

APPENDIX C

National Capital Region Transportation Planning Board

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Memorandum DRAFT

Date: December 17, 2008

To: Files

From: Dusan Vuksan, Feng Xie

Subject: Technical Report for the DC I-395 Tunnel Closure: Regional Sensitivity Study

Introduction

In a May 23, 2008 letter to TPB, DDOT requested the TPB staff to perform a regional sensitivity analysis to examine potential travel demand impacts of closing the section of I-395 between New York Avenue and Massachusetts Avenue, NW (in both directions). Federal Highway Administration is the lead agency in preparation of the Environmental Impact Statement, and other agencies working on the study include the District Department of Transportation, National Park Service, Arlington County, the Department of Defense, and the Virginia Department of Transportation. The study's purpose is to evaluate congestion reducing options, improve traffic operations and enhance safety in the corridor (refer to the May 23, 2008 DDOT letter and TPB's Statement of Work contained in Appendix A and B, respectively).

Base Condition

1. Assumptions

The 2008 simulation year from the 2007 CLRP/ FY 2008-2013 TIP represents the base condition. Round 7.1 Cooperative Forecasts with CTPP-adjusted employment data were used as the land-use input to develop the base. Appropriate transit and highway assumptions reflecting existing transit service and roadways were incorporated into transit and highway networks, respectively. TPB staff executed its standard four-step travel demand modeling process using the Version 2.2 travel forecasting model as specified in the March 1, 2008 User's Guide. The model itself was calibrated and validated at the regional level and was not recalibrated for the study.

Additionally, in response to a DDOT request from a November 5, 2008, interagency meeting, TPB staff prepared another set of comparisons beyond those specified in the Statement of Work. The 2020 simulation year from the 2007 CLRP/ FY 2008-2013 TIP represents the base condition for this second set of alternatives, and it was specifically selected to include programmed improvements on Anacostia bridges, which are all in place by then.

2. Base Condition Traffic Patterns

According to the simulated data, the 2008 base condition shows that most of the traffic using the segment between Massachusetts Avenue and New York Avenue has at least one of the trip ends in DC. More specifically, about 20% of the trips on this segment (in each direction) can be classified as through trips (Figure 1). The rest of the trips have either their origin or destination, or both, in DC.

Figure 1. 2008 Select Link Analysis Statistics for the I-395 Link between Mass. Avenue and NY Avenue

	NB Link	SB Link
Total Average Weekday Traffic (AWDT) Trips on the Link by Direction (000s)	38.0	38.0
Through Trips (neither trip end in DC)	7.0	8.0
% Through Trips	19%	21%
DC-to-DC Trips	10.0	10.0
% DC-to-DC Trips	27%	26%
X-I and I-X Trips (one trip end in DC, excludes DC-to-DC)	21.0	20.0
% X-I and I-X Trips	54%	53%

Very similarly, in the 2020 baseline, we see that most of the trips on this segment have one trip end in DC, with 17-18% of daily trips in each direction falling in the through trips category.

Figure 2. 2020 Select Link Analysis Statistics for the I-395 Link between Mass. Avenue and NY Avenue

	NB Link	SB Link
Total Average Weekday Traffic (AWDT) Trips on the Link by Direction (000s)	38.0	39.0
Through Trips (neither trip end in DC)	6.0	7.0
% Through Trips	17%	18%
DC-to-DC Trips	11.0	11.0
% DC-to-DC Trips	29%	29%
X-I and I-X Trips (one trip end in DC, excludes DC-to-DC)	21.0	21.0
% X-I and I-X Trips	54%	53%

Sensitivity Test Assumptions

TPB staff used the base conditions above to create alternative scenarios, as specified in the May 23, 2008, DDOT letter. More specifically, the I-395 segment between Massachusetts Avenue and New York Avenue has been removed in 2008 and 2020 sensitivity tests (in both directions). No other changes to the transit or highway networks were made relative to the baselines. The two sets of comparisons discussed in the following sections are:

- A. 2008 Base versus 2008 DC Test, and
- B. 2020 Base versus 2020 DC Test.

Results

Upon executing the travel demand modeling process for the specified sensitivity test, TPB staff prepared a number of exhibits to help explain the results. The major findings are stated below:

A.) 2008 Analysis

- Regionally, there is very little difference between the two scenarios, as one might expect. There is a 70,000 (70k) regional decline in VMT (Table 1), which, in percent difference terms, represents about -0.04%. Along the same lines, relative to the base, there is a 73k decline (out of 9.1 million) in VMT in DC when the link is closed. This represents a percent difference of -0.8%. Furthermore, the same table shows a 100k decrease in DC freeway VMT and a 27k increase in VMT on other facility types.
- As far as the Anacostia and Potomac Screenlines (Table 2 and Map 1), there is roughly a 2k decrease for each relative to the base. In percent difference terms, this translates to -0.16% for the Potomac Screenline and -0.35% for the Anacostia Screenline.
- Tables 3 and 4 show screenline volumes south of Massachusetts Avenue and south of Route 50, respectively. The screenline volume south of Mass. Avenue drops by 15%, while the volume south of Route 50 decreases by 5%. As expected, some of the major arterials experience volume increases in the 15-30% range due to the tunnel closing. The screenline locations are depicted on Maps 2 and 3, and Map 4 shows patterns of redistribution of traffic onto arterials when the segment is closed.
- Table 5 shows that in a relatively narrow area (cordon) around the closed segment of I-395, there is approximately a 19% drop in daily traffic volumes. Map 6 defines the cordon area.

B.) 2020 Analysis

- Similarly to the 2008 findings, regionally, there is very little difference between the two scenarios. There is a 74,000 (74k) regional decline in VMT (Table 6), which, in percent difference terms, represents about -0.04%. Along the same lines, relative to the base, there is a 65k decline (out of 9.5 million) in VMT in DC when the link is closed. This represents a percent difference of -0.7%.

Furthermore, the same table shows a 104k decrease in DC freeway VMT and a 39k increase in VMT on other facility types.

- As far as the Anacostia and Potomac screenlines results (Table 7 and Map 1), there is roughly a 4k decrease for the Potomac Screenline and approximately no difference for the Anacostia Screenline (-70 trips) relative to the base. In percent difference terms, this translates to -0.30% for the Potomac screenline, and -0.01% for the Anacostia screenline. 14th Street Bridge and Memorial Bridge each lose between 900 and 1,000 trips, while Benning Bridge gains about 800 trips.
- Tables 8 and 9 show screenline volumes south of Massachusetts Avenue and south of Route 50, respectively. The screenline volume south of Mass. Avenue drops by 14%, while the volume south of Route 50 decreases by 5%. As expected, some of the major arterials experience volume increases in the 15-30% range due to the tunnel closing. The screenline locations are depicted on Maps 2 and 3, and Map 5 shows patterns of redistribution of traffic onto arterials when the segment is closed.
- Table 5 shows that in a relatively narrow area (cordon) around the closed segment of I-395, there is approximately an 18% drop in daily traffic volumes. Map 6 defines the cordon area.

