ORIGINAL TO GENERAL FILES

DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA

OFFICE OF DESIGN POLICY & SUPPORT
INTERDEPARTMENTAL CORRESPONDENCE

FILE P.I. #0009678

OFFICE Design Policy & Support

GDOT District 7 - Metro Atlanta
Fulton County
I-75 @ CR 624/Mt. Paran Rd &
SR 3/US 41 @ CR 624/Mt. Paran Rd

DATE June 7, 2012

FROM for Brent Story, State Design Policy Engineer

TO SEE DISTRIBUTION

SUBJECT **APPROVED REVISED CONCEPT REPORT**

Attached is the approved Revised Concept Report for the above subject project.

Attachment

DISTRIBUTION:

Genetha Rice-Singleton, Program Control Administrator
Bobby Hilliard, State Program Delivery Engineer
Cindy VanDyke, State Transportation Planning Administrator
Angela Robinson, Financial Management Administrator
Glenn Bowman, State Environmental Administrator
Andy Casey, State Roadway Design Engineer
Attn: Mac Cranford, District Design Engineer
Kathy Zahul, State Traffic Engineer
Georgene Geary, State Materials & Research Engineer
Lisa Myers, State Project Review Engineer
Jeff Baker, State Utilities Engineer
Ken Thompson, Statewide Location Bureau Chief
Rachel Brown, District Engineer
Scott Lee, District Preconstruction Engineer
Jonathan Walker, District Utilities Engineer
Sue Anne Decker, Project Manager
BOARD MEMBER - 5th Congressional District

DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA
REVISED PROJECT CONCEPT REPORT

Project Type:	Quick Project	P.I. Number:	0009678
GDOT District:	7	County:	Fulton
Federal Route Number:	I-75 & US 41	State Route Number:	3 & 401

Project PI #0009678 will improve operations on the I-75 southbound ramp @ Mt. Paran Rd by adding an additional right turn lane on the ramp to reduce queuing on the ramp and the interstate. Additionally, it will improve operations on Mt. Paran Rd between the I-75 southbound exit ramp and SR 3 by adding a raised median to reduce weaving and merging.

Submitted for approval:

Mac Crawford — 4-17-12
District Seven Design Engineer — DATE

Bobby Hilliard — 4-24-2012
State Program Delivery Engineer — DATE

Sue Anne Decku — 4/19/12
GDOT Project Manager — DATE

Recommendation for approval:

*Glenn Bowman /MOH — 5/1/2012
State Environmental Administrator — DATE

The concept as presented herein and submitted for approval is consistent with that which is included in the Regional Transportation Plan (RTP) and/or the State Transportation Improvement Program (STIP).

Cynthia K Vanfe — 5-3-12
State Transportation Planning Administrator — DATE

*Recommendation on file - MOH

PLANNING, APPROVED CONCEPT, & BACKGROUND DATA

Project Justification Statement: The purpose of this proposed project is to provide improvements to the southbound exit ramps from I-75 @ CR 624/ Mt. Paran Rd & SR 3/US 41 @ CR 624/ Mt Paran Rd (Exit 256). Currently, vehicles exiting I-75 are backing up on the exit ramp and in peak periods the queues are spilling out onto the interstate creating a hazardous area for stopped or significantly slowing vehicles on the interstate through lanes trying to exit. In addition, right turning vehicles which could have a free flowing condition onto both Mt. Paran Rd and Northside Pkwy are caught in weaving and merging vehicles from Mt. Paran Rd.

The current (2011) AADT on Mt. Paran Rd is 29,350 vehicles per day.

Other projects in the area:

PI 0006396: ATMS, I-75 N Ramp Meters from I-85 to Wade Green Road
PI 720125-: Widening, SR 3 Fm Northgate Dr to Paces Mill Rd; Inc Bridge Replacement- Ph I
PI M003558: Resurface & Maintenance, SR3 from Cr 1318/Northside Drive to Cobb County Line
PI 770680-: ATMS, Surveillance System for the Atlanta Interstates
PI 0007174: Bridge, SR 3 @ Peachtree Creek

Although there are other projects in the vicinity, this project is a standalone project with independent utility and logical termini.

The proposed project length is approximately 900-ft (0.16 miles) along the exit ramp, beginning at M.P. 17.09 and extending to M.P. 17.24.

Description of the approved concept: The existing south bound exit ramp is not signalized and consists of a 900-ft long 16-ft wide single travel lane with a right turn only movement at the terminal with Mt. Paran Rd. The improvements to the south bound exit ramp consist of widening to the inside to develop two approximately 900-ft long right turn lanes. The proposed lanes will be 12-feet wide. Traffic entering Mt. Paran Rd from the proposed left lane from the I-75 south bound exit ramp will be yield controlled. Additional improvements include constructing a varying 3-ft to 16-ft wide raised median approximately 265-ft long separating the dedicated right turn lane from the combined right-thru lane on Mt. Paran Rd.

PDP Classification: ☐ Major ☒ Minor

Federal Oversight: ☐ Full Oversight ☒ Exempt ☐ State Funded ☐ Other

Projected Traffic as shown in the approved Concept Report: AADT
Open Year (2012): 29,650 Design Year (2032): 41,920

Updated Traffic: AADT
Open Year (2012): 29,650 Design Year (2032): 41,920

Functional Classification (Mainline): Urban Minor Arterial Street

VE Study anticipated: ☒ No ☐ Yes ☐ Completed – Date:

PROPOSED REVISIONS

Approved Features:	**Proposed Features:**
The Approved Concept Report mentions a roadway typical Section for Mt. Paran Rd to include the following: six 12-foot travel lanes (2 lanes NB and dual left turn lanes, a shared through and right turn lane, and a dedicated turn lane from the I-75 SB ramp to NB SR 3/Northside Pkwy on the SB side) with 2½ -foot curb and gutter on both the east and west side of the roadway. The dedicated turn lane will be separated from the SB Mt. Paran Rd mainline traffic by a 3-ft to 16-ft raised median to eliminate the existing weaving section.	Mt. Paran Rd will now include the following: seven 12-foot travel lanes (2 lanes NB and dual left turn lanes, a through lane, a right turn lane, and a dedicated turn lane from the I-75 SB ramp to NB SR 3/Northside Pkwy on the SB side) with 2½ -foot curb and gutter on both sides of the roadway. The dedicated turn lane will be separated from the SB Mt. Paran Rd mainline traffic by a 6-ft to 22-ft raised median.
Reason(s) for change: The above typical section change is being made per the results of the most recent traffic models and several project shareholder meetings with the local neighborhood groups. They both showed that separating the shared through-right lane on the southbound Mt Paran Rd approach of intersection at US 41/SR 3/Northside Pkwy would be beneficial for improving traffic flows and reduce delays at this intersection/interchange along with providing the already proposed separated turn lane from the I-75 SB exit ramp shows.	

ENVIRONMENTAL

Air Quality:
Is the project located in a PM 2.5 Non-attainment area? ☐ No ☒ Yes
Is the project located in an Ozone Non-attainment area? ☐ No ☒ Yes
The proposed project is an operational improvement project and does not add capacity.

Potential environmental impacts of proposed revision: Mt. Paran Rd will be widened by 12 feet to the west between the I-75 SB off-ramp and Northside Pkwy to accommodate the additional width of pavement needed for the new right turn lane. This minor widening will require some additional earthwork and a retaining wall, but it will not require any ROW or Easement as the Department owns the ROW between I-75 and Northside Pkwy in the area of this project. Also, this widening is not anticipated to have any environmental impacts as there were no identified resources in the initial screening, and it should not impact the project schedule.

Have proposed revisions been reviewed by environmental staff? ☐ No ☒ Yes

Environmental responsibilities (Studies/Documents/Permits): *GDOT*

PROJECT COST & ADDITIONAL INFORMATION

Updated Cost Estimate		Date of Estimate
Base Construction Cost:	$517,023.07	4/16/2012
Engineering and Inspection:	$25,851.15	4/16/2012
Liquid AC Adjustment:	$18,369.59	4/16/2012
Total Construction Cost:	$561,243.81	
Right-of-Way:	N/A	
Utilities (reimbursable costs):	$0.00	11/18/2011
Environmental Mitigation:	N/A	
TOTAL PROJECT COST:	$561,243.81	

Recommendation: Recommend that the proposed revision to the concept be approved for implementation.

Comments: None.

Attachments:

1. Cost Estimate(s)
2. Typical Sections
3. Project Layout
4. Traffic Study/Model

APPROVALS

Concur: _____ 5/29/12
Director of Engineering — Date

Approve: _____ 6-5-12
Chief Engineer — Date

STATE HIGHWAY AGENCY

DATE : 04/16/2012
PAGE : 1

JOB ESTIMATE REPORT

JOB NUMBER : 0009678_OAO SPEC YEAR: 01
DESCRIPTION: I-75 @ MT PARAN RD

ITEMS FOR JOB 0009678_OAO

LINE	ITEM	ALT	UNITS	DESCRIPTION	QUANTITY	PRICE	AMOUNT
0005	150-1000		LS	TRAFFIC CONTROL - 0009678	1.000	30000.00	30000.00
0075	163-0232		AC	TEMPORARY GRASSING	1.000	420.40	420.40
0078	163-0550		EA	CONS & REM INLET SEDIMENT TRAP	6.000	120.93	725.58
0080	165-0105		EA	MAINT OF INLET SEDIMENT TRAP	6.000	59.10	354.65
0085	163-0240		TN	MULCH	35.000	214.55	7509.50
0095	171-0030		LF	TEMPORARY SILT FENCE, TYPE C	530.000	2.86	1518.53
0100	163-0300		EA	CONSTRUCTION EXIT	2.000	1052.13	2104.26
0105	165-0030		LF	MAINT OF TEMP SILT FENCE, TP C	265.000	0.86	230.44
0110	165-0101		EA	MAINT OF CONST EXIT	2.000	447.06	894.13
0115	210-0100		LS	GRADING COMPLETE - 0009678	1.000	50000.00	50000.00
0120	310-1101		TN	GR AGGR BASE CRS, INCL MATL	527.000	21.06	11100.75
0125	402-1812		TN	RECYL AC LEVELING,INC BM&HL	45.000	76.17	3427.96
0130	402-3121		TN	RECYL AC 25MM SP,GP1/2,BM&HL	254.000	68.98	17521.22
0135	402-3130		TN	RECYL AC 12.5MM SP,GP2,BM&HL	556.000	70.52	39210.19
0140	402-3190		TN	RECYL AC 19 MM SP,GP 1 OR 2 ,INC BM&HL	102.000	73.36	7483.73
0145	413-1000		GL	BITUM TACK COAT	301.000	2.72	819.88
0149	441-0108		SY	CONC SIDEWALK, 8 IN	20.000	44.48	889.60
0150	441-0748		SY	CONC MEDIAN, 6 IN	455.000	37.12	16891.78
0155	441-6022		LF	CONC CURB & GUTTER, 6"X30"TP2	961.000	12.68	12194.87
0160	446-1100		LF	PVMT REF FAB STRIPS, TP2,18 INCH WIDTH	961.000	5.03	4842.68
0170	550-1180		LF	STM DR PIPE 18",H 1-10	462.000	31.30	14463.65
0173	621-4060		LF	CONCRETE SIDE BARRIER, TY 6	60.000	230.00	13800.00
0174	621-4061		LF	CONCRETE SIDE BARRIER, TY 6A	65.000	315.00	20475.00
0178	005-0002		LS	INSTALL/LIGHTING FACILITIES	1.000	34000.00	34000.00
0179	636-1029		SF	HWY SGN,TP2 MATL,REFL SH TP 3	14.000	15.81	221.37
0184	636-1033		SF	HWY SIGNS, TP1MAT,REFL SH TP 9	155.000	19.14	2967.40
0189	636-2070		LF	GALV STEEL POSTS, TP 7	195.000	7.66	1494.27
0194	636-4104		EA	PLASTIC FLEX DELINEATOR, TP 2B	130.000	43.31	5630.91
0199	639-2002		LF	STEEL WIRE STRAND CABLE, 3/8"	540.000	3.27	1765.99
0204	639-4014		EA	STR POLE,TP 4,INCL LUMIN. ARM 1 @ 40 FT	1.000	5341.72	5341.72
0209	639-4014		EA	STR POLE,TP 4,INCL LUMIN. ARM 1 @ 30 FT	1.000	5341.72	5341.72
0214	639-4004		EA	STRAIN POLE, TP IV	4.000	4768.28	19073.15
0219	641-1100		LF	GUARDRAIL, TP T	450.000	35.01	15755.03
0224	641-5001		EA	GUARDRAIL ANCHORAGE, TP 1	1.000	662.94	662.95
0229	641-5012		EA	GUARDRAIL ANCHORAGE, TP 12	3.000	1739.20	5217.62
0234	647-1000		LS	TRAF SIGNAL INSTALLATION NO - 1	1.000	32500.00	32500.00
0239	647-1000		LS	TRAF SIGNAL INSTALLATION NO - 2	1.000	57900.00	57900.00
0242	432-5010		SY	MILL ASPH CONC PVMT,VARB DEPTH	6220.000	2.83	17616.91
0244	652-0210		EA	PAVEMENT MARKING, WORD, TP 1	5.000	46.76	233.83
0247	500-9999		CY	CL B CONC,BASE OR PVMT WIDEN	30.000	150.45	4513.69

JOB ESTIMATE REPORT

0249	653-0110	EA	THERM PVMT MARK, ARROW, TP 1	3.000	73.23	219.72
0254	653-0120	EA	THERM PVMT MARK, ARROW, TP 2	10.000	71.35	713.57
0259	653-1501	LF	THERMO SOLID TRAF ST 5 IN, WHI	2843.000	0.44	1255.07
0264	653-1502	LF	THERMO SOLID TRAF ST, 5 IN YEL	1050.000	0.49	519.31
0269	653-1704	LF	THERM SOLID TRAF STRIPE,24",WH	86.000	3.56	306.60
0274	653-1804	LF	THERM SOLID TRAF STRIPE, 8",WH	630.000	1.82	1152.13
0277	611-3000	EA	RECONSTR CATCH BASIN, GROUP 1	1.000	1522.82	1522.83
0279	653-3501	GLF	THERMO SKIP TRAF ST, 5 IN, WHI	320.000	0.37	121.57
0284	653-6004	SY	THERM TRAF STRIPING, WHITE	239.000	3.04	728.21
0289	654-1001	EA	RAISED PVMT MARKERS TP 1	12.000	5.01	60.22
0294	654-1003	EA	RAISED PVMT MARKERS TP 3	20.000	4.52	90.55
0299	615-1200	LF	DIRECTIONAL BORE - 5 IN	875.000	9.46	8283.75
0304	668-1100	EA	CATCH BASIN, GP 1	2.000	2144.27	4288.54
0309	668-1110	LF	CATCH BASIN, GP 1, ADDL DEPTH	10.000	163.77	1637.73
0314	668-2100	EA	DROP INLET, GP 1	6.000	1791.98	10751.91
0318	668-2110	LF	DROP INLET, GP 1, ADDL DEPTH	10.000	153.26	1532.63
0319	700-6910	AC	PERMANENT GRASSING	1.000	756.13	756.14
0324	700-7000	TN	AGRICULTURAL LIME	2.000	109.66	219.32
0329	700-8000	TN	FERTILIZER MIXED GRADE	1.000	424.26	424.27
0334	700-8100	LB	FERTILIZER NITROGEN CONTENT	400.000	1.87	750.24
0339	713-3001	SY	WOOD FIBER BLANKET,TP I,SLOPES	315.000	0.92	290.77
0344	647-2160	EA	PULL BOX, PB-6	3.000	979.33	2938.01
0349	682-6233	LF	CONDUIT, NONMETL, TP 3, 2 IN	1175.000	3.15	3708.83
0354	935-1113	LF	OUT PLNT FBR OPT CBL,LOOSE TB,SM,24 FBR	100.000	2.97	297.72
0359	935-1511	LF	OUT PLNT FBR OPT CBL,DROP,SM,6 FBR	200.000	1.27	255.47
0364	935-3401	EA	FBR OPTIC CLOSURE,FDC(RACK MTD),6 FBR	1.000	300.00	300.00
0369	935-3501	EA	FBR OPTIC CLOSURE,FDC(WALL MTD),6 FBR	1.000	300.00	300.00
0374	935-4010	EA	FIBER OPTIC SPLICE, FUSION	24.000	44.60	1070.50
0379	935-5030	EA	FIBER OPTIC CONNECTORS, SM	8.000	100.00	800.00
0384	935-6562	EA	EXT TRNSCVR,DRP&RPT,1310SM,(SIGNAL JOBS)	2.000	1306.05	2612.10
0389	935-8000	LS	TESTING	1.000	2000.00	2000.00

ITEM TOTAL	517023.07
INFLATED ITEM TOTAL	517023.07

TOTALS FOR JOB 0009678_OAO

ESTIMATED COST:	517023.07
CONTINGENCY PERCENT (0.0):	0.00
ENGINEERING & INSPECTION PERCENT (5.0):	25851.15
LIQUID AC ADJUSTMENT:	18369.59
ESTIMATED TOTAL:	561243.81

PROJ. NO.		CALL NO.	9/29/2009
P.I. NO.	0009678		
DATE	4/16/2012		

INDEX (TYPE)	**DATE**	**INDEX**
REG. UNLEADED	Apr-12	$ 3.842
DIESEL		$ 4.138
LIQUID AC		$ 623.00

Link to Fuel and AC Index:
http://www.dot.ga.gov/doingbusiness/Materials/Pages/asphaltcementindex.aspx

LIQUID AC ADJUSTMENTS

PA=[((APM-APL)/APL)]xTMTxAPL

Asphalt

Price Adjustment (PA)				**17886.33**	**$**	**17,886.33**
Monthly Asphalt Cement Price month placed (APM)	Max. Cap	60%	$	996.80		
Monthly Asphalt Cement Price month project let (APL)			$	623.00		
Total Monthly Tonnage of asphalt cement (TMT)				47.85		

ASPHALT	**Tons**	**%AC**	**AC ton**
Leveling	45	5.0%	2.25
12.5 OGFC	0	5.0%	0
12.5 mm	556	5.0%	27.8
9.5 mm SP	0	5.0%	0
25 mm SP	254	5.0%	12.7
19 mm SP	102	5.0%	5.1
	957		**47.85**

BITUMINOUS TACK COAT

Price Adjustment (PA)			**$**	**483.26**	**$**	**483.26**
Monthly Asphalt Cement Price month placed (APM)	Max. Cap	60%	$	996.80		
Monthly Asphalt Cement Price month project let (APL)			$	623.00		
Total Monthly Tonnage of asphalt cement (TMT)				1.292825378		

Bitum Tack Gals	gals/ton	tons
301	232.8234	1.29282538

9/29/2009

PROJ. NO.		CALL NO.	
P.I. NO.	0009678		
DATE	4/16/2012		

BITUMINOUS TACK COAT (surface treatment)

Price Adjustment (PA)				**0**	**$ -**
Monthly Asphalt Cement Price month placed (APM)	Max. Cap	60%	$	996.80	
Monthly Asphalt Cement Price month project let (APL)			$	623.00	
Total Monthly Tonnage of asphalt cement (TMT)				0	

Bitum Tack	SY	Gals/SY	Gals	gals/ton	tons
Single Surf. Trmt.		0.20	0	232.8234	0
Double Surf.Trmt.		0.44	0	232.8234	0
Triple Surf. Trmt		0.71	0	232.8234	0
					0

TOTAL LIQUID AC ADJUSTMENT	**$**	**18,369.59**

DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA

INTERDEPARTMENT CORRESPONDENCE

FILE **P.I. No. 0009678 Fulton County**
I-75 @ CR 624/MT PARAN RD
& SR 3/US 41@ CR 624/MT PARAN RD

OFFICE District 7
Chamblee

DATE November 18, 2011

FROM **Jonathan Walker**
District Utilities Engineer

TO **Bobby Hilliard P.E., State Program Delivery Engineer**
ATTN **Sue Anne H. Decker, P.E., Project Manager**

SUBJECT **PRELIMINARY UTILITY COST (ESTIMATE)**

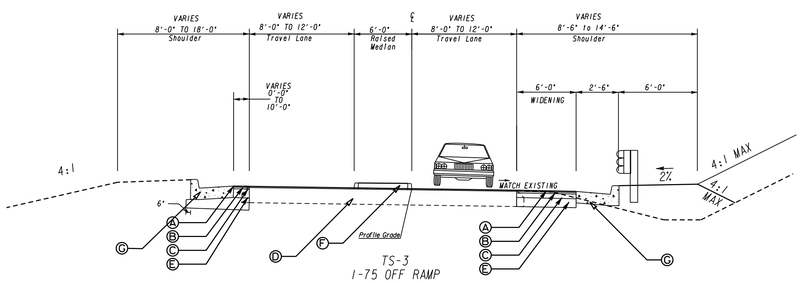
As requested by your office, we are furnishing you with a Preliminary Utility Cost Estimate for each utility with facilities potentially located within the project limits.

