ORIGINAL TO GENERAL FILES

DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA

OFFICE OF DESIGN POLICY & SUPPORT
INTERDEPARTMENTAL CORRESPONDENCE

FILE P.I. # 0012618
Douglas County
GDOT District 7 - Metro Atlanta
Reconstruction: SR 5 From CS 573 to
CR 173

OFFICE Design Policy & Support

DATE 5/28/2015

FROM for Brent Story, State Design Policy Engineer

TO SEE DISTRIBUTION

SUBJECT **APPROVED CONCEPT REPORT**

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

Attachment

DISTRIBUTION:

Glenn Bowman, Director of Engineering
Joe Carpenter, Director of P3/Program Delivery
Genetha Rice-Singleton, Assistant Director of P3/Program Delivery
Albert Shelby, State Program Delivery Engineer
Darryl VanMeter, State Innovative Delivery Engineer
Bobby Hilliard, Program Control Administrator
Cindy VanDyke, State Transportation Planning Administrator
Hiral Patel, State Environmental Administrator
Andrew Heath, State Traffic Engineer
Angela Robinson, Financial Management Administrator
Lisa Myers, State Project Review Engineer
Charles "Chuck" Hasty, State Materials Engineer
Lee Upkins, State Utilities Engineer
Richard Cobb, Statewide Location Bureau Chief
Kathy Zahul, District Engineer
Scott Lee, District Preconstruction Engineer
Sam Samu, Project Manager
BOARD MEMBER - 13th Congressional District

DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA
LIMITED SCOPE PROJECT CONCEPT REPORT

Project Type:	Improvement	P.I. Number:	0012618
GDOT District:	7	County:	Douglas
Federal Route Number:	N/A	State Route Number:	5
		Project Number:	N/A

This project will provide operational and traffic flow improvements along SR 5 from Stewart Parkway to Concourse Parkway. This will be accomplished primarily by the addition of auxiliary turn lanes and traffic signal upgrades.

Submitted for approval:

, URS — Scott E. Mohler, PE — 1/16/15
Consultant Designer & Firm — Date

STEVEN SHEFFIELD, DCDOT — 1/16/15
Local Government Sponsor — Date

Albert V. Shelby III — 1/27/15
State Program Delivery Engineer — Date

SAM SAMU KUNA — 01/26/2015
GDOT Project Manager — Date

Recommendation for approval:

* HIRAL PATEL — 1/30/2015
State Environmental Administrator — Date

* ANDREW HEATH — 2/3/2015
State Traffic Engineer — 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).

* CINTHIA L. VANDIKE — 2/3/2015
State Transportation Planning Administrator — Date

Approval:

Concur: — 5/21/2015
GDOT Director of Engineering — DATE

Approve: Margaret B. Pickle — 5.21.15
GDOT Chief Engineer — DATE

PROJECT LOCATION

PI Number: **0012618**

County: **Douglas County**

Description: **SR 5 (Bill Arp Road) from Stewart Pkwy to Concourse Pkwy**

PLANNING & BACKGROUND DATA

Project Justification Statement: SR 5 is designated as a Level 2 Regional Thoroughfare and is considered Douglas County's most congested commercial corridor for access to and from I-20. The existing congestion has resulted in level of service reduction and increased delays on the corridor. The operation and traffic flow of the overall corridor between Stewart Mill Pkwy and Concourse Pkwy can be significantly improved with relatively simple, low cost improvements such as auxiliary lane additions and traffic signal upgrades at targeted locations on the corridor. This project, as identified and recommended in the Douglas County Comprehensive Transportation Plan, will enhance the operation of the SR 5 corridor around I-20 for both commuting and freight delivery traffic.

Existing conditions: The existing corridor consists of 4 through lanes (2 in the north direction and 2 in the south direction) with an 18-foot raised concrete median and auxiliary turn lanes at various locations along the corridor. There is an existing 5-foot sidewalk on the east side of SR 5 from Stewart Pkwy to Douglas Blvd, on the west side of SR 5 in front of the Walgreens property, and on both sides of SR 5 from I-20 to Concourse Pkwy. Major intersections on the corridor are at Stewart Pkwy, Douglas Blvd., both of the I-20 ramps locations, and at Concourse Pkwy. There is one bridge on the corridor where SR 5 spans over I-20. Properties on the project corridor are commercial and retail. Major utilities on the corridor are natural gas, overhead electric, water, sewer, cable TV, and telecommunications.

