

14TH STREET BRIDGE CORRIDOR EIS  
VISSIM OUTPUT<sup>1</sup>

PEAK PERIOD	AM						PM					
Measures of Effectiveness	2030_NB No Build		2030_B Build 11/22/2009 ALT 4		Difference <sup>2</sup>	Grade Point	2030_NB No Build		2030_B Build 11/22/2009 ALT 4		Difference	Grade Point
	DELAY (SEC/VEH)	LOS	DELAY (SEC/VEH)	LOS			DELAY (SEC/VEH)	LOS	DELAY (SEC/VEH)	LOS		
Intersections	(SEC/VEH)	LOS	(SEC/VEH)	LOS	Difference <sup>2</sup>	Grade Point	(SEC/VEH)	LOS	(SEC/VEH)	LOS	Difference	Grade Point
9TH ST. @ D ST.	9.3	A	9.3	A	0.0	0	46.5	D	15.9	B	-30.6	2
9TH ST. @ MAINE AVE. EXIT	23.1	C	23.2	C	0.1	0	21.2	C	26.4	C	5.2	0
7TH ST. @ D ST.	12.4	B	13.3	B	0.9	0	22.2	C	19.7	B	-2.5	1
7TH ST. @ E ST.	10.3	A	10.4	A	0.1	0	27.4	C	20.5	B	-6.9	1
7TH ST. @ FRONTAGE RD.	33.3	C	37.6	D	4.3	-1	28.8	C	33.3	C	4.5	0
7TH ST. @ NB I-395 ON-RAMP	11.5	B	10.8	A	-0.7	1	16.4	B	15.3	B	-1.1	0
7TH ST. @ G ST.	31.4	C	29.7	C	-1.7	0	23.1	C	23.2	C	0.1	0

  

PEAK PERIOD	AM				PM			
Measures of Effectiveness	2030_NB No Build		2030_B Build 11/22/2009 ALT 4		2030_NB No Build		2030_B Build 11/22/2009 ALT 4	
	MEAN SPEED (MPH)	MEAN SPEED (MPH)	Difference	Grade Point	MEAN SPEED (MPH)	MEAN SPEED (MPH)	Difference	Grade Point
Segment	(MPH)	(MPH)	Difference	Grade Point	(MPH)	(MPH)	Difference	Grade Point
NB I-395 - Btw. Maine Avenue and I-395/Southeast Freeway split	33.0	23.5	-9.5	-1	23.0	38.6	15.6	3
AVERAGE GRADE POINT				-0.13				0.88

  

PEAK PERIOD	AM				PM			
Measures of Effectiveness	2030_NB No Build		2030_B Build 11/23/2009 ALT 5_NB		2030_NB No Build		2030_B Build 11/27/2009 ALT 5_NB	
	MAX. QUEUE <sup>7</sup> (FT)	MAX. QUEUE (FT)	Difference	Grade Point	MAX. QUEUE (FT)	MAX. QUEUE (FT)	Difference	Grade Point
Segments	(FT)	(FT)	Difference	Grade Point	(FT)	(FT)	Difference	Grade Point
SB GWMP to NB I-395	>4,000	>4,000	NA	NA	3,830	>4,000	NA	NA
NB GWMP to NB I-395	1,260	>5,000	NA	NA	2,770	4,950	2,180	NA
NB GWMP to SB I-395	780	870	90	NA	175	735	560	NA

  

PEAK PERIOD	AM				PM			
Measures of Effectiveness	2030_NB No Build		2030_B Build 11/23/2009 ALT 5_SB		2030_NB No Build		2030_B Build 11/27/2009 ALT 5_SB	
	MAX. QUEUE (FT)	MAX. QUEUE (FT)	Difference	Grade Point	MAX. QUEUE (FT)	MAX. QUEUE (FT)	Difference	Grade Point
Segments	(FT)	(FT)	Difference	Grade Point	(FT)	(FT)	Difference	Grade Point
SB GWMP to NB I-395	>4,000	>4,000	NA	NA	3,830	>4,000	NA	NA
NB GWMP to NB I-395	1,260	1,320	60	NA	2,770	2,300	-470	NA
NB GWMP to SB I-395	780	880	100	NA	175	210	35	NA

  

PEAK PERIOD	AM				PM			
Measures of Effectiveness	2030_NB No Build		2030_B Build 12/8/2009 ALT 6		2030_NB No Build		2030_B Build 12/9/2009 ALT 6	
	MEAN SPEED (MPH)	MEAN SPEED (MPH)	Difference	Grade Point	MEAN SPEED (MPH)	MEAN SPEED (MPH)	Difference	Grade Point
Segments	(MPH)	(MPH)	Difference	Grade Point	(MPH)	(MPH)	Difference	Grade Point
SB I-395 - CD <sup>3</sup> road (GWMP <sup>4</sup> )	6.6	8.0	1.4	1	14.3	12.4	-1.9	-1
SB I-395 - CD road (BCD <sup>5</sup> )	27.7	35.6	7.9	2	27.5	33.4	5.9	2
SB I-395 - Btw. Exit 10C & 10B	12.9	13.8	0.9	0	23.0	20.7	-2.3	-1
SB I-395 - Btw. GWMP & BCD	44.8	48.1	3.3	1	45.5	48.4	2.9	1
SB I-395 - Btw. BCD & U.S.1/V.A.110	48.2	46.0	-2.2	-1	47.3	43.1	-4.2	-1
NB I-395 - Prior to Exit 10C	6.0	5.7	-0.1	0	4.4	4.3	-0.1	0