FACILITY OWNER	NON-REIMBURSABLE	REIMBURSABLE	GRAND TOTAL
Atlanta Gas Light Company	$ 20,000.00	$ 0.00	
AT&T Formerly BellSouth	$ 45,000.00	$ 0.00	
Fulton County Pub. Works	$ 0.00	$ 0.00	
Georgia Power Distribution	$ 53,000.00	$ 0.00	
Totals	**$ 118,000.00**	**$ 0.00**	**$118,000.00**

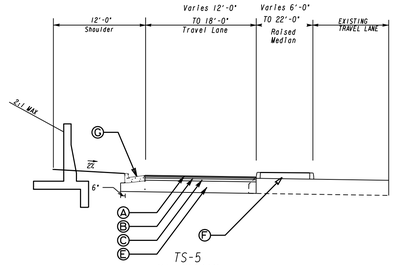
If you have any questions, please contact Clyde Cunningham at 770-986-1117.

BRP/JW/YPF

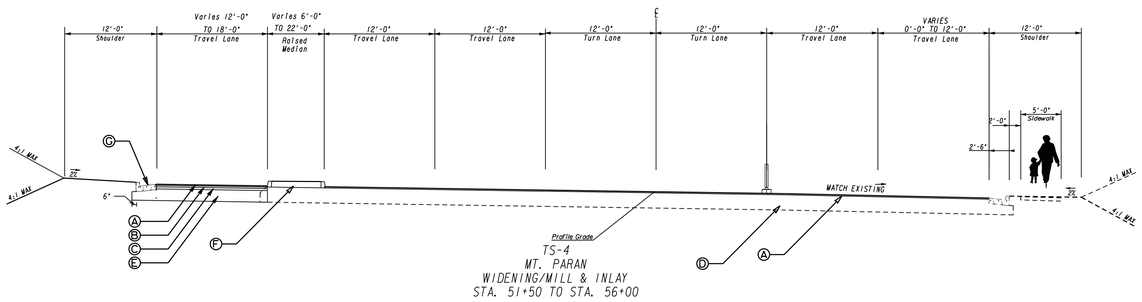
C: Jeff Baker, P.E., State Utilities Engineer
Angela Robinson, Office of Financial Management
Sebastian Nesbitt, Area Engineer



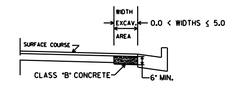
TS-3
I-75 OFF RAMP
WIDENING
STA. 10+00 TO 13+00



TS-5
MT. PARAN
SHOULDER DETAIL
STA. 54+09 TO STA. 55+48



TS-4
MT. PARAN
WIDENING/MILL & INLAY
STA. 51+50 TO STA. 56+00



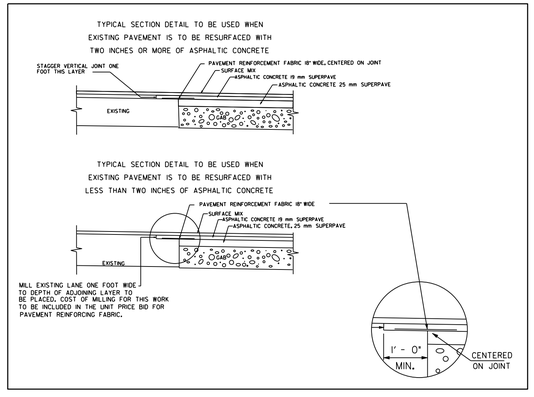
NO SCALE
CLASS "B" CONCRETE BASE OR PAVEMENT WIDENING
Item Code 500-9999 - Cu. Yds.

In excavated areas between the existing paving and new curb and gutter that are 5'-0" or less in width, Class "B" Concrete shall be placed in lieu of the base and paving specified by the typical section. Payment will be made under "Class B Concrete Base and Pavement Widening".

In excavated areas greater than 5'-0" in width, the Contractor shall place base and paving as specified on the typical section.

See plans for details of curb and gutter construction.

CLASS "B" CONCRETE BASE OR WIDENING DETAIL



PAVEMENT DESIGN

SYMBOL	PAVEMENT SYMBOLS LEGEND DESCRIPTION	
A	RECYCLED ASPH CONC 12.5 MM SUPERPAVE, GP 2 ONLY, INCL BITUM MATL & H LIME	165 LB/SY
B	RECYCLED ASPH CONC 19 MM SUPERPAVE, GP 1 OR 2, INCL BITUM MATL & H LIME	220 LB/SY
C	RECYCLED ASPH CONC 25 MM SUPERPAVE, GP 1 OR 2, INCL BITUM MATL & H LIME	550 LB/SY
D	EXIST. PAVEMENT	
E	10" GRADED AGGREGATE BASE	
F	6" CONCRETE MEDIAN, TYPE B	
G	6" X 30" CONC. CURB & GUTTER, GA STD 9032 B, TYPE 2	

GEORGIA
DEPARTMENT
OF
TRANSPORTATION

NOT TO SCALE

REVISION DATES

STATE OF GEORGIA
DEPARTMENT OF TRANSPORTATION
OFFICE: DISTRICT 7 DESIGN

TYPICAL SECTIONS

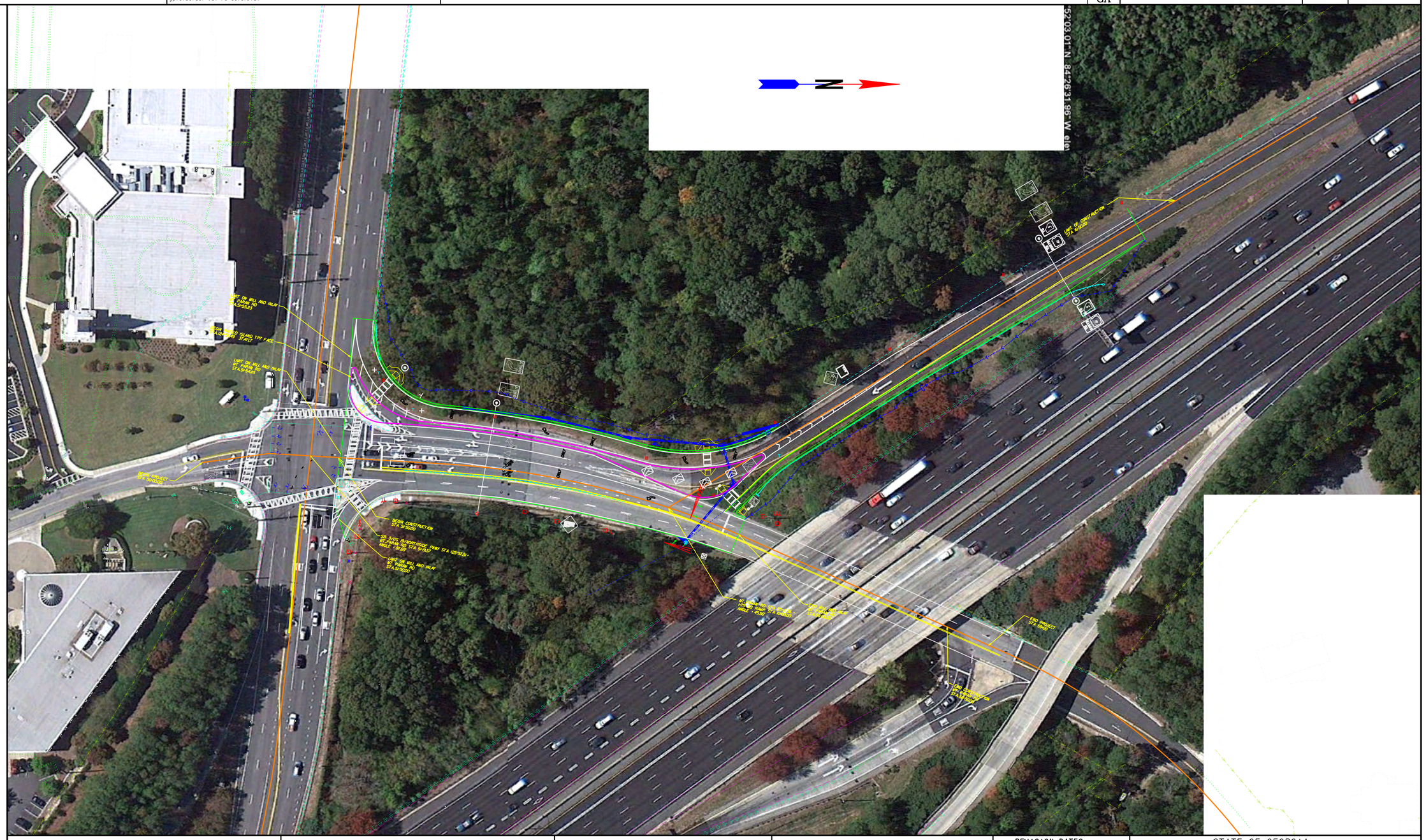
I-75 SB @ MT PARAN

DRAWING No.
05-002

4/16/2012 1:18:09 PM GPLOT-V8 S:\D7 DESIGN PROJECTS\0009678\Design\0009678_layout_3-19-12.dgn

