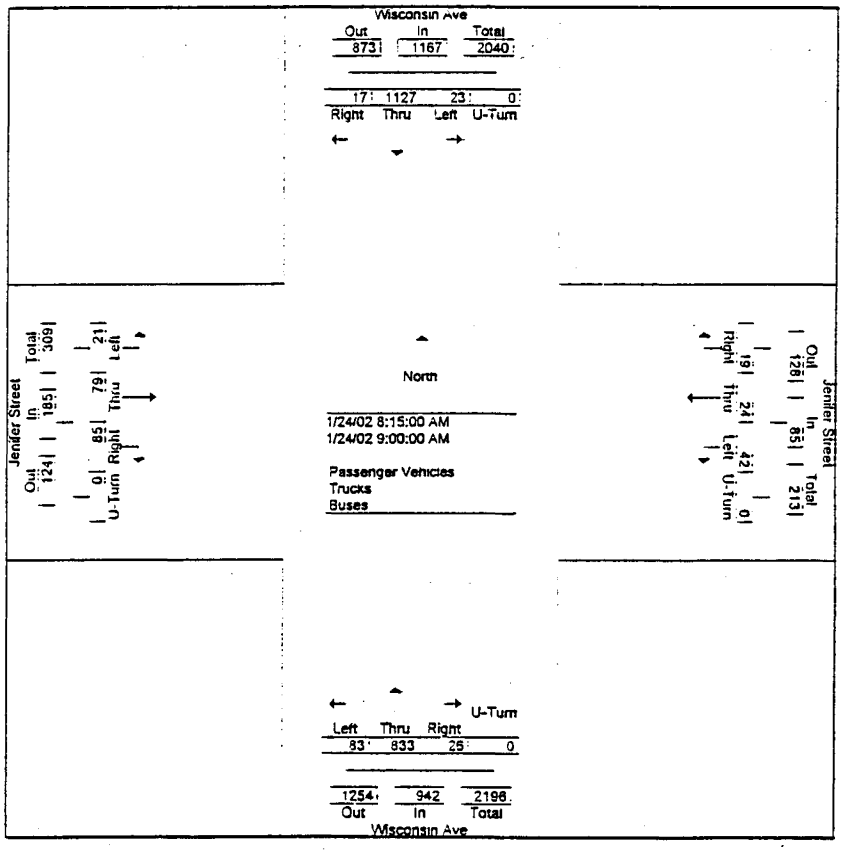
Page No : 2

	Wisconsin Ave From North					Wisconsin Ave From South					Jenifer Street From East					Jenifer Street From West					
End Time	Left	Thru	Right	U-Turn	App. Total	Left	Thru	Right	U-Turn	App. Total	Left	Thru	Right	U-Turn	App. Total	Left	Thru	Right	U-Turn	App. Total	Int. Total
Peak Hour From 07:15 AM to 09:00 AM - Peak 1 of 1																					
Intersection	08:15 AM																				
Volume	23	1127	17	0	1167	83	833	26	0	942	42	24	19	0	85	21	79	85	0	185	2379
Percent	2.0	96.6	1.5	0.0		8.8	88.4	2.8	0.0		49.4	28.2	22.4	0.0		11.4	42.7	45.9	0.0		
08:30 Volume	9	313	3	0	325	24	227	4	0	255	10	7	3	0	20	3	19	16	0	38	638
Peak Factor																					0.932
High Int.	08:30 AM					08:30 AM					09:00 AM					09:00 AM					
Volume	9	313	3	0	325	24	227	4	0	255	11	8	5	0	24	6	15	31	0	52	
Peak Factor					0.898					0.924					0.885					0.889	