Conclusion

Closing the I-395 segment between New York Avenue and Massachusetts Avenue does not appear to have a significant impact on the Potomac and Anacostia river crossings in 2008 and 2020. The magnitude of impact resulting from closing the segment is very similar for different measures in both modeled years. At link level, in terms of the 14th St. Bridge, the link closing takes about 650 trips (out of 237k) off the bridge in 2008, and about 940 trips (out of 240k) in 2020.

There is a more substantial impact on the corridor screenlines south of Massachusetts Avenue and New York Avenue. Some of the traffic that would otherwise have utilized the closed I-395 segment has shifted onto parallel arterials.

Attachments:

Tables 1-9

Maps 1-6

Appendices:

A - May 23, 2008 DDOT Letter

B - TPB's Statement of Work

Tables 1-9

Table 1. Difference in Jurisdictional VMT by Facility Type in 2008; I-395 DC Test minus CLRP Base
Version 2.2 Model; 2,191 Zones; COG Cooperative Land Use Forecasts Round 7.1; TP+4.1

Jurisdiction	Facility Type						Total
	Freeway	Major Arterial	Minor Arterial	Collector	Expressway	Ramp	
District of Columbia	-99,663	13,521	3,544	10,666	-508	-276	-72,716
Montgomery Co., MD	-1,257	14	580	118	-408	-161	-1,114
Prince George's Co., MD	7,456	-7,829	-2,330	-2,374	-1,185	-342	-6,603
Arlington Co., VA	-1,983	-1,167	-653	-614	243	-203	-4,376
City of Alexandria, VA	-614	-955	-375	-290	0	-107	-2,340
Fairfax Co., VA	2,017	-2,132	-1,686	-15	-219	289	-1,747
Rest of the Modeled Area	8,318	7,972	3,360	387	-1,005	2	19,032
MSA							
DC	-99,663	13,521	3,544	10,666	-508	-276	-72,716
VA	5,200	-4,646	-1,159	-1,148	-1,018	-93	-2,863
MD	7,362	-3,156	-1,720	-2,266	-1,474	-484	-1,738
MSA Total	-87,101	5,719	665	7,252	-3,000	-853	-77,317
Total	-85,726	9,424	2,440	7,878	-3,082	-798	-69,864

Table 2. DC I-395 Tunnel Study: Simulated AWDT Volumes on Potomac and Anacostia Screenlines in 2008

	Estimated Volume		DC Test minus CLRP	
	CLRP	DC Test	Total Abs. Δ	% Δ
Potomac				
1. American Legion Bridge	262,485	262,517	32	0.01%
2. Chain Bridge	50,610	50,540	-70	-0.14%
3. Key Bridge	100,079	99,880	-199	-0.20%
4. Roosevelt Bridge	135,132	134,793	-339	-0.25%
5. Memorial Bridge	111,947	111,755	-192	-0.17%
6. 14th Street Bridge	236,569	235,915	-654	-0.28%
7. WWB	144,898	144,651	-247	-0.17%
8. Governer Nice Bridge	30,868	30,854	-14	-0.05%
Total	1,072,588	1,070,905	-1,683	-0.16%
Anacostia				
9. Frederick Douglas Memorial Bridge	53,030	52,215	-815	-1.54%
10. 11th Street Bridge	132,426	131,314	-1,112	-0.84%
11. Sousa Bridge	87,332	87,562	230	0.26%
12. Whitney Young Memorial Bridge	45,873	45,654	-219	-0.48%
13. Benning Bridge	66,208	66,434	226	0.34%
14. New York Avenue	112,403	112,624	221	0.20%
15. Bladensburg Road	47,878	47,464	-414	-0.86%
Total	545,150	543,267	-1,883	-0.35%

Table 3. DC I-395 Tunnel Study: Simulated AWDT Volumes on the Mass. Avenue Screenline in 2008

	Estimated Volume		DC Test minus CLRP	
	CLRP	DC Test	Total Abs. Δ	% Δ
South of Mass. Avenue				
Fourteenth St. NW	18,118	18,524	406	2.24%
Thirteenth St. NW	25,170	27,072	1,902	7.56%
Twelfth St. NW	1,028	1,502	474	46.11%
Ninth St. NW	47,906	54,588	6,682	13.95%
Seventh St. NW	7,770	9,924	2,154	27.72%
Sixth St. NW	27,250	33,336	6,086	22.33%
Third St. NW	10,492	14,709	4,217	40.19%
I-395, South of Mass. Avenue	76,125	0	-76,125	-100.00%
Second St. NW	7,679	11,919	4,240	55.22%
N. Capitol St. NE	38,790	44,706	5,916	15.25%
2nd St. NE	4,147	5,473	1,326	31.97%
4th St. NE	20,805	21,271	466	2.24%
Total	285,280	243,024	-42,256	-14.81%

Table 4. DC I-395 Tunnel Study: Simulated AWDT Volumes on the Screenline south of US 50 (NY Ave.) in 2008

	Estimated Volume		DC Test minus CLRP	
	CLRP	DC Test	Total Abs. Δ	% Δ
South of US 50				
I-295	143,828	144,186	358	0.25%
Bladensburg Road (US 1) NE	44,293	44,895	602	1.36%
West Virginia Avenue NE	16,902	16,237	-665	-3.93%
Ninth St. NE	21,336	21,537	201	0.94%
Florida Avenue NE	30,774	34,299	3,525	11.45%
North Capitol St.	46,249	47,117	868	1.88%
New Jersey Avenue NW	8,186	10,859	2,673	32.65%
Third St. NW	2,210	8,680	6,470	292.76%
I-395 South of US 50	76,125	0	-76,125	-100.00%
Sixth St. NW	24,897	31,186	6,289	25.26%
Seventh St. NW	36,398	46,065	9,667	26.56%
Ninth St. NW	16,658	18,738	2,080	12.49%
Twelfth St. NW	14,940	19,378	4,438	29.71%
Thirteenth St. NW	20,340	21,820	1,480	7.28%
Fourteenth St. NW	50,238	53,919	3,681	7.33%
Fifteenth St. NW	58,550	62,540	3,990	6.81%
Total	611,924	581,456	-30,468	-4.98%