USER:mcranford gplotborder-V8I-PO-color.tbl

STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
GA			



GEORGIA
DEPARTMENT OF TRANSPORTATION

SCALE IN FEET
0 50 100 200

REVISION DATES

STATE OF GEORGIA
DEPARTMENT OF TRANSPORTATION

OFFICE: DISTRICT 7 DESIGN

MAINLINE PLAN

I-75 SB @ MT PARAN RD @
SR 3/US 41/NORTHSIDE PKWY

DRAWING No. 13-001

6/20/2011 GPLN

Results of VISSIM Traffic Models
For
I-75 SB @ Mt Paran Rd

Description of the Five Models:

Existing – the existing lane configuration (L_L_TR_R)

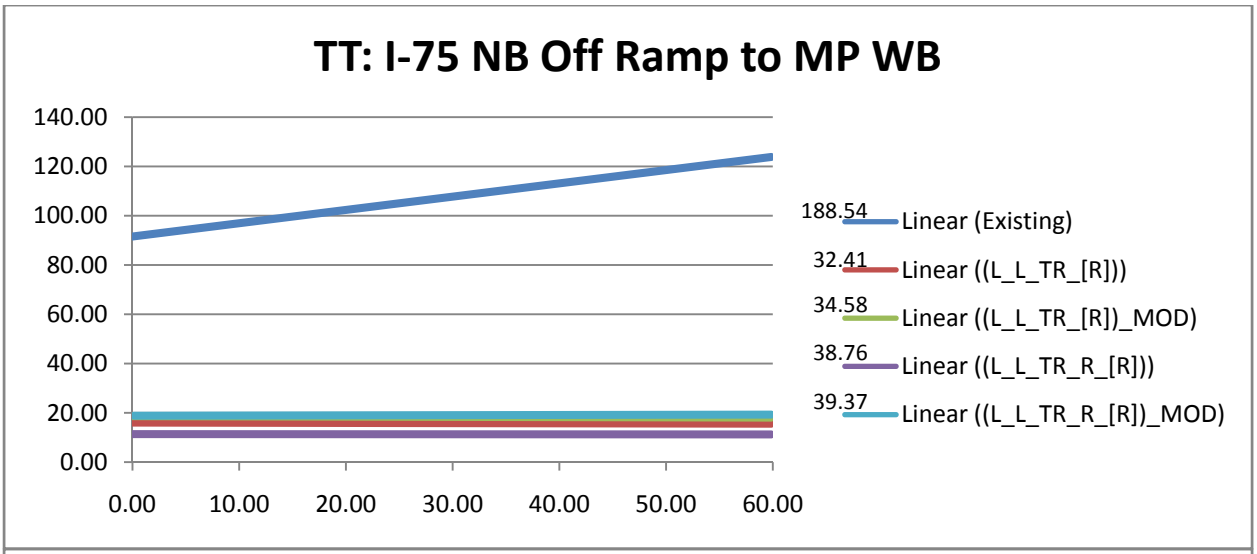
*All of the alternative models include the addition of a second lane on the off ramp

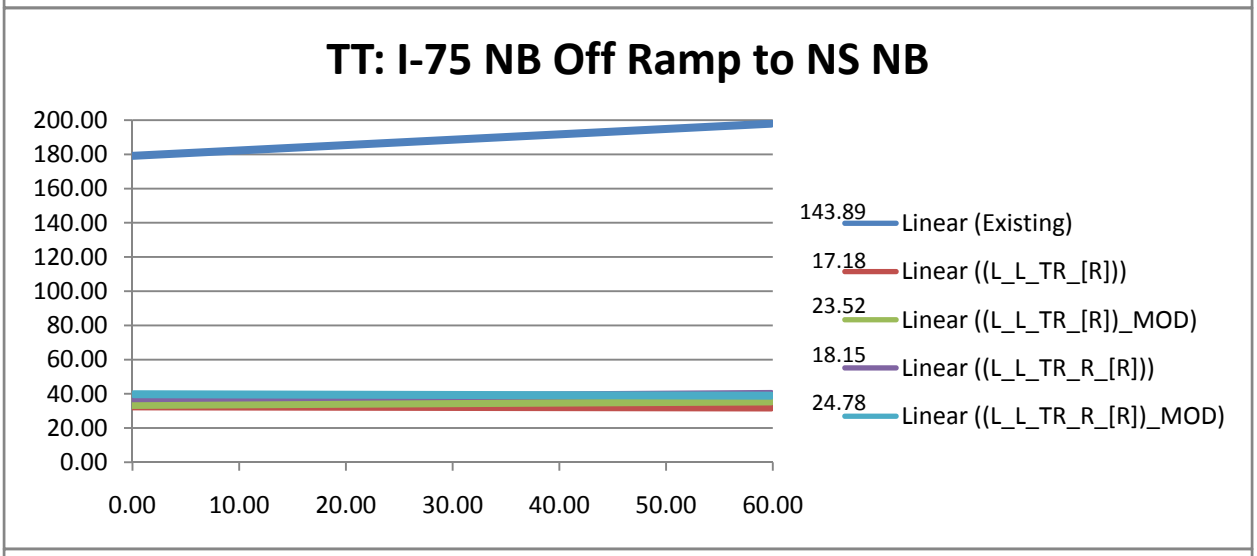
(L_L_TR_[R]) – Model #1, two left turn lanes, a through/right lane and a separated right turn from the off ramp onto Northside Dr with a stop controlled intersection at the off ramp and Mt Paran

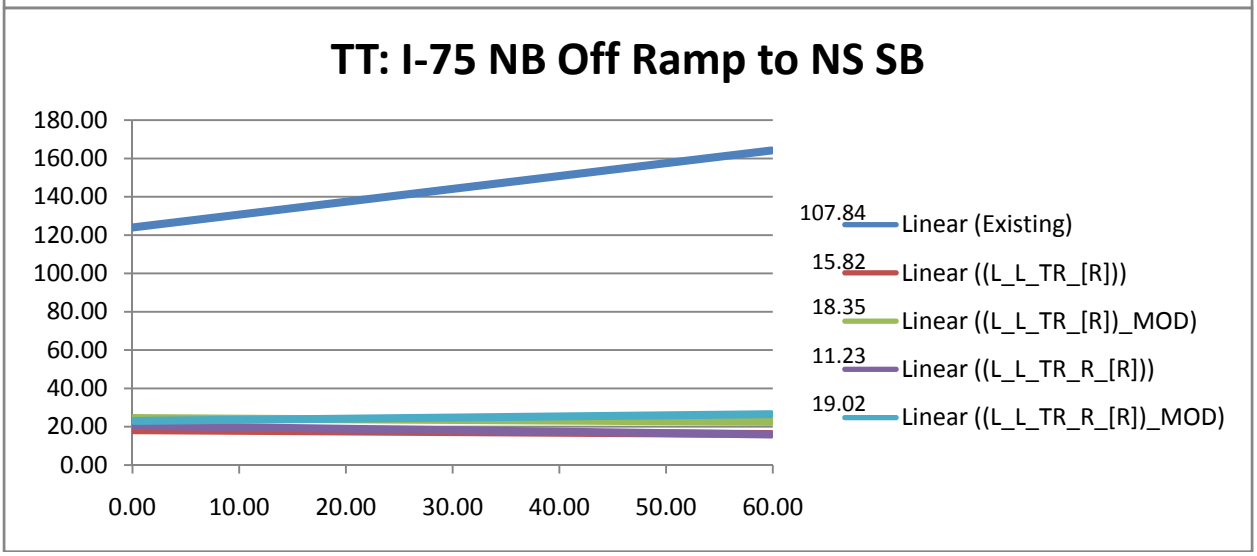
(L_L_TR_[R])_MOD – Model #2, two left turn lanes, a through/right lane and a separated right turn lane from the off ramp onto Northside Dr with a signalized intersection at the off ramp and Mt Paran to flush the ramp

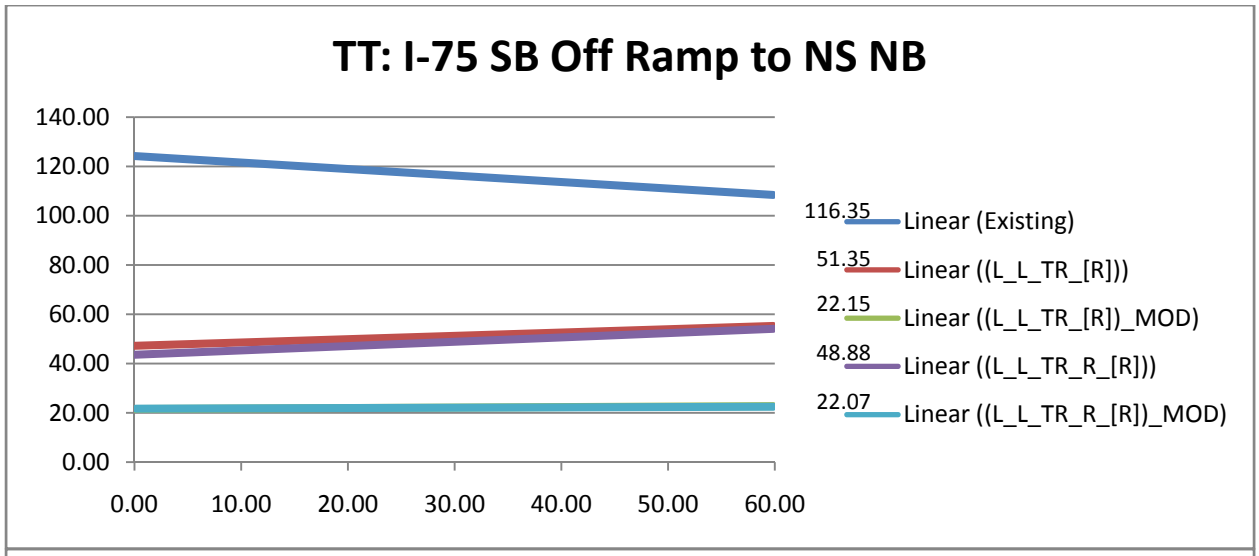
(L_L_TR_R_[R]) – Model #3, two left turn lanes, a through/right lane, an additional right turn lane and a separated right turn lane from the off ramp onto Northside Dr with a stop controlled intersection at the off ramp and Mt Paran