Other projects in the area:

- **PI 0000424 SR 5/Bankhead Hwy/Bill Arp Rd @ CS 573/Rose Ave safety project**
- **PI 0003435 I-20 west from Liberty Rd to SR 5/Bill Arp Rd HOV lanes**
- **PI 0012619 – I-20 @ SR 5 Interchange alternatives analysis**
- **PI 0013058 – I-20 west from SR 5 to SR 6 HOV lanes**
- **PI 0013226 – I-2- from SR 5/Douglas to SR 139/Fulton Navigator ITS**
- **PI 721430 – SR 5 from Dorset Shoals Rd NE to Kings Highway widening project**
- **PI M004589 – I-20 from Carroll County line to SR 5 maintenance project**
- **PI M005199 – I-20 from SR 5 to Sweetwater Creek maintenance project**

Description of the proposed project:
This project will provide operational improvements along SR 5 to relieve congestion and improve traffic flow. This includes the addition of a second southbound left turn lane at the Douglas Boulevard intersection, the addition of a restricted median opening and southbound left-turn lane at the entrance to Wesley Pond Apartments to reduce U-turn volume at the Stewart Pkwy intersection, the addition of a dual right-turn lanes on the westbound I-20 off-ramp, the addition of a right-turn lane in the eastbound direction at the Concourse Parkway intersection. Also planned are traffic signal upgrades at key intersections on the corridor and an evaluation of the removal of protected only left turn phases as warranted.

MPO: Atlanta Regional Commission (ARC) TIP # DO-290

MPO Name Congressional District(s): 13

Federal Oversight: ☒ Exempt ☐ State Funded ☐ Other

Projected Traffic: AADT
Current Year (2014): 29,070 Open Year (approx. 2018): N/A
Traffic Projections Performed by: Willburn Engineering, LLC

Functional Classification (Mainline): Urban Principal Arterial

Complete Streets - Bicycle, Pedestrian, and/or Transit Standards Warrants:
Warrants met: ☒ None ☐ Bicycle ☐ Pedestrian ☐ Transit

DESIGN AND STRUCTURAL

Description of Proposed Project:

Major Structures:

Structure ID	Existing	Proposed
097-0004-0	The existing bridge has 6 lanes, which consist of 2 through lanes and a left turn lane in both the north and south directions.	No modifications to the SR 5 overpass bridge are proposed.

Mainline Design Features: State Route 5/Bill Arp Road

Feature	Existing	Standard*	Proposed
- **Number of Lanes**	**4 (2 SB and 2 NB)**	**N/A**	**Match existing**
- **Lane Width(s)**	**12 ft.**	**12 ft.**	**12 ft.**
- **Median Width & Type**	**concrete raised median (width varies)**	**N/A**	**N/A**
- **Sidewalks**	**5' with no buffer**	**5' with 6 ft. buffer**	**Match existing**
- **Auxiliary Lanes**	**single left and right turn lanes at intersections is typical**	**N/A**	**Addition of dual left and right turn lanes per recommendation of traffic study**
Posted Speed	**35 MPH**		**35 MPH**
Design Speed	**35 MPH**	**35 MPH**	**35 MPH**
Minimum Horizontal Curve Radius	**900 ft.**	**371 ft.**	**1,456 ft.**
Maximum Superelevation Rate	**Unknown**	**4%**	**Match existing**
Maximum Grade	**Unknown**	**7%**	**Match existing**
Design Vehicle	**Unknown**	**WB-62**	**WB-62**

*According to current GDOT design policy if applicable

Major Interchanges/Intersections:

- Stewart Parkway/West Stewart Mill Parkway
- Arbor Parkway
- Douglas Boulevard
- Interstate 20
- Concourse Parkway

Lighting required: ☒ No ☐ Yes

Transportation Management Plan [TMP] Required: ☒ No ☐ Yes
If Yes: Project classified as: ☐ Non-Significant ☐ Significant
TMP Components Anticipated: ☐ TTC ☐ TO ☐ PI