Table 5. I-395 Cordon Area: AWDT Volumes; Refer to Map 6

	2008				2020			
	CLRP	DC Test	Difference	% Difference	CLRP	DC Test	Difference	% Difference
I-395 S. of Mass. Ave. Exit	88,070	17,019	-71,051	-80.7%	89,973	19,193	-70,780	-78.7%
2nd St. NE	722	1,518	796	110.2%	787	951	164	20.8%
Local Traffic*	7,811	8,026	215	2.8%	8,792	9,030	238	2.7%
Massachusetts Ave.	19,592	20,603	1,011	5.2%	21,325	22,836	1,511	7.1%
H Street	50,352	49,807	-545	-1.1%	50,919	49,641	-1,278	-2.5%
Local Traffic	516	397	-119	-23.1%	767	640	-127	-16.6%
Local Traffic	3,599	3,562	-37	-1.0%	4,900	4,900	0	0.0%
K St. NE	16,256	12,222	-4,034	-24.8%	19,737	15,250	-4,487	-22.7%
Local Traffic	397	538	141	35.5%	545	728	183	33.6%
Local Traffic	43	36	-7	-16.3%	111	107	-4	-3.6%
New York Ave.	60,965	54,873	-6,092	-10.0%	62,873	57,147	-5,726	-9.1%
Local Traffic	225	57	-168	-74.7%	342	157	-185	-54.1%
New Jersey Ave. NE	29,890	18,813	-11,077	-37.1%	31,715	21,288	-10,427	-32.9%
New York Ave.	36,567	41,520	4,953	13.5%	36,919	42,676	5,757	15.6%
Local Traffic	2,404	2,794	390	16.2%	4,357	4,428	71	1.6%
K St. NW	11,006	10,516	-490	-4.5%	12,235	11,765	-470	-3.8%
Massachusetts Ave NW	57,401	59,072	1,671	2.9%	58,937	60,651	1,714	2.9%
H Street NW	29,248	32,068	2,820	9.6%	31,380	33,817	2,437	7.8%
Local Traffic	4,396	3,644	-752	-17.1%	4,758	3,755	-1,003	-21.1%
3rd St. NW	3,103	6,834	3,731	120.2%	4,066	7,792	3,726	91.6%
Total	422,563	343,919	-78,644	-18.6%	445,438	366,752	-78,686	-17.7%

Note: * Local Traffic refers to AWDT volumes on centroid connectors

**Table 6. Difference in Jurisdictional VMT by Facility Type in 2020; I-395 DC Sensitivity Test minus CLRP Base
Version 2.2 Model; 2,191 Zones; COG Cooperative Land Use Forecasts Round 7.1; TP+4.1**

Jurisdiction	Facility Type						Total
	Freeway	Major Arterial	Minor Arterial	Collector	Expressway	Ramp	
District of Columbia	-103,666	20,348	6,438	13,084	-984	-49	-64,830
Montgomery Co., MD	-2,867	-2,548	-404	-124	371	-33	-5,604
Prince George's Co., MD	3,195	3,953	54	1,358	-113	-86	8,362
Arlington Co., VA	-1,015	-2,135	-1,683	-280	179	127	-4,807
City of Alexandria, VA	-1,167	-942	-839	-251	0	25	-3,173
Fairfax Co., VA	-1,717	-3,826	-1,298	-64	-673	-531	-8,109
Rest of the Modeled Area	2,860	2,336	-2,699	62	1,819	-23	4,350
MSA							
DC	-103,666	20,348	6,438	13,084	-984	-49	-64,830
VA	-2,890	-7,678	-6,763	-588	-585	-526	-19,027
MD	666	3,516	-2,016	2,034	1,555	51	5,805
MSA Total	-105,890	16,186	-2,341	14,530	-14	-524	-78,052
Total	-104,377	17,186	-431	13,785	599	-570	-73,811

Table 7. DC I-395 Tunnel Study: Simulated AWDT Volumes on Potomac and Anacostia Screenlines in 2020

	Estimated Volume		DC Test minus CLRP	
	CLRP	DC Test	Total Abs. Δ	% Δ
Potomac				
1. American Legion Bridge	281,981	281,752	-229	-0.08%
2. Chain Bridge	55,850	55,598	-252	-0.45%
3. Key Bridge	106,521	105,832	-689	-0.65%
4. Roosevelt Bridge	136,593	136,434	-159	-0.12%
5. Memorial Bridge	116,462	115,386	-1,076	-0.92%
6. 14th Street Bridge	239,548	238,609	-939	-0.39%
7. WWB	251,741	251,417	-324	-0.13%
8. Governer Nice Bridge	36,886	36,822	-64	-0.17%
Total	1,225,582	1,221,850	-3,732	-0.30%
Anacostia				
9. Frederick Douglas Memorial Bridge	65,476	64,804	-672	-1.03%
10. 11th Street Bridge	146,934	147,154	220	0.15%
11. Sousa Bridge	85,266	84,665	-601	-0.70%
12. Whitney Young Memorial Bridge	47,856	47,677	-179	-0.37%
13. Benning Bridge	54,052	54,829	777	1.44%
14. New York Avenue	117,259	117,465	206	0.18%
15. Bladensburg Road	51,993	52,173	180	0.35%
Total	568,836	568,767	-69	-0.01%

Table 8. DC I-395 Tunnel Study: Simulated AWDT Volumes on the Mass. Avenue Screenline in 2020