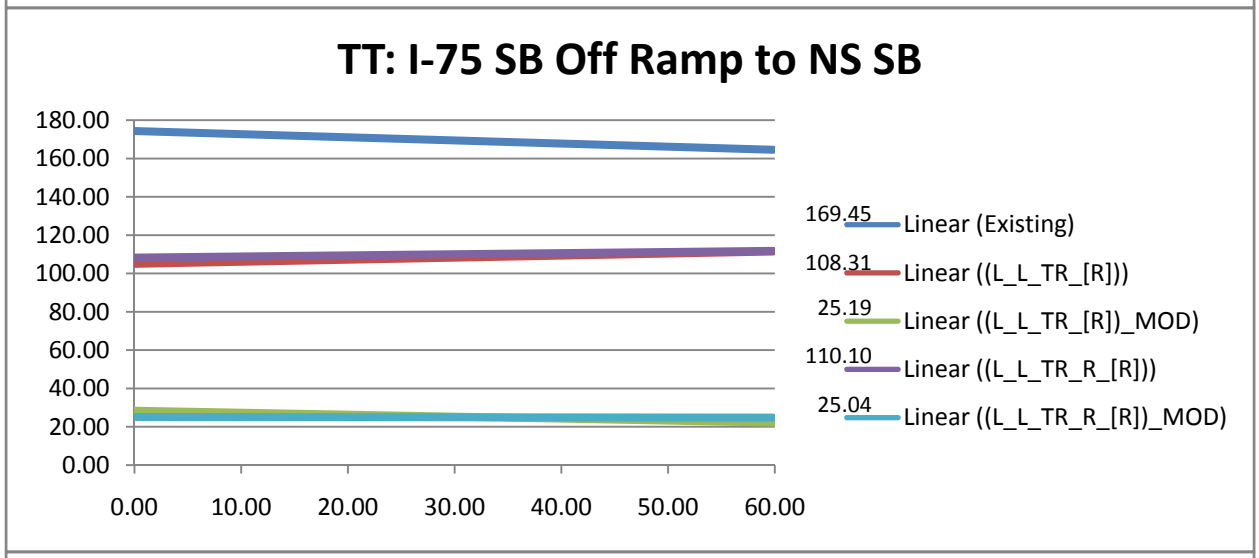
(L_L_TR_R_[R])_MOD = Model #4, two left turn lanes, a through/right lane, an additional right turn lane and a separated right turn lane from the off ramp onto Northside Dr with a signalized intersection at the off ramp and Mt Paran to flush the ramp

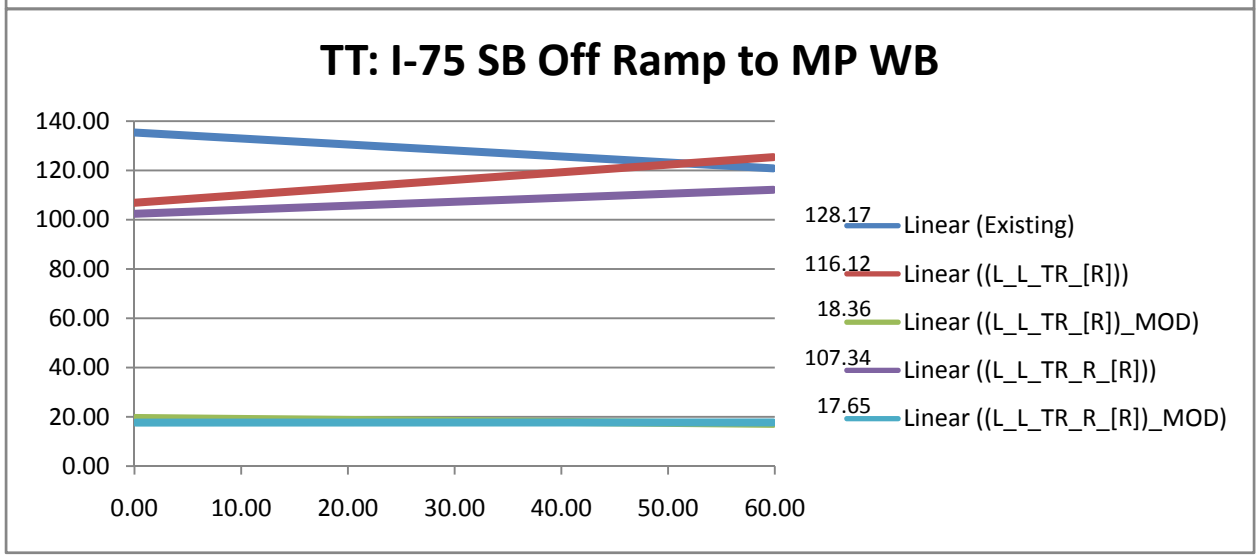

TT: I-75 NB Off Ramp to MP WB
140.00
120.00
100.00
80.00
60.00
40.00
20.00
0.00
0.00
10.00
20.00
30.00
40.00
50.00
60.00
188.54
Linear (Existing)
32.41
Linear ((L_L_TR_[R]))
34.58
Linear ((L_L_TR_[R])_MOD)
38.76
Linear ((L_L_TR_R_[R]))
39.37
Linear ((L_L_TR_R_[R])_MOD)

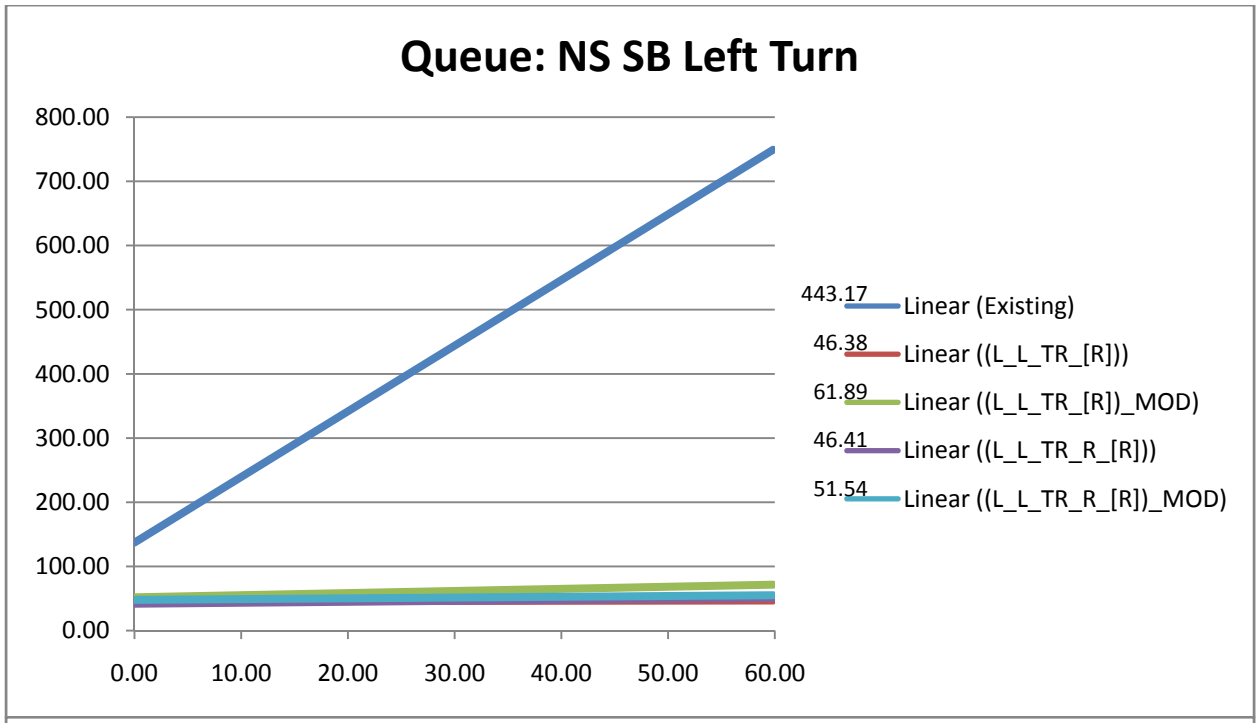

TT: I-75 NB Off Ramp to NS NB
200.00
180.00
160.00
140.00
120.00
100.00
80.00
60.00
40.00
20.00
0.00
0.00
10.00
20.00
30.00
40.00
50.00
60.00
143.89
Linear (Existing)
17.18
Linear ((L_L_TR_[R]))
23.52
Linear ((L_L_TR_[R])_MOD)
18.15
Linear ((L_L_TR_R_[R]))
24.78
Linear ((L_L_TR_R_[R])_MOD)