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VISSIM OUTPUT<sup>1</sup>

PEAK PERIOD	AM				PM							
	2030_NB No Build		2030_B Build 12/8/2009 ALT 6		2030_NB No Build		2030_B Build 12/9/2009 ALT 6					
Measures of Effectiveness	MAX. QUEUE		MAX. QUEUE		Difference	Grade Point	MAX. QUEUE		Difference	Grade Point		
Segments	(FT)		(FT)				(FT)				(FT)	
SB GWMP to NB I-395	>4,000		>4,000		NA	NA	3,830		NA	NA		
NB GWMP to NB I-395	1,260		1,200		-60	NA	2,770		-155	NA		
NB GWMP to SB I-395	780		740		-40	NA	175		-70	NA		
PEAK PERIOD	AM				PM							
Measures of Effectiveness	2030_NB No Build		2030_B Build 12/8/2009 ALT 6		2030_NB No Build		2030_B Build 12/9/2009 ALT 6					
	DELAY		DELAY		DELAY		DELAY					
Intersection	(SEC/VEH)	LOS	(SEC/VEH)	LOS	Difference	Grade Point	(SEC/VEH)	LOS	(SEC/VEH)	LOS		
BOUNDARY CHANNEL DR. - I-395 ON-RAMP	N/A	N/A	1.4 A				NA	N/A	N/A	0.8 A		NA
AVERAGE GRADE POINT					0.50						0.00	
PEAK PERIOD	AM				PM							
Measures of Effectiveness	2030_NB No Build		2030_B Build 11/23/2009 ALT 7		2030_NB No Build		2030_B Build 11/28/2009 ALT 7					
	DELAY		DELAY		DELAY		DELAY					
Intersections	(SEC/VEH)	LOS	(SEC/VEH)	LOS	Difference	Grade Point	(SEC/VEH)	LOS	(SEC/VEH)	LOS	Difference	Grade Point
14TH ST. @ INDEPENDENCE AVE.	43.5	D	31.5	C			-12.0	1	72.6	E		
14TH ST. @ C ST.	63.3	E	11.7	B	-51.6	3	80.3	E	27.4	C	-52.9	2
12TH ST. @ INDEPENDENCE AVE.	15.2	B	17.7	B	2.5	0	42.0	D	55.6	D	13.6	0
12TH ST. @ DOE GARAGE	15.8	B	6.2	A	-9.6	1	28.1	C	28.6	C	0.5	0
12TH ST. @ C ST.	15.5	B	43.1	D	27.6	-1	31.0	C	27	C	-4.0	0
12TH ST. @ D ST.	90.8	F	84.5	F	-6.3	0	71.1	E	80.4	E	9.3	0
12TH ST. @ MARYLAND AVE.	44.3	D	57.8	E	13.5	-1	97.1	F	125.8	F	28.7	0
12TH ST. @ MAIDEN LN.	6.9	A	12.2	B	5.3	-1	86.2	F	115.3	F	29.1	0
MAINE AVE. @ EAST BASIN DR.	36.6	D	10.9	A	-25.7	3	84.0	F	53.1	D	-30.9	2
AVERAGE GRADE POINT					0.56						0.44	
PEAK PERIOD	AM				PM							
Measures of Effectiveness	2030_NB No Build		2030_B Build 11/30/2009 ALT 13		2030_NB No Build		2030_B Build 12/1/2009 ALT 13					
	TRAVEL TIME		TRAVEL TIME		TRAVEL TIME		TRAVEL TIME					
Segments	(SEC)		(SEC)		Difference	Grade Point	(SEC)		(SEC)		Difference	Grade Point
NB I-395 - Rochambeau Bridge	1,021		328				-693	3	816			
SB I-395 - Rochambeau Bridge	105		176		71	-1	105		181		76	-1
AVERAGE GRADE POINT					1.00						1.00	

<sup>1</sup> Preliminary VISSIM output results. Tabulated output results are averaged from five (5) simulation runs.

<sup>2</sup> Difference between the Build Alternative and the No-Build Alternative.

<sup>3</sup> CD Road = Collector-Distributor Road.

<sup>4</sup> GWMP = George Washington Memorial Parkway.

<sup>5</sup> BCD = Boundary Channel Drive.

<sup>6</sup> Average Grade Point Value is computed by averaging grade points for each individual performance measure.

There are five (5) change ranges: negative, none, minimal, moderate, substantial; each assigned a numerical value: -1, 0, 1, 2 or 3, respectively. The performance change is determined by comparing the difference between 2030 No-Build and Build based on the set criterion, which represents a significant level of change.

ALT 4 Construct geometric improvements at I-395 & 9th St.

ALT 5 Construct geometric improvements at I-395 and George Washington Memorial Parkway.

ALT 6 Reduce I-395 access points at Boundary Channel Drive.

ALT 7 Eliminate turn movements at 14th Street and C Street intersection.

ALT 8 Convert shoulders on Rochambeau Bridge to general purpose lanes, with additional lane to 14th Street.

ALT 9 Convert shoulders on Rochambeau Bridge to general purpose lanes with additional lane to NB I-395.

ALT 10 Three HOT Lanes, one new lane: Construct one reversible shared bus/HOT lane in the median across Rochambeau Bridge;

convert existing GPL's to HOT in the peak direction with connections to 14th Street and to I-395 Expressway.

ALT 11 Two HOT Lanes: Extend congestion pricing across Rochambeau Bridge by constructing two reversible shared HOT/bus lanes in median.

ALT 12 Construct reversible general purpose lanes in median on Rochambeau Bridge.

ALT 13 Construct bus lanes between Pentagon Transit Center and 14th St at Independence Ave using inside shoulders on Rochambeau Bridge.