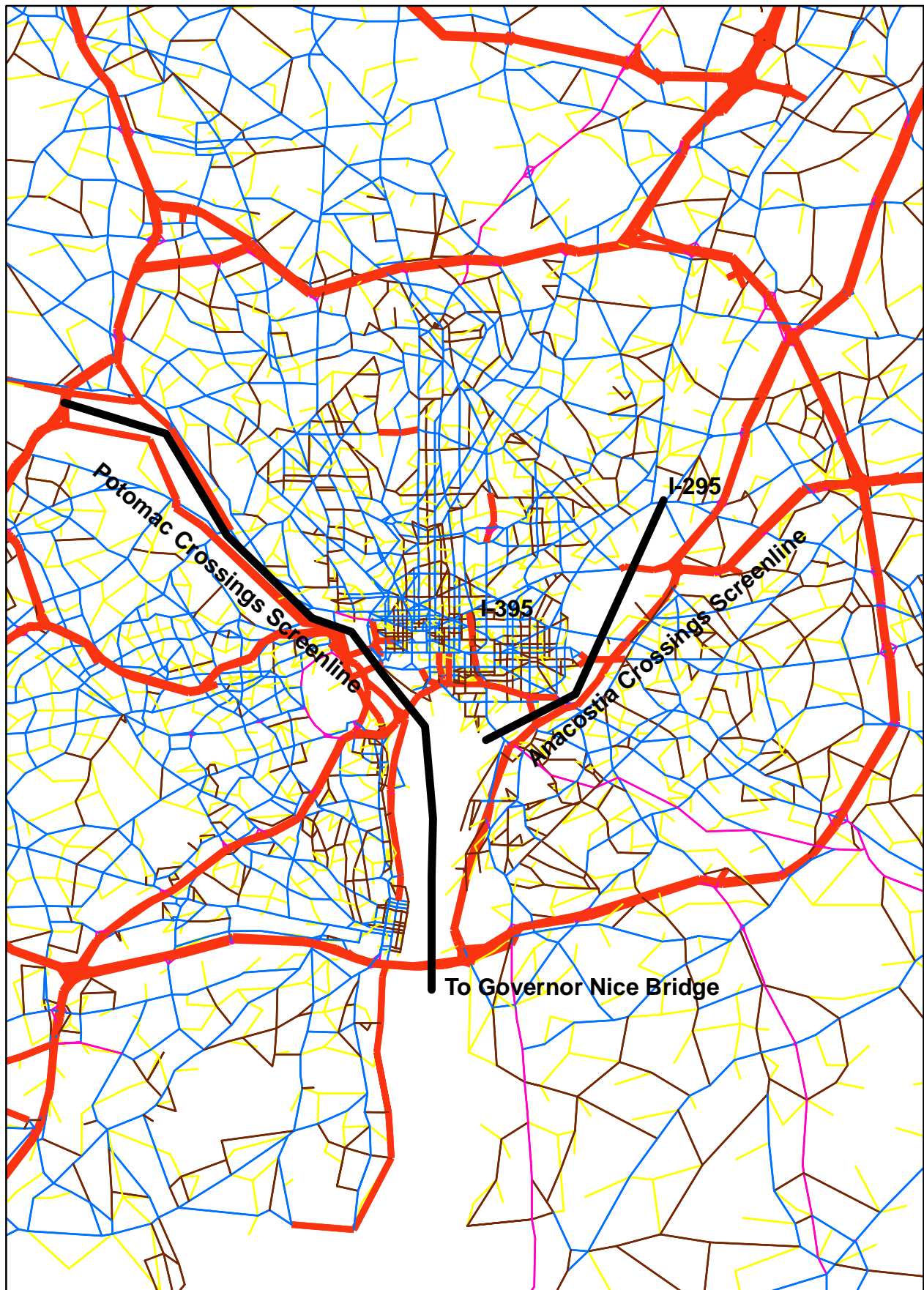
	Estimated Volume		DC Test minus CLRP	
	CLRP	DC Test	Total Abs. Δ	% Δ
South of Mass. Avenue				
Fourteenth St. NW	19,153	20,415	1,262	6.59%
Thirteenth St. NW	26,411	28,155	1,744	6.60%
Twelfth St. NW	1,085	1,398	313	28.85%
Ninth St. NW	50,129	56,379	6,250	12.47%
Seventh St. NW	9,662	12,219	2,557	26.46%
Sixth St. NW	29,387	35,048	5,661	19.26%
Third St. NW	11,845	16,018	4,173	35.23%
I-395, South of Mass. Avenue	77,389	0	-77,389	-100.00%
Second St. NW	8,074	13,068	4,994	61.85%
N. Capitol St. NE	41,081	46,571	5,490	13.36%
2nd St. NE	5,180	6,087	907	17.51%
4th St. NE	20,872	21,844	972	4.66%
Total	300,268	257,202	-43,066	-14.34%

Table 9. DC I-395 Tunnel Study: Simulated AWDT Volumes on the Screenline south of US 50 (NY Ave.) in 2020

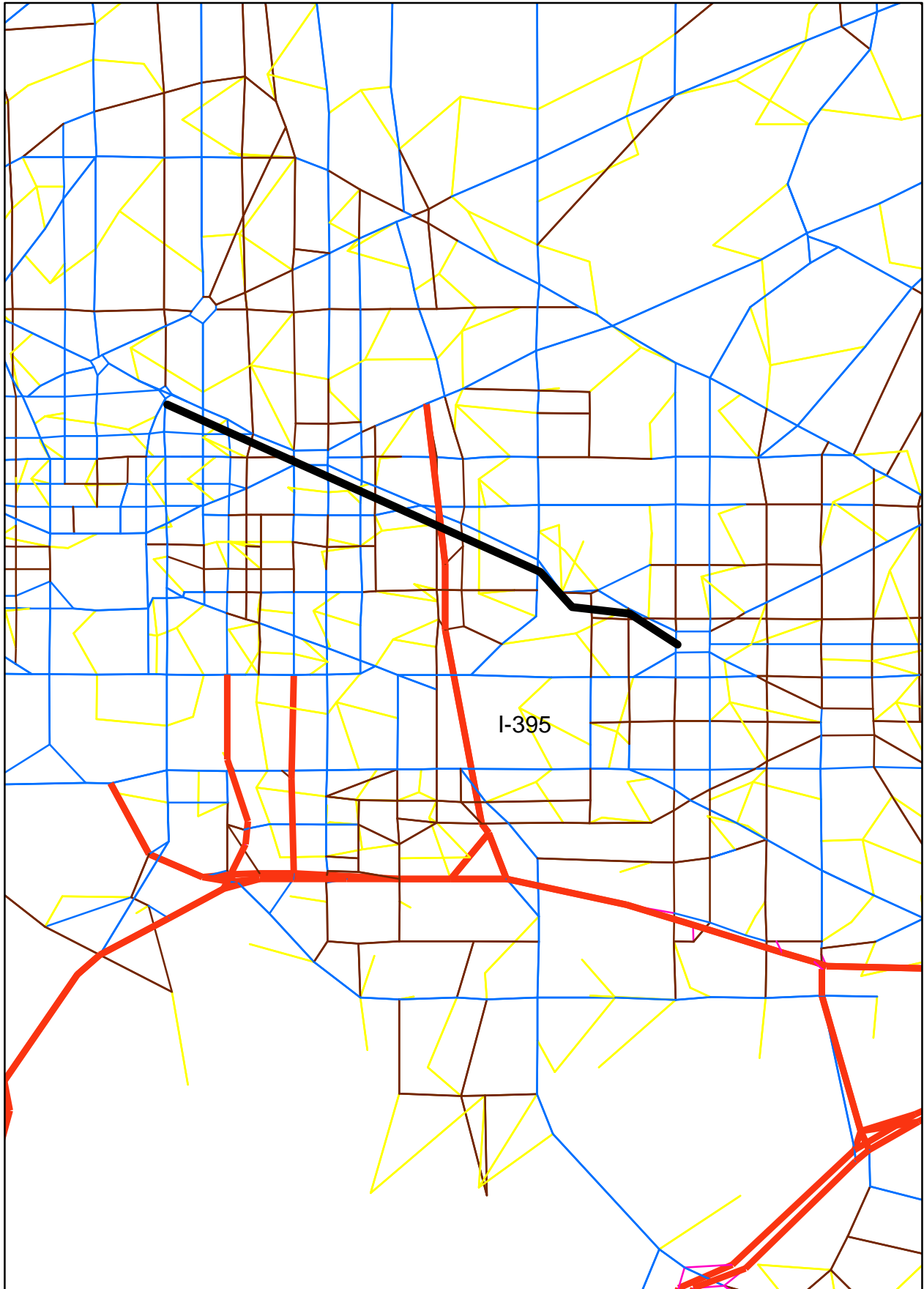
	Estimated Volume		DC Test minus CLRP	
	CLRP	DC Test	Total Abs. Δ	% Δ
South of US 50				
I-295	145,561	145,962	401	0.28%
Bladensburg Road (US 1) NE	47,671	48,060	389	0.82%
West Virginia Avenue NE	18,379	18,424	45	0.24%
Ninth St. NE	23,450	23,072	-378	-1.61%
Florida Avenue NE	33,354	37,477	4,123	12.36%
North Capitol St.	47,619	48,145	526	1.10%
New Jersey Avenue NW	9,595	11,808	2,213	23.06%
Third St. NW	4,239	8,728	4,489	105.90%
I-395 South of US 50	77,389	0	-77,389	-100.00%
Sixth St. NW	26,356	32,897	6,541	24.82%
Seventh St. NW	40,580	50,141	9,561	23.56%
Ninth St. NW	19,273	21,524	2,251	11.68%
Twelfth St. NW	17,175	21,092	3,917	22.81%
Thirteenth St. NW	22,170	24,263	2,093	9.44%
Fourteenth St. NW	52,389	56,323	3,934	7.51%
Fifteenth St. NW	61,281	64,651	3,370	5.50%
Total	646,481	612,567	-33,914	-5.25%