Will Context Sensitive Solutions procedures be utilized? ☒ No ☐ Yes

Design Exceptions to FHWA/AASHTO controlling criteria anticipated: NONE

Design Variances to GDOT Standard Criteria anticipated: NONE

UTILITY AND PROPERTY

Temporary State Route Needed: ☒ No ☐ Yes ☐ Undetermined

Railroad Involvement: NONE

Utility Involvements:

Utility Owner	Utility Type/Description
Atlanta Gas & Light	**natural gas**
AT&T	**telecommunications**
Douglas County Water & Sewer	**water & sanitary sewer**
Comcast	**television**
Greystone Power Corporation	**electric power**
Level 3 Communications	**fiber optic telecommunications**
Georgia Power	**electric power**
Plantation Pipeline	**natural gas transmission**

SUE Required: ☒ No ☐ Yes

Public Interest Determination Policy and Procedure recommended? ☒ No ☐ Yes

Right-of-Way: Existing width: _____ft. Proposed width: _____ft.
Required Right-of-Way anticipated: ☐ No ☒ Yes ☐ Undetermined

Easements anticipated: ☐ None ☒ Temporary ☐ Permanent ☐ Utility ☐ Other

Anticipated number of impacted parcels: 5

Displacements anticipated: 0 Total: 5

Businesses: 5

Residences: 0

Other: 0

ENVIRONMENTAL AND PERMITS

Anticipated Environmental Document:

GEPA: ☐ **NEPA:** ☒ CE ☐ PCE

MS4 Compliance – Is the project located in an MS4 area? ☐ No ☒ Yes

The GDOT's General NPDES Stormwater Permit No. GAR41000 (GDOT MS4 Permit) states in Section 4.2.5.1(a) that linear GDOT roadway projects in MS4 areas with total disturbed areas less than 1 acre are exempt from the requirement to develop, implement, and enforce a post-construction stormwater BMP program for the project. This exemption is termed a *Project Level Exclusion* as described in Section 10.2.2.1, page 10-5 of the GDOT Drainage Manual. It is anticipated that this project will have a total disturbed area less than 1 acre and will thus qualify for a *Project Level Exclusion*.

Environmental Permits, Variances, Commitments, and Coordination anticipated:
The class of action for this project is anticipated to be a PCE or CE. No variances or special commitments are anticipated for this project. Coordination is anticipated with GA DNR, GA SHPO, and USFWS.

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
Is a Carbon Monoxide hotspot analysis required?	☐ No	☒ Yes

NEPA/GEPA Comments & Information: The project is anticipated to have no effect on ecological, historic, and archaeological resources. The project is not anticipated to be one of air quality concern. No noise impacts are anticipated. The need for public involvement is not anticipated as the project should not be a source of controversy.

COORDINATION, ACTIVITIES, RESPONSIBILITIES, AND COSTS

Concept Phase Activity	Party Responsible for Performing Task(s)
ARC Project Concept Development (2012)	Douglas County
Consultant Kickoff Meeting (5/15/2014)	AECOM (formerly URS Corp.)
Concept Alternatives Development (various dates from 9/22/14 to 11/18/14)	AECOM (formerly URS Corp.)
Initial Concept Alternatives Meeting (9/22/2014)	AECOM (formerly URS Corp.)
Final Concept Alternatives Meeting (11/18/2014)	AECOM (formerly URS Corp.)

Project Activity	Party Responsible for Performing Task(s)
Environmental Studies, Documents, and Permits	AECOM (formerly URS Corp.)
Environmental Mitigation	No environmental mitigation anticipated
Public Information Open House	AECOM (formerly URS Corp.)
Design	AECOM (formerly URS Corp.)
Right-of-Way Acquisition	Consultant or Douglas County Staff
Utility Coordination (Pre-Let)	GDOT
Utility Relocation (Construction)	Utility Owner
Letting to Contract (Management Let: 5/15/2017)	GDOT
Construction Supervision	GDOT
Providing Material Pits	Contractor
Providing Detours	No detours are anticipated
Construction Inspection & Materials Testing	GDOT

Project Cost Estimate and Funding Responsibilities:

	Federal Funding	State Funding	Douglas County Funding	Total
PE	$100,000	$0	$25,000	$125,000
**ROW (Parcel 1)	$0	$0	$233,000	$233,000
**ROW (Parcel 3)	$0	$0	$67,000	$67,000
*CST	$737,976	$0	$149,000	$886,976
Reimbursable Utility	$0	$0	$18,500	$18,500
Environmental Mitigation	$0	$0	$0	$0
Total	$837,976	$0	$492,500	$1,330,476

*CST cost includes: Construction, Engineering and Inspection, Contingencies and Liquid AC Cost Adjustment.
**ROW cost was computed using the GDOT Preliminary Cost Estimate Spreadsheet (V2 1). The cost includes anticipated required right-of-way, permanent, and temporary easements.

ALTERNATIVES DISCUSSION:

This project is comprised of auxiliary lane additions and/or signal improvements at specific locations along the corridor where the improvements are deemed to be highly effective for improving the level of service and/or reducing delays for the corridor as a whole. There are no continuous typical section improvements along the project corridor between logical termini. Therefore, an alternatives discussion does not apply to this project.

LIST OF ATTACHMENTS/SUPPORTING DATA

1. Concept Layout
2. Cost Estimates
    a. Construction, including Engineering and Inspection
    b. Completed Liquid AC Cost Adjustment Forms
    c. Right-of-Way
    d. Utilities
3. Crash Summaries
4. Traffic Diagrams
5. Traffic Study (includes Traffic Projections and Capacity Analysis)
6. Meeting Minutes

ATTACHMENT 1

CONCEPT LAYOUT

LEGEND

- PROPERTY LINE
- CURB & GUTTER
- REQUIRED RIGHT OF WAY
- REQUIRED EASEMENT
- REQUIRED DRIVEWAY EASEMENT
- ENVIRONMENTALLY SENSITIVE AREA
- EXISTING TRAFFIC SIGNAL