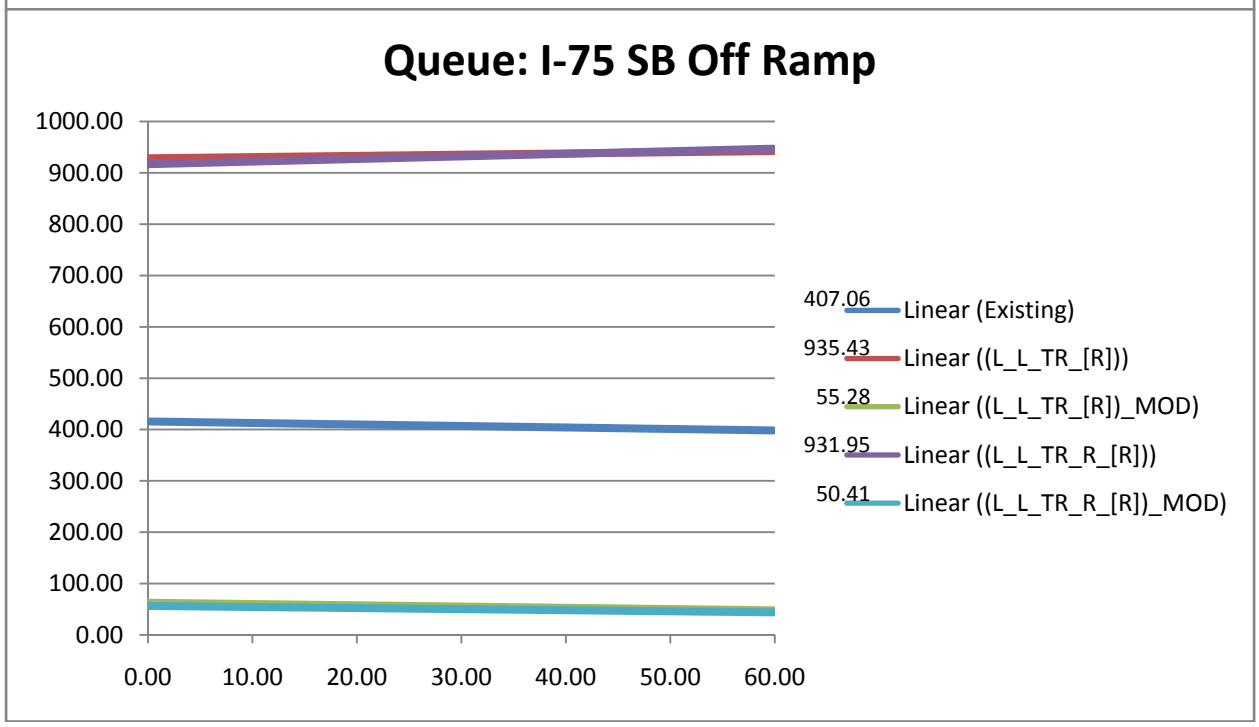

TT: I-75 NB Off Ramp to NS SB
180.00
160.00
140.00
120.00
100.00
80.00
60.00
40.00
20.00
0.00
0.00
10.00
20.00
30.00
40.00
50.00
60.00
107.84
Linear (Existing)
15.82
Linear ((L_L_TR_[R]))
18.35
Linear ((L_L_TR_[R])_MOD)
11.23
Linear ((L_L_TR_R_[R]))
19.02
Linear ((L_L_TR_R_[R])_MOD)

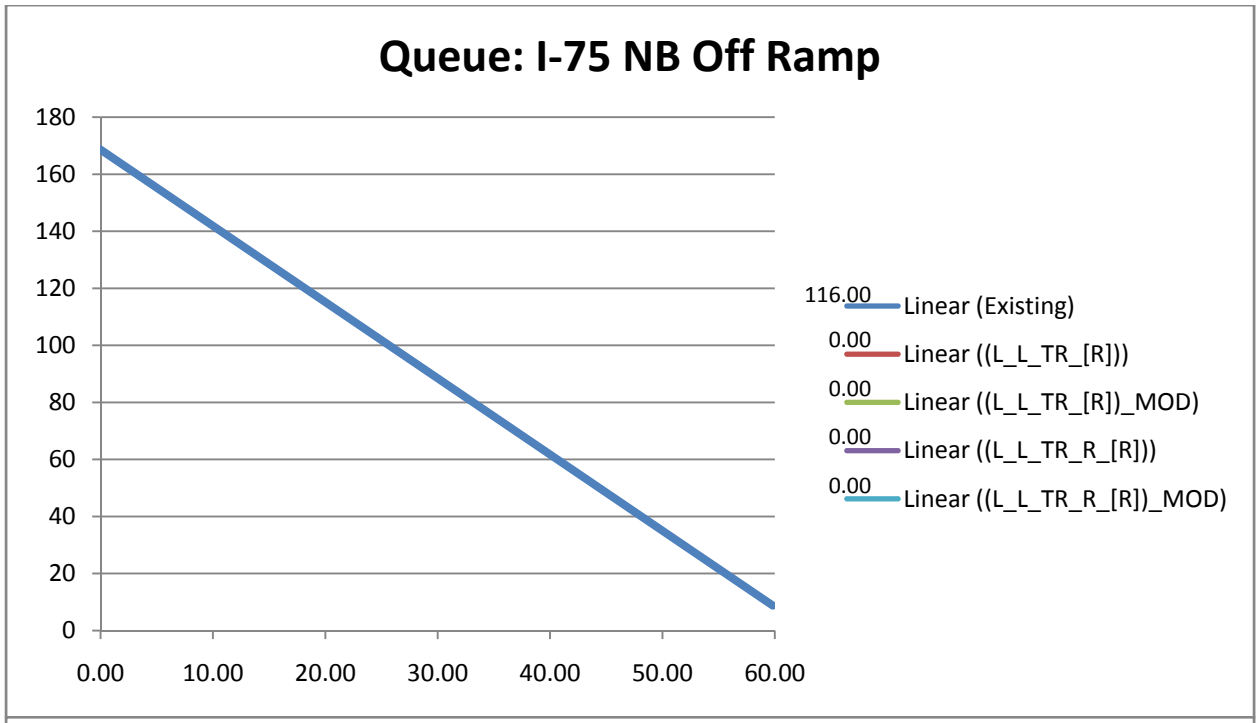

TT: I-75 SB Off Ramp to NS NB
140.00
120.00
100.00
80.00
60.00
40.00
20.00
0.00
0.00
10.00
20.00
30.00
40.00
50.00
60.00
116.35
Linear (Existing)
51.35
Linear ((L_L_TR_[R]))
22.15
Linear ((L_L_TR_[R])_MOD)
48.88
Linear ((L_L_TR_R_[R]))
22.07
Linear ((L_L_TR_R_[R])_MOD)

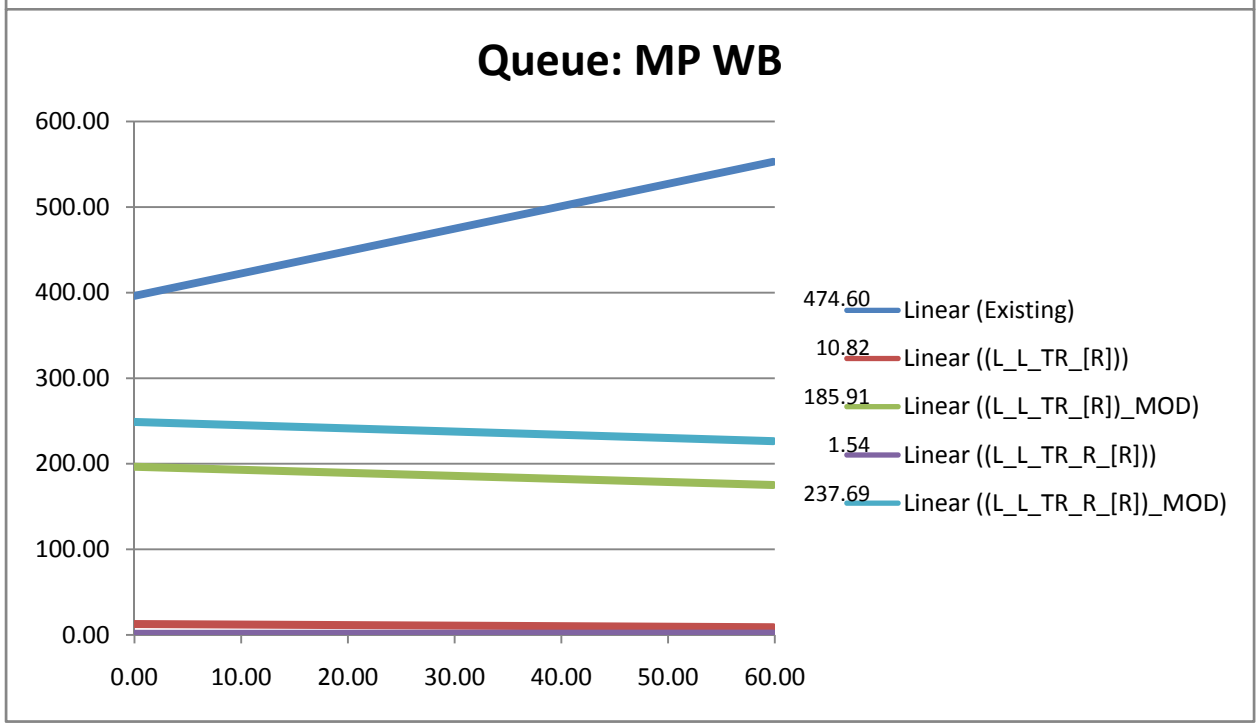

TT: I-75 SB Off Ramp to NS SB
180.00
160.00
140.00
120.00
100.00
80.00
60.00
40.00
20.00
0.00
0.00
10.00
20.00
30.00
40.00
50.00
60.00
169.45
Linear (Existing)
108.31
Linear ((L_L_TR_[R]))
25.19
Linear ((L_L_TR_[R])_MOD)
110.10
Linear ((L_L_TR_R_[R]))
25.04
Linear ((L_L_TR_R_[R])_MOD)

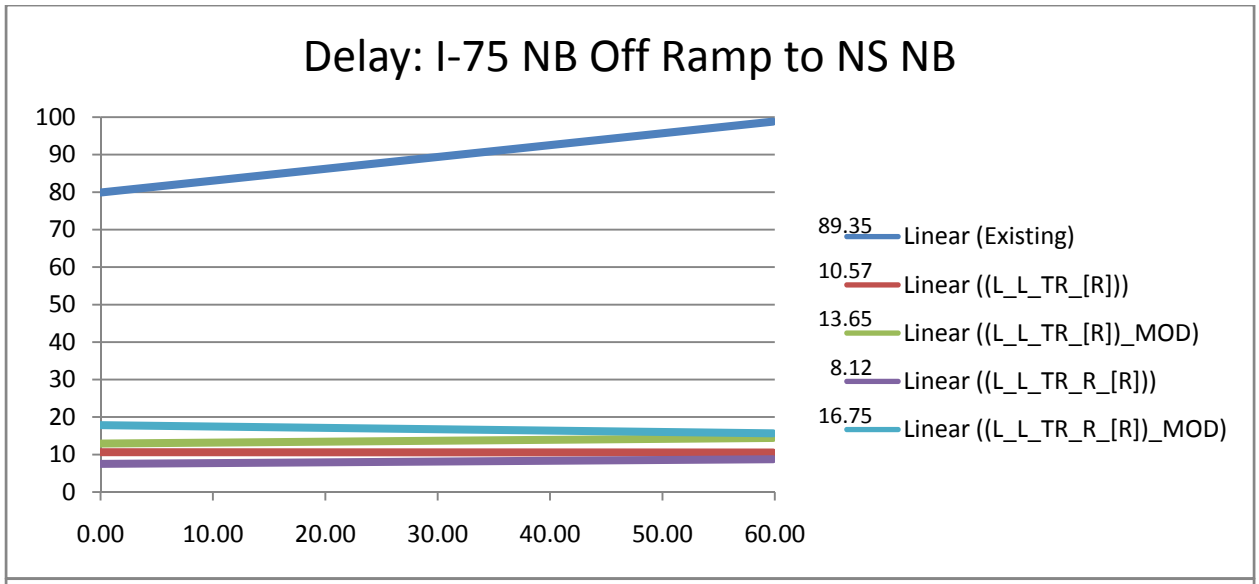

TT: I-75 SB Off Ramp to MP WB
140.00
120.00
100.00
80.00
60.00
40.00
20.00
0.00
0.00
10.00
20.00
30.00
40.00
50.00
60.00
128.17
Linear (Existing)
116.12
Linear ((L_L_TR_[R]))
18.36
Linear ((L_L_TR_[R])_MOD)
107.34
Linear ((L_L_TR_R_[R]))
17.65
Linear ((L_L_TR_R_[R])_MOD)