Maps 1-6

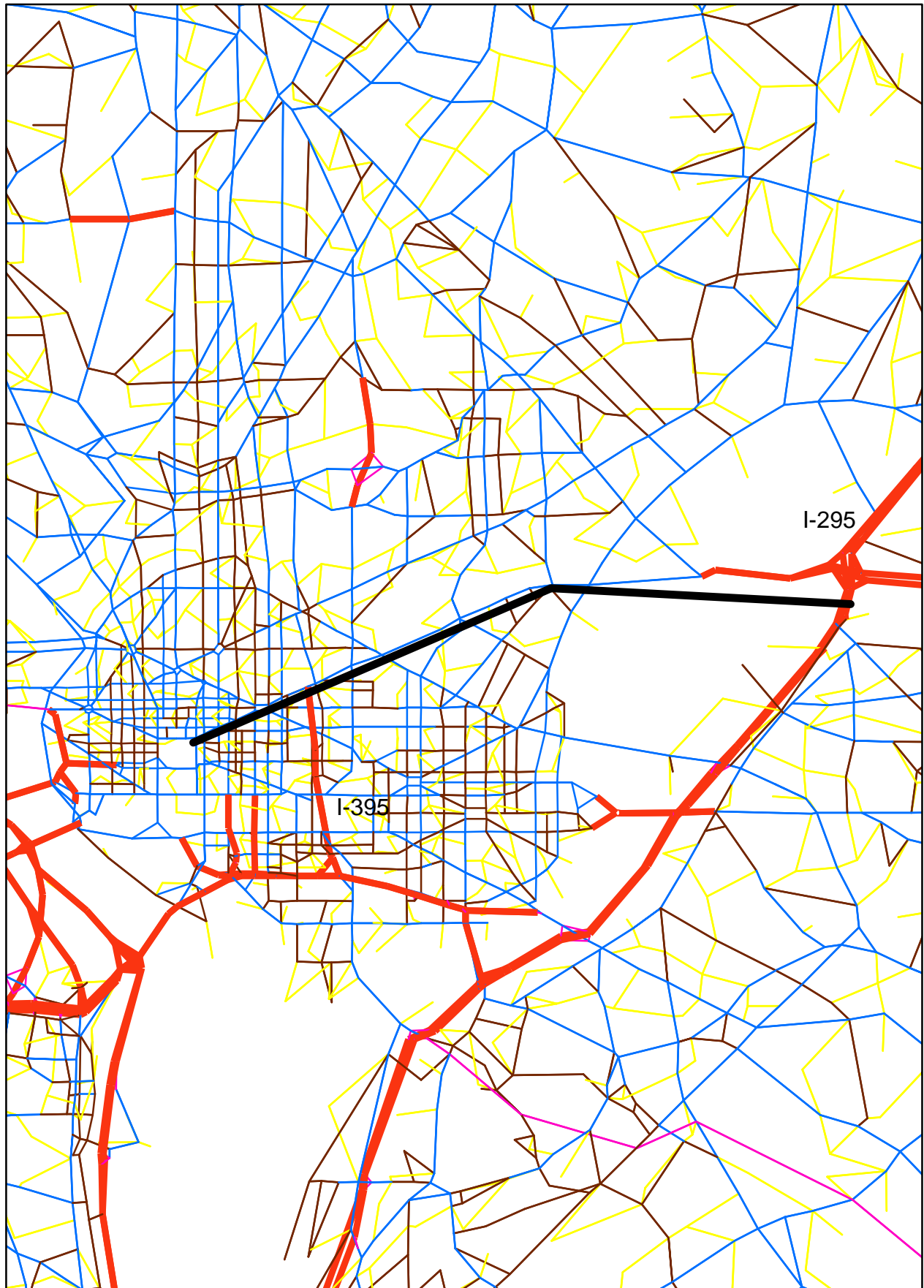
Map 1. Potomac and Anacostia Crossings Screenlines (refer to Tables 2 & 6)