DESIGN SPEED = 35 MPH

SHEET 1 OF 3

DOUGLAS COUNTY

PROPOSED OPERATIONAL IMPROVEMENTS TO SR 5 (BILL ARP RD) FROM STEWART PKWY TO CONCOURSE PKWY

MPO TIP # DO-290

GEORGIA
DEPARTMENT OF TRANSPORTATION

SCALE IN FEET
0 50 100 200

DOUGLAS COUNTY

PROPOSED OPERATIONAL IMPROVEMENTS
TO SR 5 (BILL ARP RD) FROM
STEWART PKWY TO CONCOURSE PKWY

MPO TIP # DO-290

GEORGIA
DEPARTMENT
OF
TRANSPORTATION

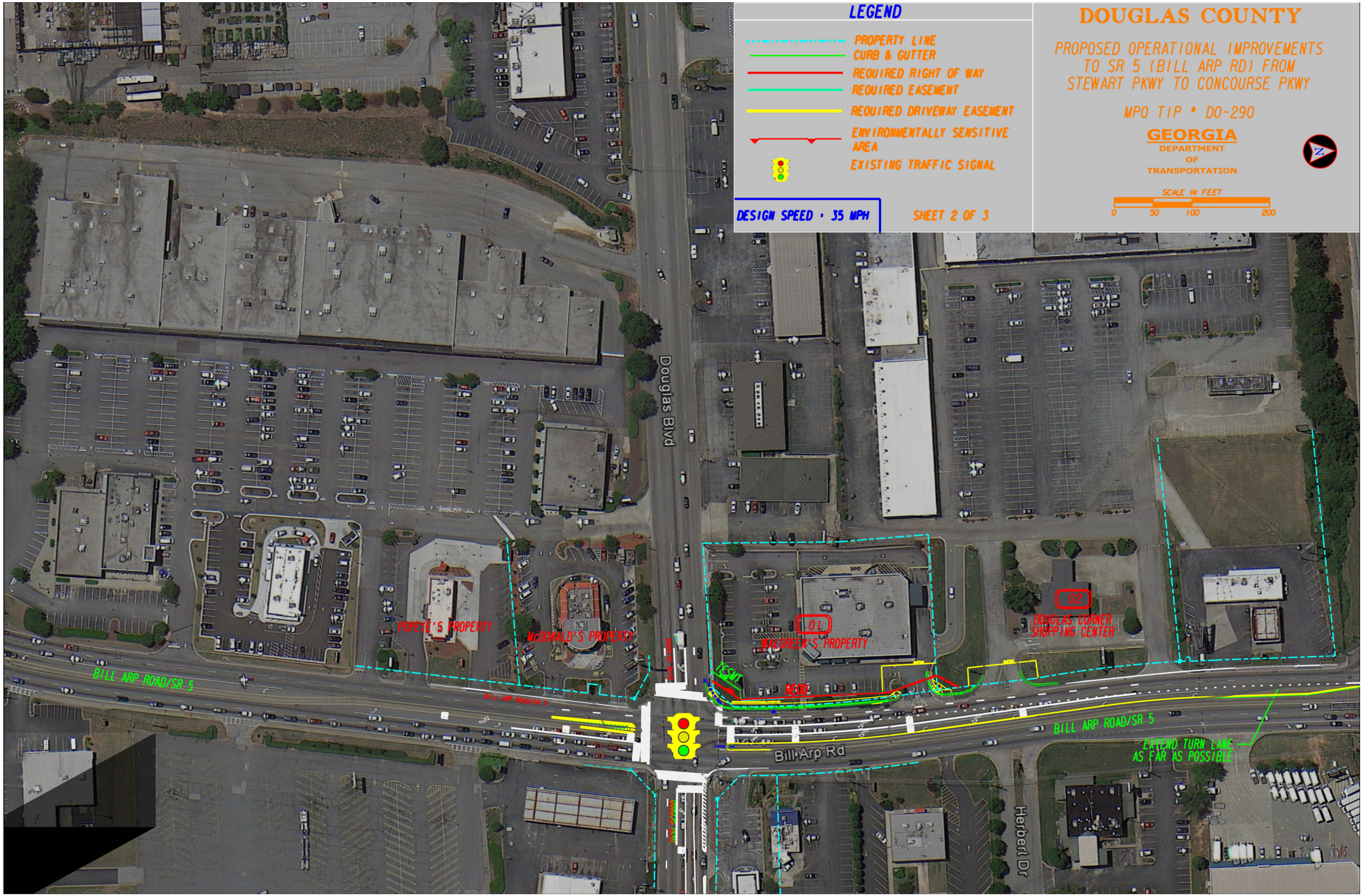
SCALE IN FEET
0 50 100 200

LEGEND

- PROPERTY LINE
- CURB & GUTTER
- REQUIRED RIGHT OF WAY
- REQUIRED EASEMENT
- REQUIRED DRIVEWAY EASEMENT
- ENVIRONMENTALLY SENSITIVE AREA
- EXISTING TRAFFIC SIGNAL