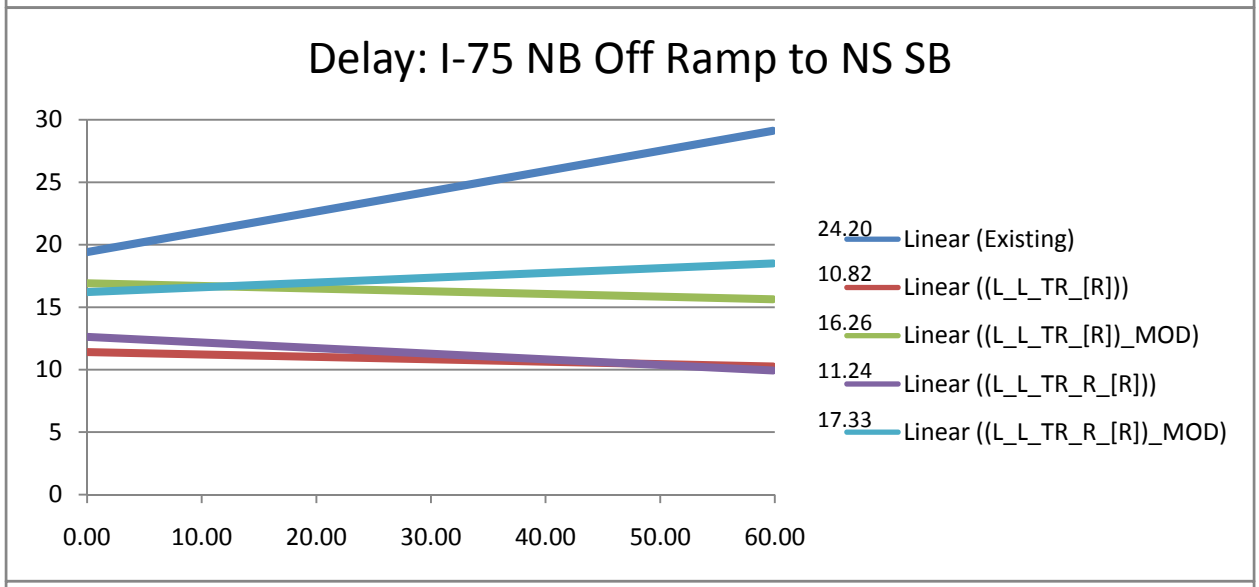

Queue: NS SB Left Turn
800.00
700.00
600.00
500.00
400.00
300.00
200.00
100.00
0.00
0.00
10.00
20.00
30.00
40.00
50.00
60.00
443.17
Linear (Existing)
46.38
Linear ((L_L_TR_[R]))
61.89
Linear ((L_L_TR_[R])_MOD)
46.41
Linear ((L_L_TR_R_[R]))
51.54
Linear ((L_L_TR_R_[R])_MOD)

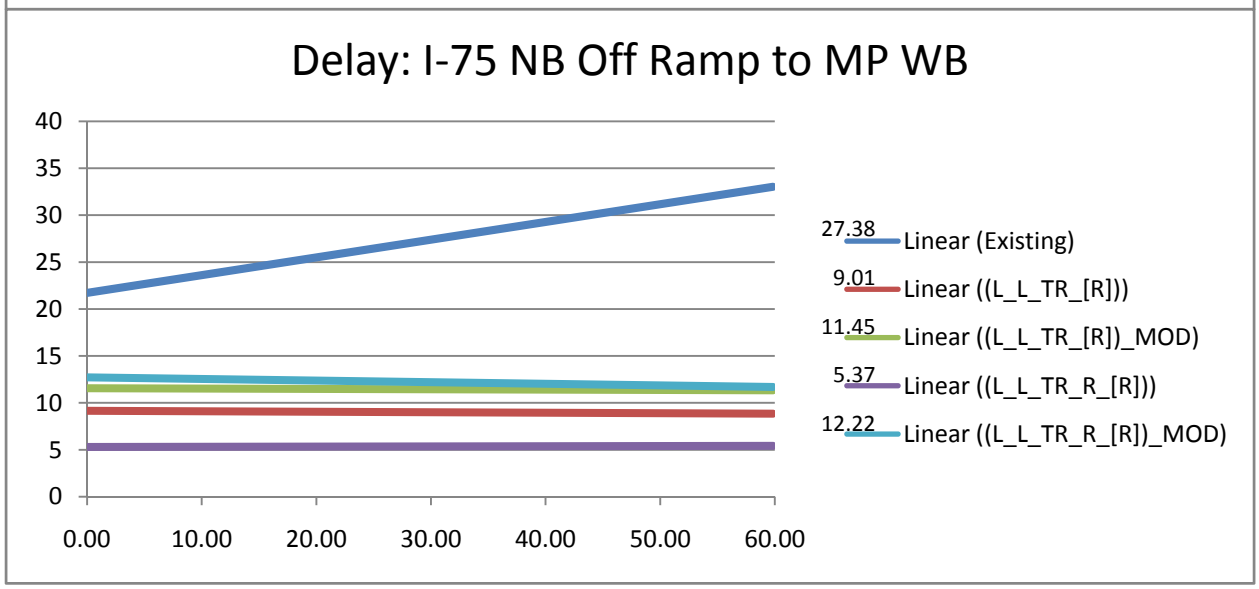

Queue: I-75 SB Off Ramp
1000.00
900.00
800.00
700.00
600.00
500.00
400.00
300.00
200.00
100.00
0.00
0.00
10.00
20.00
30.00
40.00
50.00
60.00
407.06
Linear (Existing)
935.43
Linear ((L_L_TR_[R]))
55.28
Linear ((L_L_TR_[R])_MOD)
931.95
Linear ((L_L_TR_R_[R]))
50.41
Linear ((L_L_TR_R_[R])_MOD)

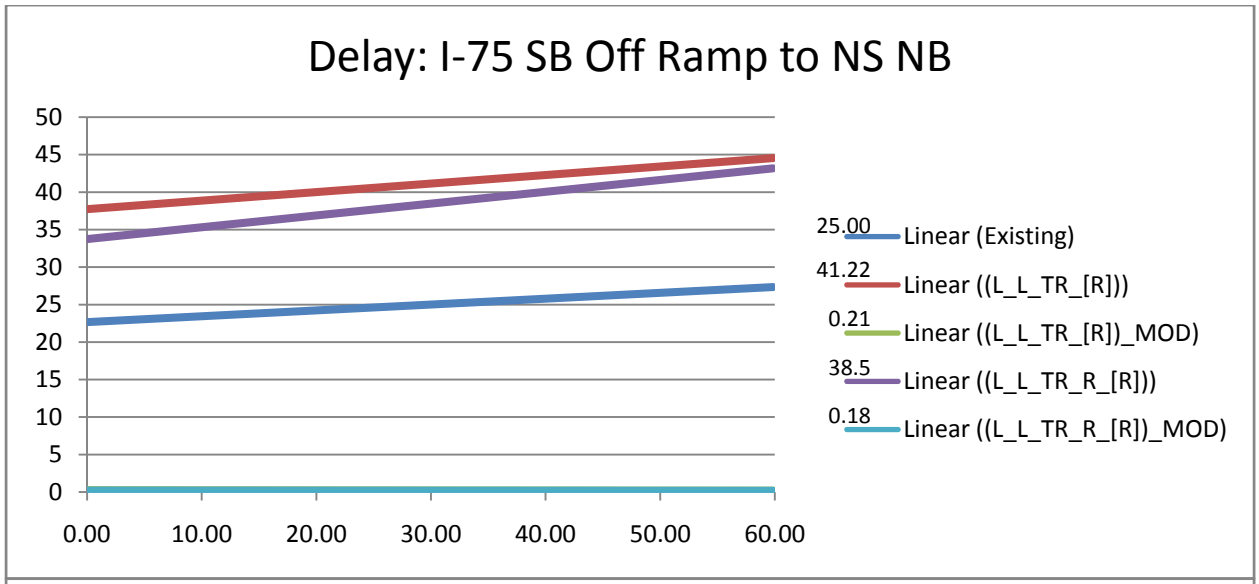

Queue: I-75 NB Off Ramp
180
160
140
120
100
80
60
40
20
0
0.00
10.00
20.00
30.00
40.00
50.00
60.00
116.00 Linear (Existing)
0.00 Linear ((L_L_TR_[R]))
0.00 Linear ((L_L_TR_[R])_MOD)
0.00 Linear ((L_L_TR_R_[R]))
0.00 Linear ((L_L_TR_R_[R])_MOD)