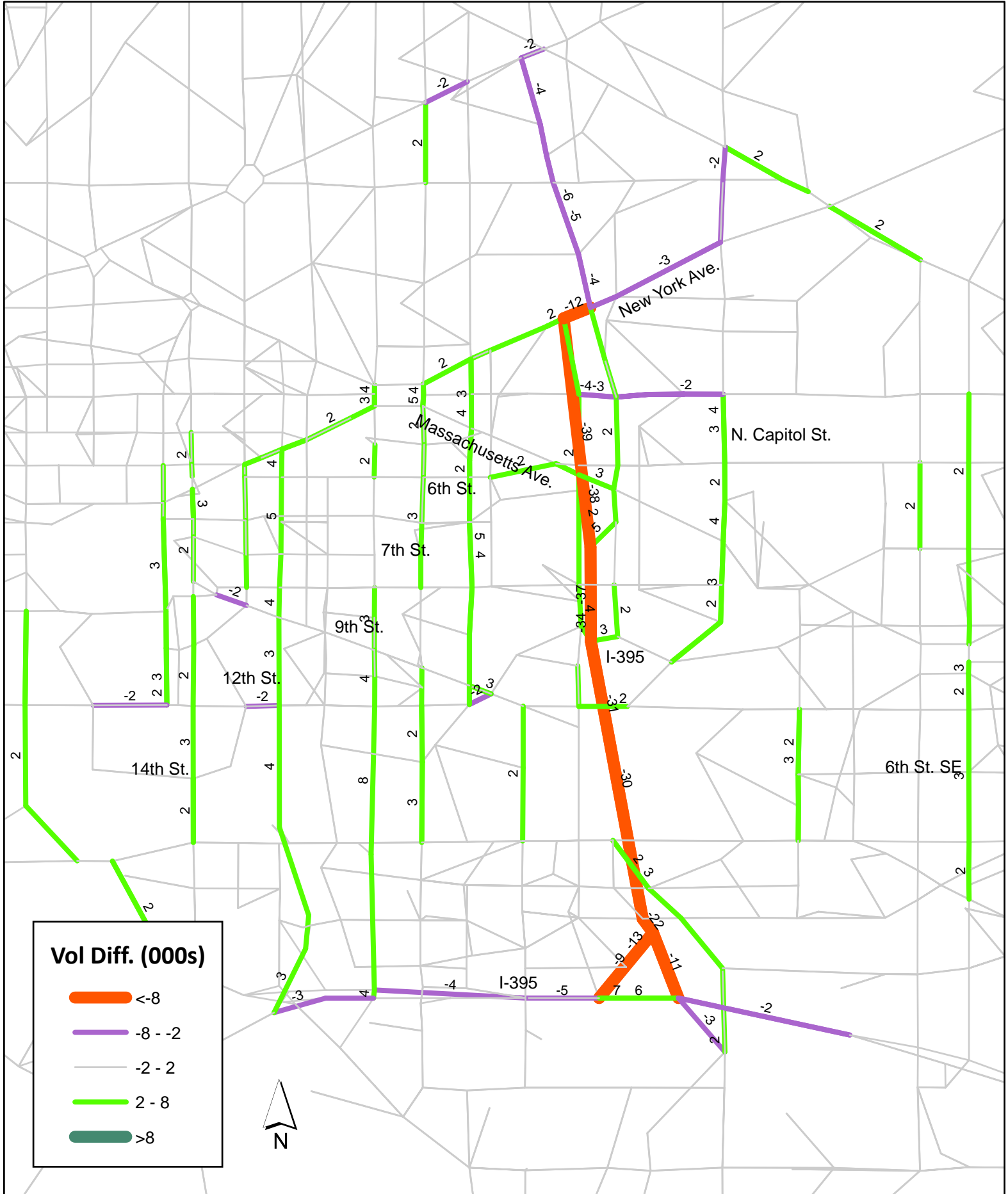
Map 2. Corridor Screenline South of Mass. Ave. (refer to Tables 3 & 7)



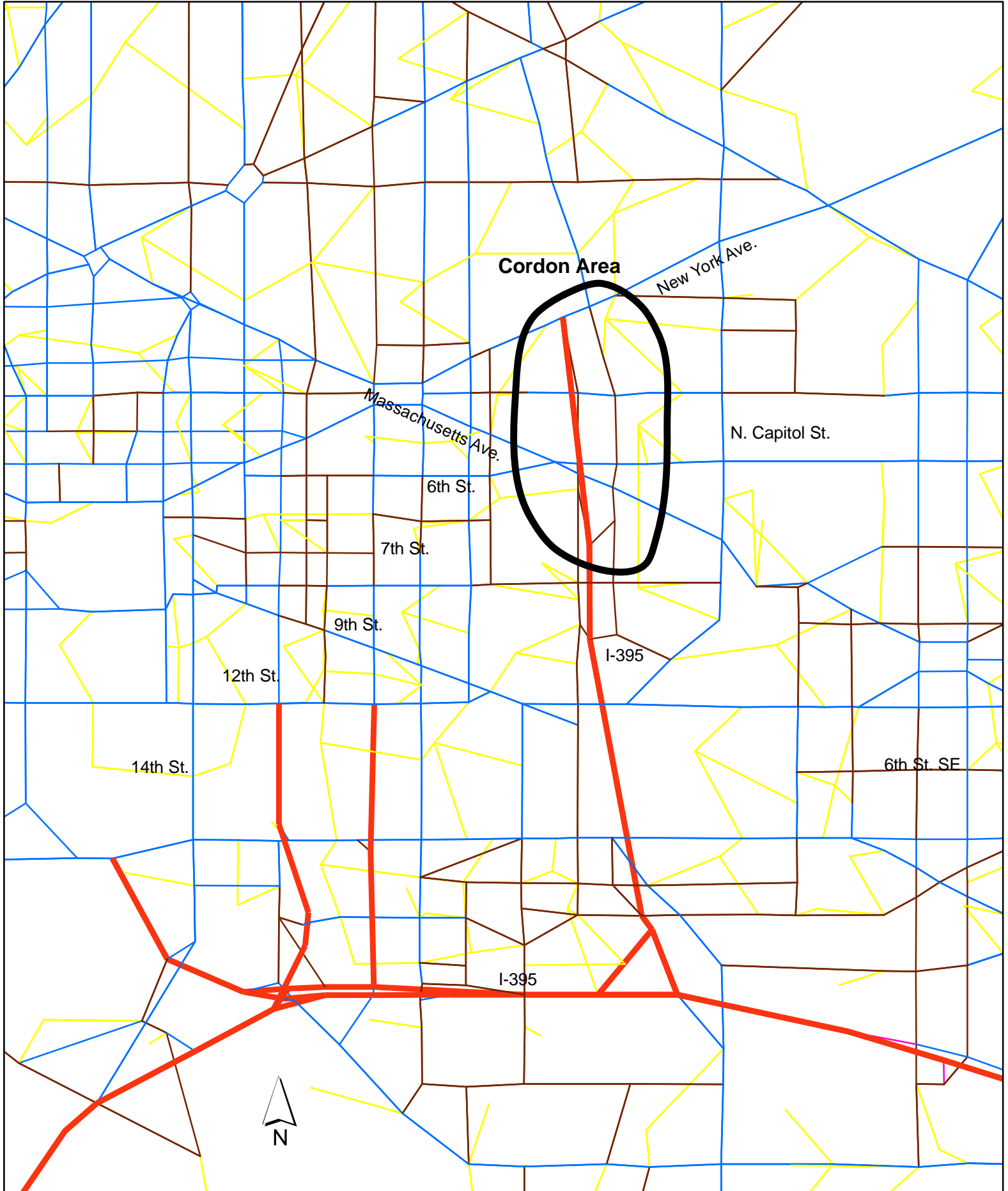
Map 3. Corridor Screenline South of US 50 (refer to Tables 4 & 8)