DESIGN SPEED = 35 MPH

SHEET 2 OF 3



DOUGLAS COUNTY

PROPOSED OPERATIONAL IMPROVEMENTS
TO SR 5 (BILL ARP RD) FROM
STEWART PKWY TO CONCOURSE PKWY

MPO TIP # DO-290

GEORGIA
DEPARTMENT
OF
TRANSPORTATION

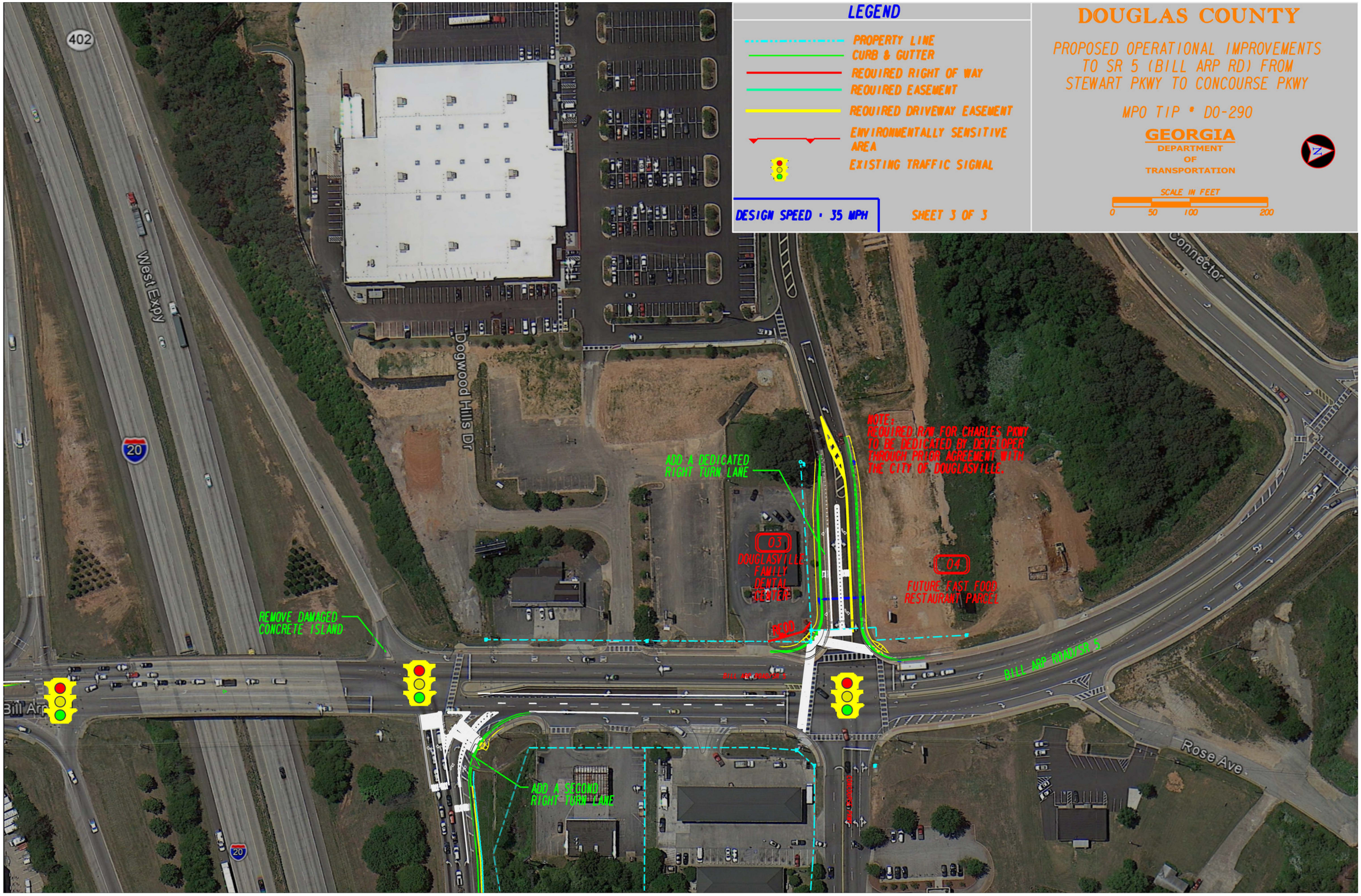
SCALE IN FEET
0 50 100 200

LEGEND

- PROPERTY LINE
- CURB & GUTTER
- REQUIRED RIGHT OF WAY
- REQUIRED EASEMENT
- REQUIRED DRIVEWAY EASEMENT
- ENVIRONMENTALLY SENSITIVE AREA
- EXISTING TRAFFIC SIGNAL

DESIGN SPEED = 35 MPH

SHEET 3 OF 3



ATTACHMENT 2

COST ESTIMATES

A. Construction Cost
B. Liquid AC Cost Adjustment Form
C. Right-of-Way Cost
D. Utility Relocation Cost

CONSTRUCTION COST ESTIMATE

(INCLUDES ENGINEERING, INSPECTION, AND CONTINGENCY)

STATE HIGHWAY AGENCY

DATE : 5/5/2015
PAGE : 1

JOB DETAIL ESTIMATE

JOB NUMBER : 0012618_SR5 SPEC YEAR: 13
DESCRIPTION: SR 5(BILL ARP RD) CONGESTION & TRAFFIC FLOW IMPROVEMENTS
MPO TIP NO. DO-290