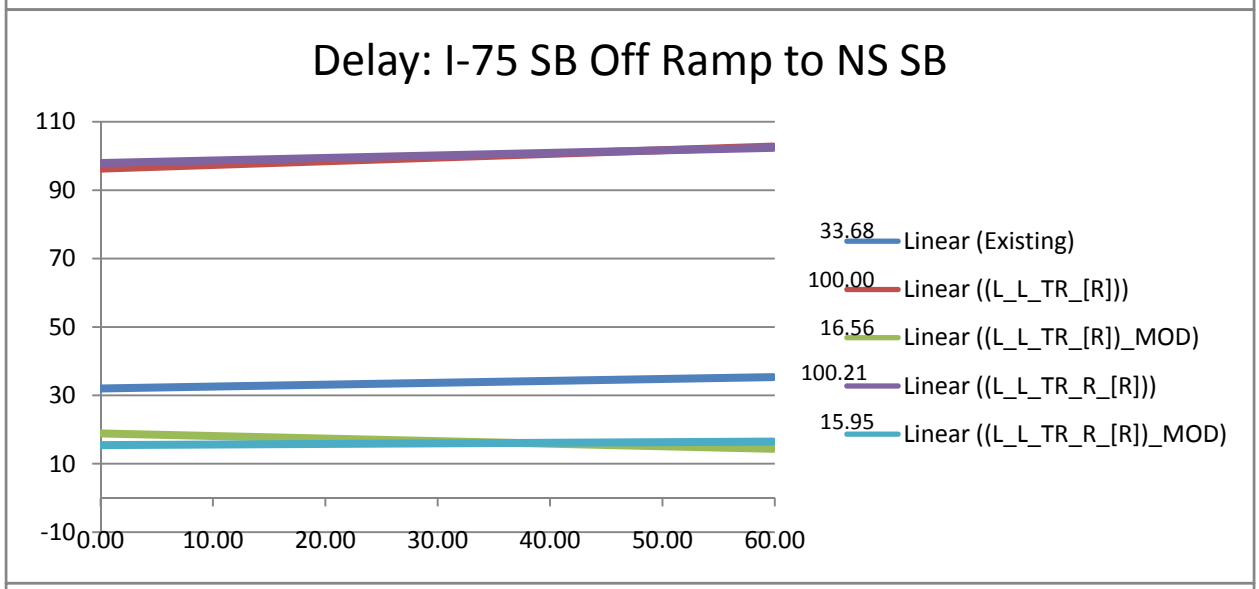

Queue: MP WB
600.00
500.00
400.00
300.00
200.00
100.00
0.00
0.00
10.00
20.00
30.00
40.00
50.00
60.00
474.60 Linear (Existing)
10.82 Linear ((L_L_TR_[R]))
185.91 Linear ((L_L_TR_[R])_MOD)
1.54 Linear ((L_L_TR_R_[R]))
237.69 Linear ((L_L_TR_R_[R])_MOD)

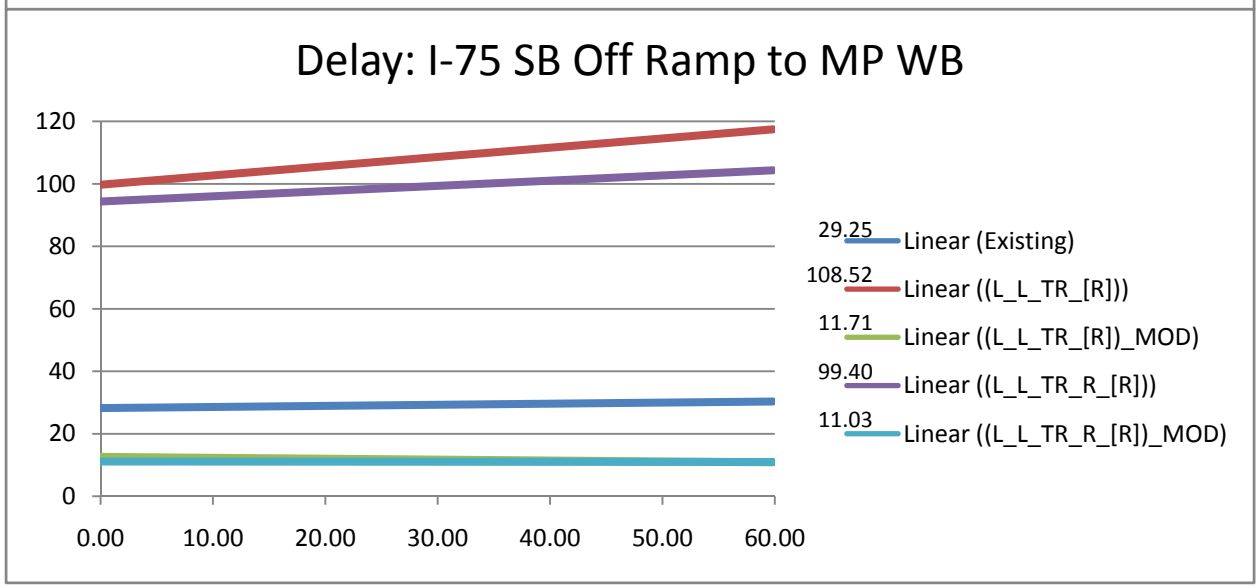

Delay: I-75 NB Off Ramp to NS NB
100
90
80
70
60
50
40
30
20
10
0
0.00
10.00
20.00
30.00
40.00
50.00
60.00
89.35 Linear (Existing)
10.57 Linear ((L_L_TR_[R]))
13.65 Linear ((L_L_TR_[R])_MOD)
8.12 Linear ((L_L_TR_R_[R]))
16.75 Linear ((L_L_TR_R_[R])_MOD)


Delay: I-75 NB Off Ramp to NS SB
30
25
20
15
10
5
0
0.00
10.00
20.00
30.00
40.00
50.00
60.00
24.20 Linear (Existing)
10.82 Linear ((L_L_TR_[R]))
16.26 Linear ((L_L_TR_[R])_MOD)
11.24 Linear ((L_L_TR_R_[R]))
17.33 Linear ((L_L_TR_R_[R])_MOD)


Delay: I-75 NB Off Ramp to MP WB
40
35
30
25
20
15
10
5
0
0.00
10.00
20.00
30.00
40.00
50.00
60.00
27.38 Linear (Existing)
9.01 Linear ((L_L_TR_[R]))
11.45 Linear ((L_L_TR_[R])_MOD)
5.37 Linear ((L_L_TR_R_[R]))
12.22 Linear ((L_L_TR_R_[R])_MOD)


Delay: I-75 SB Off Ramp to NS NB
50
45
40
35
30
25
20
15
10
5
0
0.00
10.00
20.00
30.00
40.00
50.00
60.00
25.00 Linear (Existing)
41.22 Linear ((L_L_TR_[R]))
0.21 Linear ((L_L_TR_[R])_MOD)
38.5 Linear ((L_L_TR_R_[R]))
0.18 Linear ((L_L_TR_R_[R])_MOD)


Delay: I-75 SB Off Ramp to NS SB
110
90
70
50
30
10
-10
0.00
10.00
20.00
30.00
40.00
50.00
60.00
33.68 Linear (Existing)
100.00 Linear ((L_L_TR_[R]))
16.56 Linear ((L_L_TR_[R])_MOD)
100.21 Linear ((L_L_TR_R_[R]))
15.95 Linear ((L_L_TR_R_[R])_MOD)


Delay: I-75 SB Off Ramp to MP WB
120
100
80
60
40
20
0
0.00
10.00
20.00
30.00
40.00
50.00
60.00
29.25 Linear (Existing)
108.52 Linear ((L_L_TR_[R]))
11.71 Linear ((L_L_TR_[R])_MOD)
99.40 Linear ((L_L_TR_R_[R]))
11.03 Linear ((L_L_TR_R_[R])_MOD)

Travel Time

	Existing	(L_L_TR_[R])	(L_L_TR_[R])_MOD	(L_L_TR_R_[R])	(L_L_TR_R_[R])_MOD
I-75 NB Off Ramp to NS NB	188.5	32.4	34.6	38.8	39.4
I-75 NB Off Ramp to NS SB	143.9	17.2	23.5	18.2	24.8
I-75 NB Off Ramp to MP WB	107.8	15.8	18.4	11.2	19.0
I-75 SB Off Ramp to NS NB	116.3	51.4	22.2	48.9	22.1
I-75 SB Off Ramp to NS SB	169.5	108.3	25.2	110.1	25.0
I-75 SB Off Ramp to MP WB	128.2	116.1	18.36	107.3	17.7

Queue

	Existing	(L_L_TR_[R])	(L_L_TR_[R])_MOD	(L_L_TR_R_[R])	(L_L_TR_R_[R])_MOD
NS SB Left Turn	443.2	46.4	61.9	46.4	51.5
I-75 SB Off Ramp	407.1	935.4	55.3	932.0	50.4
I-75 NB Off Ramp	116.0	0.0	0.0	0.0	0.0
MP WB	474.6	10.8	185.9	1.5	237.7

Delay

	Existing	(L_L_TR_[R])	(L_L_TR_[R])_MOD	(L_L_TR_R_[R])	(L_L_TR_R_[R])_MOD
I-75 NB Off Ramp to NS NB	89.4	10.6	13.7	8.1	16.8
I-75 NB Off Ramp to NS SB	24.2	10.8	16.3	11.2	17.3
I-75 NB Off Ramp to MP WB	27.4	9.0	11.5	5.4	12.2
I-75 SB Off Ramp to NS NB	25.0	41.2	0.2	38.5	0.2
I-75 SB Off Ramp to NS SB	33.7	100.0	16.6	100.2	16.0
I-75 SB Off Ramp to MP WB	29.3	108.5	11.7	99.4	11.0

Calibration

	Existing	L_L_TR_[R]	L_L_TR_[R]_MOD	L_L_TR_R_[R]	L_L_TR_R_[R]_MOD
MP WB	-13%	-26%	-13%	-16%	-3%
MP EB	-10%	-10%	-10%	-10%	-10%
NS SB	-1%	-1%	-1%	-1%	-1%
SB Ramp	-1%	-39%	-1%	-33%	-1%
NB Ramp	2%	2%	3%	3%	3%
NS SB LT	-5%	1%	1%	0%	1%
TOTAL	-6%	-15%	-6%	-11%	-2%