Map 5. DC Sensitivity Study
Model Year: 2020; DC Test minus CLRP
Daily (AWDT) Volume Difference (Green=increase, Red=decreases)
11/10/2008

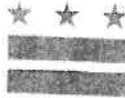


**Map 6. DC Sensitivity Study
Map of I-395 Cordon Area
12/04/2008**



Appendices

GOVERNMENT OF THE DISTRICT OF COLUMBIA
DEPARTMENT OF TRANSPORTATION



OFFICE OF THE DIRECTOR

MAY 23 2008

The Honorable Phil Mendelson
Chairman, National Capital Region
Transportation Planning Board
777 North Capitol Street, NE., Suite 300
Washington, DC 20002-4239

Dear Chairman Mendelson:

This letter requests Transportation Planning Board (TPB) staff assistance on work related to an Environmental Impact Statement (EIS) for the 14th Street Bridge Corridor.

The Eastern Federal Lands Highway Division (EFLHD) of the Federal Highway Administration (FHWA) is the lead federal agency for preparation of this EIS. The District Department of Transportation (DDOT) along with the National Park Service (NPS), Arlington County, the Department of Defense (Pentagon) and the Virginia Department of Transportation (VDOT) are cooperatively working on this study. DDOT and the other agencies are members of the study's steering committee. The current study limits are confined to land located in Arlington County and the District of Columbia. The purpose of this study is to investigate and recommend ways to reduce congestion, improve traffic operations and enhance safety in the corridor.

A wide range of options and ideas potentially meeting the project purpose have been solicited from partners, stakeholders and the public. This list of options and ideas will be analyzed, modeled and screened in the near future. Based on a TPB finding that a high proportion of New York Avenue traffic has neither an origin nor a destination within the District, DDOT has requested that EFLHD include an option to close a section of Interstate 395 (I-395) between its current northern terminus at New York Avenue and its interchange with Massachusetts Avenue, NW.

DDOT has discussed this option with EFLHD and Transportation Planning Board (TPB) staff. Based on discussions between Jack Van Dop of EFLHD and Ron Kirby of TPB, the impacts of this option are more wide-ranging and more regional than for most of the other options that will be modeled. Therefore, it has been proposed that the TPB staff undertake a regional sensitivity analysis through modifications to the inputs to the current approved regional transportation model for the 14th Street Bridge Corridor. A similar exercise was undertaken by TPB staff when analyzing alternatives for the Woodrow Wilson Bridge EIS.

Therefore DDOT hereby requests that a regional sensitivity analysis be performed by the TPB staff for the proposed closing of I-395 between New York Avenue and Massachusetts Avenue, NW. DDOT requests that this regional sensitivity analysis provide the following information.

Regional Sensitivity Analysis

Evaluate the traffic impacts of removing the link of I-395 from Massachusetts Avenue to New York Avenue from the system, thereby terminating I-395 at Massachusetts Avenue, as a possible measure to reduce traffic and congestion in the 14th Street Bridge Corridor. The regional sensitivity analysis should utilize the current approved Version 2.2 TPB Regional Travel Forecasting Model to evaluate the traffic impacts on the 14th Street Bridge Corridor and shifts in traffic to other corridors in the regional network resulting from this network change.

DDOT requests that TPB staff run the regional model for two conditions: 1) the 2007 CLRP network adopted by TPB in January of 2008, with the I-395 link from Mass Ave to New York Ave in the network, and 2) the 2007 CLRP network with the I-395 link from Mass Ave to New York Ave, deleted. No additional detailing or refinement of the regional network will be conducted for this analysis. The staff should compile assigned traffic volumes across a series of river crossings and screenlines for each model run as a means of comparing shifts in traffic resulting from the network change.

The following screenlines should be evaluated:

1. Potomac River Crossings – for individual bridges, as well as groupings of central vs. beltway bridges
2. Anacostia River Crossings: South Capitol Street, Eleventh Street, Pennsylvania Avenue, East Capitol, Benning Road and US 50 bridges
3. Screenline across the Route 295 corridor south of US 50
4. Screenline across the I-395 corridor, south of Massachusetts Avenue

By comparing traffic volumes across this range of screenlines, the staff should be able to identify the shifts in traffic at key locations throughout the region, determine if the network change results in a significant decrease in 14th Street Corridor traffic, and identify locations where significant traffic increases can be expected to occur as a result of traffic shifts due to closing the New York Avenue to Massachusetts Avenue segment of I-395.

As mentioned above, a similar modeling effort was undertaken by TPB staff for the Woodrow Wilson Bridge EIS. In that instance, costs incurred by TPB staff were reimbursed from the Woodrow Wilson Bridge EIS budget. In this case, we wish to follow the same precedent. Jack Van Dop from EFLHD has funds available in the 14th Street Bridge EIS budget that can be used for this purpose. However, if a detailed TPB cost estimate exceeds funds available in the EIS budget, then DDOT would be willing to cover that deficit with unprogrammed funds from DDOT's TPB technical assistance account.

Thank you for considering this request. If you have any questions or wish to discuss this request, please contact Rick Rybeck at 202-671-2325 or by email at rick.rybeck@dc.gov.

Sincerely,



Emeka Moneme
Director

cc:

Mr. Mark Kehrl, Division Administrator, FHWA-DC, Washington, DC
Ms. Jo Anne Sorenson, Assistant District Engineer, Planning & Development, NOVA, VDOT, Chantilly, VA
Ms. Lyn Erickson, Assistant Director, Office of Planning, MDOT
Mr. Ron Kirby, Director of Transportation Planning, MWCOG, Washington, DC
Mr. Jack Van Dop, EFLHD, FHWA, Sterling, VA
Ms. Melisa Ridenour, Division Engineer, EFLHD, FHWA, Sterling, VA
Ms. Karina Ricks, Associate Director, TPPA - DDOT

July 7, 2008

STATEMENT OF WORK

REGIONAL SENSITIVITY ANALYSIS: CLOSURE OF I-395 BETWEEN NEW YORK AVENUE AND MASSACHUSETTS AVENUE, NW

I. INTRODUCTION

In a May 23, 2008 letter to the TPB, DDOT has requested the TPB staff to perform a regional sensitivity analysis to examine the potential travel demand impacts of closing the section of I-395 between New York Avenue and Massachusetts Avenue, NW (in both directions). This work scope responds to that request by identifying the study tasks, schedule and budget to perform such an analysis.