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Start Date : 01/24/2002
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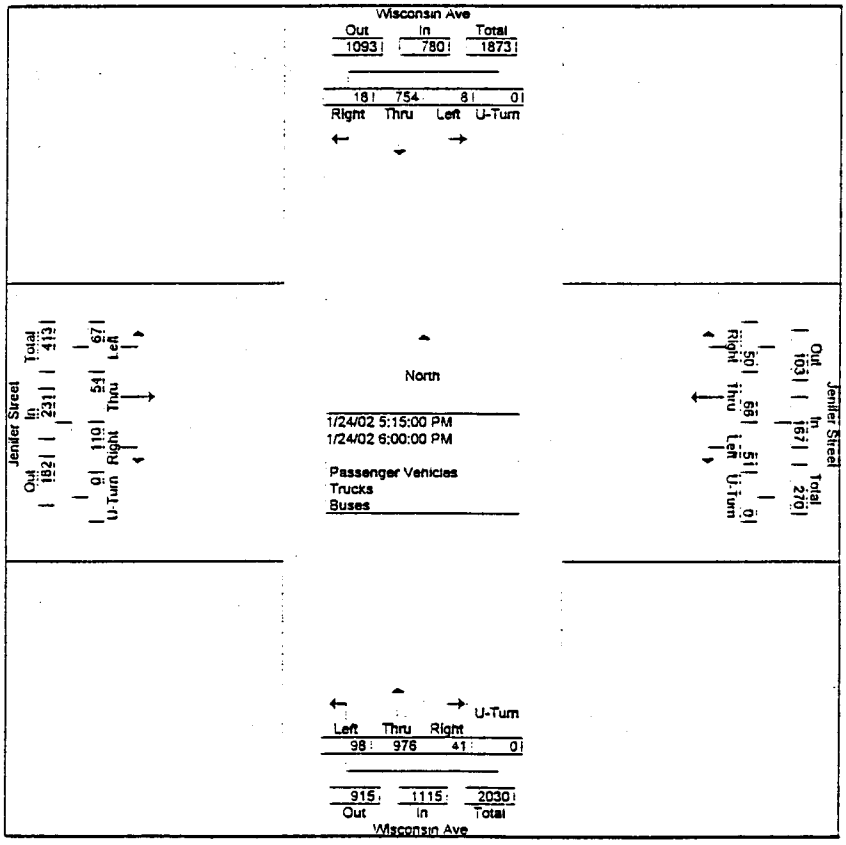
	Wisconsin Ave From North					Wisconsin Ave From South					Jenifer Street From East					Jenifer Street From West					
End Time	Left	Thru	Right	U-Turn	App. Total	Left	Thru	Right	U-Turn	App. Total	Left	Thru	Right	U-Turn	App. Total	Left	Thru	Right	U-Turn	App. Total	Int. Total
Peak Hour From 04:15 PM to 06:00 PM - Peak 1 of 1																					
Intersection 05:15 PM																					
Volume	8	754	18	0	780	98	976	41	0	1115	51	66	50	0	167	67	54	110	0	231	2293
Percent	1.0	96.7	2.3	0.0		8.8	87.5	3.7	0.0		30.5	39.5	29.9	0.0		29.0	23.4	47.6	0.0		
05:30 Volume	2	185	6	0	193	25	270	5	0	300	16	17	14	0	47	17	16	27	0	60	600
Peak Factor																					0.955
High Int.	05:45 PM					05:30 PM					05:30 PM					05:15 PM					
Volume	4	202	4	0	210	25	270	5	0	300	16	17	14	0	47	20	15	29	0	64	
Peak Factor					0.929					0.929					0.888					0.902	



HCS: Signalized Intersections Release 3.2

Inter: Jenifer St @ Wisconsin Ave
Analyst: ORGA/KM
Date: 1/24/02 AM Peak Hour
E/W St: Jenifer Street, NW

City/St: Washington, D.C.
Proj #: Washington Clinic - NMS
Period: 8:00 AM - 9:00 AM
N/S St: Wisconsin Avenue, NW

SIGNALIZED INTERSECTION SUMMARY

	Eastbound			Westbound			Northbound			Southbound		
	L	T	R	L	T	R	L	T	R	L	T	R
No. Lanes	0	1	0	0	1	0	0	2	1	0	2	1
LGConfig		LTR			LTR			LT	R		LT	R
Volume	21	79	85	42	24	19	83	833	26	23	1127	17
Lane Width		11.0			11.0			11.0	11.0		11.0	11.0
RTOR Vol			20			5			13			8

Duration 0.25 Area Type: All other areas

Signal Operations

Phase Combination		1	2	3	4			5	6	7	8
EB	Left	P				NB	Left		P		
	Thru	P					Thru		P		
	Right	P					Right		P		
	Peds						Peds				
WB	Left	P				SB	Left	P	P		
	Thru	P					Thru	P	P		
	Right	P					Right	P	P		
	Peds						Peds				
NB	Right					EB	Right				
SB	Right					WB	Right				
Green		35.0						10.0	50.0		
Yellow		4.0						4.0	4.0		
All Red		1.0						1.0	1.0		

Cycle Length: 110.0 secs

Intersection Performance Summary

Appr/ Lane Grp	Lane Group Capacity	Adj Sat Flow Rate (s)	Ratios v/c	Ratios g/C	Lane Group Delay	Lane Group LOS	Approach Delay	Approach LOS
Eastbound								
LTR	440	1382	0.42	0.318	32.3	C	32.3	C
Westbound								
LTR	396	1245	0.23	0.318	28.9	C	28.9	C
Northbound								
LT	1020	2244	0.98	0.455	52.3	D	51.8	D
R	663	1459	0.02	0.455	16.6	B		
Southbound								
LT	1957	3312	0.65	0.591	16.7	B	16.6	B
R	922	1561	0.01	0.591	9.3	A		

Intersection Delay = 32.0 (sec/veh) Intersection LOS = C

HCS: Signalized Intersections Release 3.2

Inter: Jenifer St @ Wisconsin Ave
Analyst: ORGA/KM
Date: 1/24/02 PM Peak Hour
E/W St: Jenifer Street, NW

City/St: Washington, D.C.
Proj #: Washington Clinic - NMS
Period: 5:00 PM - 6:00 PM
N/S St: Wisconsin Avenue, NW

SIGNALIZED INTERSECTION SUMMARY

	Eastbound			Westbound			Northbound			Southbound		
	L	T	R	L	T	R	L	T	R	L	T	R
No. Lanes	0	1	0	0	1	0	0	2	1	0	2	1
LGConfig		LTR			LTR			LT	R		LT	R
Volume	67	54	110	51	66	50	98	976	41	8	754	18
Lane Width		11.0			11.0			11.0	11.0		11.0	11.0
RTOR Vol			30			12			20			9