II. WORK TASKS

1. Review transportation networks in the study area
 - Identify facilities of interest: I-395 roadway section, transit services, network characteristics
 - Prepare screenlines listed in the DDOT letter, identify travel in base condition (existing operations), and summarize
2. Prepare travel demand forecasts
 - Using the latest approved TPB travel forecasts (2007 CLRP), update transportation networks to reflect the specified closure of I-395 (2010 time frame assumed)
 - Execute the travel demand forecasting process
3. Analyze the results in comparison to existing conditions
 - Prepare regional 'tracking sheet' of vehicles and person travel by mode, purpose, and VMT
 - Identify differences in aggregate and on a disaggregate basis
 - Populate screenlines with travel simulation data
4. Summarize results and prepare a draft technical memo to document technical methods and results
5. Transmit draft report to DDOT and FHWA; address questions / comments; incorporate feedback comments
6. Transmit final report to TPB
7. Receive comments and finalize draft report for inclusion in project DEIS

III. END PRODUCT

The end product of this work effort will consist of a technical memorandum identifying travel demand impacts in terms of travel statistics, study area screenline volumes, and corridor / facility impacts.

IV. STAFFING / BUDGET

<u>STAFFING</u>	<u>PERSON DAYS</u>
DTP Director	5
Systems Planning Applications Director	5
Senior Transportation Engineer	15
Transportation Engineer	15
Administrative Assistant	5

<u>COSTS</u>	<u>\$</u>
Salaries	15,066
M&A (25%)	3,767
Leave Additive (19%)	3,578
Benefits (20%)	4,482
Indirect (36%)	9,681
Direct	425

Total	\$37,000

V. SCHEDULE

Staff will execute these work tasks and deliver a draft technical memo report to DDOT within 60 days of the notice to proceed. Following discussion of the report with DDOT, the FHWA, and the TPB, staff will incorporate comments and prepare the final project report within 30 days of receipt of all comments.

GOVERNMENT OF THE DISTRICT OF COLUMBIA
DEPARTMENT OF TRANSPORTATION



OFFICE OF THE DIRECTOR

MAY 23 2008

The Honorable Phil Mendelson
Chairman, National Capital Region
Transportation Planning Board
777 North Capitol Street, NE., Suite 300
Washington, DC 20002-4239

Dear Chairman Mendelson:

This letter requests Transportation Planning Board (TPB) staff assistance on work related to an Environmental Impact Statement (EIS) for the 14th Street Bridge Corridor.

The Eastern Federal Lands Highway Division (EFLHD) of the Federal Highway Administration (FHWA) is the lead federal agency for preparation of this EIS. The District Department of Transportation (DDOT) along with the National Park Service (NPS), Arlington County, the Department of Defense (Pentagon) and the Virginia Department of Transportation (VDOT) are cooperatively working on this study. DDOT and the other agencies are members of the study's steering committee. The current study limits are confined to land located in Arlington County and the District of Columbia. The purpose of this study is to investigate and recommend ways to reduce congestion, improve traffic operations and enhance safety in the corridor.

A wide range of options and ideas potentially meeting the project purpose have been solicited from partners, stakeholders and the public. This list of options and ideas will be analyzed, modeled and screened in the near future. Based on a TPB finding that a high proportion of New York Avenue traffic has neither an origin nor a destination within the District, DDOT has requested that EFLHD include an option to close a section of Interstate 395 (I-395) between its current northern terminus at New York Avenue and its interchange with Massachusetts Avenue, NW.

DDOT has discussed this option with EFLHD and Transportation Planning Board (TPB) staff. Based on discussions between Jack Van Dop of EFLHD and Ron Kirby of TPB, the impacts of this option are more wide-ranging and more regional than for most of the other options that will be modeled. Therefore, it has been proposed that the TPB staff undertake a regional sensitivity analysis through modifications to the inputs to the current approved regional transportation model for the 14th Street Bridge Corridor. A similar exercise was undertaken by TPB staff when analyzing alternatives for the Woodrow Wilson Bridge EIS.

Therefore DDOT hereby requests that a regional sensitivity analysis be performed by the TPB staff for the proposed closing of I-395 between New York Avenue and Massachusetts Avenue, NW. DDOT requests that this regional sensitivity analysis provide the following information.

Regional Sensitivity Analysis

Evaluate the traffic impacts of removing the link of I-395 from Massachusetts Avenue to New York Avenue from the system, thereby terminating I-395 at Massachusetts Avenue, as a possible measure to reduce traffic and congestion in the 14th Street Bridge Corridor. The regional sensitivity analysis should utilize the current approved Version 2.2 TPB Regional Travel Forecasting Model to evaluate the traffic impacts on the 14th Street Bridge Corridor and shifts in traffic to other corridors in the regional network resulting from this network change.

DDOT requests that TPB staff run the regional model for two conditions: 1) the 2007 CLRP network adopted by TPB in January of 2008, with the I-395 link from Mass Ave to New York Ave in the network, and 2) the 2007 CLRP network with the I-395 link from Mass Ave to New York Ave, deleted. No additional detailing or refinement of the regional network will be conducted for this analysis. The staff should compile assigned traffic volumes across a series of river crossings and screenlines for each model run as a means of comparing shifts in traffic resulting from the network change.

The following screenlines should be evaluated:

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By comparing traffic volumes across this range of screenlines, the staff should be able to identify the shifts in traffic at key locations throughout the region, determine if the network change results in a significant decrease in 14th Street Corridor traffic, and identify locations where significant traffic increases can be expected to occur as a result of traffic shifts due to closing the New York Avenue to Massachusetts Avenue segment of I-395.

14th Street Bridge EIS Analysis Request
Page Three

As mentioned above, a similar modeling effort was undertaken by TPB staff for the Woodrow Wilson Bridge EIS. In that instance, costs incurred by TPB staff were reimbursed from the Woodrow Wilson Bridge EIS budget. In this case, we wish to follow the same precedent. Jack Van Dop from EFLHD has funds available in the 14th Street Bridge EIS budget that can be used for this purpose. However, if a detailed TPB cost estimate exceeds funds available in the EIS budget, then DDOT would be willing to cover that deficit with unprogrammed funds from DDOT's TPB technical assistance account.

Thank you for considering this request. If you have any questions or wish to discuss this request, please contact Rick Rybeck at 202-671-2325 or by email at rick.rybeck@dc.gov.

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