Duration 0.25 Area Type: All other areas

Signal Operations

Phase Combination		1	2	3	4			5	6	7	8
EB	Left	P				NB	Left	P	P		
	Thru	P					Thru	P	P		
	Right	P					Right	P	P		
	Peds						Peds				
WB	Left	P				SB	Left		P		
	Thru	P					Thru		P		
	Right	P					Right		P		
	Peds						Peds				
NB	Right					EB	Right				
SB	Right					WB	Right				
Green		35.0						10.0	50.0		
Yellow		4.0						4.0	4.0		
All Red		1.0						1.0	1.0		

Cycle Length: 110.0 secs

Intersection Performance Summary

Appr/ Lane Grp	Lane Group Capacity	Adj Sat Flow Rate (s)	Ratios v/c	Ratios g/C	Lane Group Delay	Lane Group LOS	Approach Delay	Approach LOS
Eastbound								
LTR	412	1296	0.54	0.318	35.9	D	35.9	D
Westbound								
LTR	419	1318	0.42	0.318	32.5	C	32.5	C
Northbound								
LT	1870	3164	0.62	0.591	16.0	B	15.9	B
R	922	1561	0.02	0.591	9.4	A		
Southbound								
LT	1489	3276	0.55	0.455	23.3	C	23.2	C
R	710	1561	0.01	0.455	16.5	B		

Intersection Delay = 21.5 (sec/veh) Intersection LOS = C

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TWO-WAY STOP CONTROL SUMMARY

Intersection:	43rd Street @ Military Road
Analyst:	ORGA/KM
Project No.:	Washington Clinic NMS
Date:	1/24/02 AM Peak Hour
East/West Street:	Military Road, NW
North/South Street:	43rd Street, NW
Intersection Orientation: EW	Study period (hrs): 0.25

Vehicle Volumes and Adjustments

Major Street: Approach	Eastbound			Westbound		
Movement	1	2	3	4	5	6
	L	T	R	L	T	R
Volume		568	38	41	575	
Hourly Flow Rate, HFR		585	39	42	598	
Percent Heavy Vehicles		--	--	0	--	--
Median Type	Undivided					
RT Channelized?						
Lanes		1 0		0 1		
Configuration		TR		LT		
Upstream Signal?		No			No	

Minor Street: Approach	Northbound			Southbound		
Movement	7	8	9	10	11	12
	L	T	R	L	T	R
Volume	2		22			
Hourly Flow Rate, HFR	4		44			
Percent Heavy Vehicles	0		0			
Percent Grade (%)		0			0	
Median Storage 1						
Flared Approach: Exists?		No				
Storage						
RT Channelized?						
Lanes	0		0			
Configuration		LR				

Delay, Queue Length, and Level of Service

Approach	EB	WB	Northbound			Southbound		
Movement	1	4	7	8	9	10	11	12
Lane Config		LT		LR				
v (vph)		42		48				
C(m) (vph)		967		434				
v/c		0.04		0.11				
95% queue length		0.00		0.33				
Control Delay		8.9		14.3				
LOS		A		B				
Approach Delay				14.3				
Approach LOS				B				

HCS: Unsignalized Intersections Release 3.2

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TWO-WAY STOP CONTROL SUMMARY

Intersection:	43rd Street @ Military Road
Analyst:	ORGA/KM
Project No.:	Washington Clinic NMS
Date:	1/24/02 PM Peak Hour
East/West Street:	Military Road, NW
North/South Street:	43rd Street, NW
Intersection Orientation: EW	Study period (hrs): 0.25

Vehicle Volumes and Adjustments

Major Street: Approach	Eastbound			Westbound		
Movement	1	2	3	4	5	6
	L	T	R	L	T	R
Volume		483	60	28	484	
Hourly Flow Rate, HFR		542	67	32	569	
Percent Heavy Vehicles		--	--	3	--	--
Median Type	Undivided					
RT Channelized?						
Lanes		1	0	0	1	
Configuration		TR		LT		
Upstream Signal?		No			No	

Minor Street: Approach	Northbound			Southbound		
Movement	7	8	9	10	11	12
	L	T	R	L	T	R
Volume	18		63			
Hourly Flow Rate, HFR	23		80			
Percent Heavy Vehicles	0		0			
Percent Grade (%)		0			0	
Median Storage	1					
Flared Approach: Exists?		No				
Storage						
RT Channelized?						
Lanes	0		0			
Configuration		LR				

Delay, Queue Length, and Level of Service

Approach	EB	WB	Northbound			Southbound		
Movement	1	4	7	8	9	10	11	12
Lane Config		LT		LR				
v (vph)		32		103				
C(m) (vph)		965		380				
v/c		0.03		0.27				
95% queue length		0.00		1.14				
Control Delay		8.9		18.0				
LOS		A		C				
Approach Delay				18.0				
Approach LOS				C				

HCS: Unsignalized Intersections Release 3.2