ITEMS FOR JOB 0012618_SR5

LINE	ITEM	ALT	UNITS	DESCRIPTION	QUANTITY	PRICE	AMOUNT
5	150-1000	LS		TRAFFIC CONTROL - DOUGLAS BLVD AT SR 5	1	25000	25000
6	150-1000	LS		TRAFFIC CONTROL - WESLEY POND MEDIAN OPENING	1	15000	15000
7	150-1000	LS		TRAFFIC CONTROL - I-20 WB RAMP AT SR 5	1	15000	15000
8	150-1000	LS		TRAFFIC CONTROL - CHANNELING ISLAND REMOVAL @ I-20 WB RAMP	1	5000	5000
9	150-1000	LS		TRAFFIC CONTROL - CONCOURSE PKWY AT SR 5	1	20000	20000
10	210-0100	LS		GRADING COMPLETE - DOUGLAS BLVD AT SR 5	1	50000	50000
15	210-0100	LS		GRADING COMPLETE - WESLEY POND MEDIAN OPENING	1	25000	25000
20	210-0100	LS		GRADING COMPLETE - I-20 WB RAMP AT SR 5	1	25000	25000
25	210-0100	LS		GRADING COMPLETE - CONCOURSE PKWY AT SR	1	50000	50000
30	310-1101	TN		GR AGGR BASE CRS, INCL MATL	1016	21	21336
35	402-3113	TN		RECYL AC 12.5MM SP,GP1/2,BM&HL	792	78	61776
40	402-3121	TN		RECYL AC 25MM SP,GP1/2,BM&HL	251	80	20080
45	402-3190	TN		RECYL AC 19 MM SP,GP 1 OR 2 ,INC BM&HL	167	84	14028
50	413-1000	GL		BITUM TACK COAT	382	3	1146
55	432-5010	SY		MILL ASPH CONC PVMT,VARB DEPTH	2600	3	7800
60	441-0104	SY		CONC SIDEWALK, 4 IN	650	32	20800
65	441-0754	SY		CONC MEDIAN, 7 1/2 IN	113	55	6215
70	441-6216	LF		CONC CURB & GUTTER/ 8X24TP2	1074	14	15036
75	441-6222	LF		CONC CURB & GUTTER/ 8X30TP2	140	17	2380
80	446-1100	LF		PVMT REF FAB STRIPS, TP2,18 INCH WIDTH	1431	4	5724
85	500-3201	CY		CL B CONC, RET WALL	18	580	10440
90	500-9999	CY		CL B CONC,BASE OR PVMT WIDEN	78	200	15600

JOB DETAIL ESTIMATE

JOB NUMBER : 0012618_SR5 SPEC YEAR: 13
DESCRIPTION: SR 5(BILL ARP RD) CONGESTION & TRAFFIC FLOW IMPROVEMENTS
MPO TIP NO. DO-290

ITEMS FOR JOB 0012618_SR5

LINE	ITEM	ALT	UNITS	DESCRIPTION	QUANTITY	PRICE	AMOUNT
94	610-2805	SY		REM CONC MEDIAN PAVING	26	30	780
95	550-1180	LF		STM DR PIPE 18,H 1-10	64	36	2304
100	550-1240	LF		STM DR PIPE 24,H 1-10	64	46	2944
105	611-3010	EA		RECONSTR DROP INLET, GROUP 1	2	2400	4800
110	611-3030	EA		REC STORM SEW MANHOLE, TYPE 1	4	1800	7200
115	668-1100	EA		CATCH BASIN, GP 1	3	2240	6720
120	668-2100	EA		DROP INLET, GP 1	2	1950	3900
122	641-1200	LF		GUARDRAIL, TP W	309	17	5253
123	641-5001	EA		GUARDRAIL ANCHORAGE, TP 1	2	860	1720
124	641-5012	EA		GUARDRAIL ANCHORAGE, TP 12	2	2060	4120
125	636-1020	SF		HWY SGN,TP1MAT,REFL SH TP3	63	15	945
130	636-1033	SF		HWY SIGNS, TP1MAT,REFL SH TP 9	63	18	1134
135	636-1041	SF		HWY SIGNS,TP 2MAT,REFL SH TP 9	63	34	2142
140	636-2070	LF		GALV STEEL POSTS, TP 7	168	7	1176
145	639-2001	LF		STEEL WIRE STRAND CABLE, 1/4	100	2.3	230
150	639-4003	EA		STRAIN POLE, TP III	3	6900	20700
155	652-6501	GLF		SKIP TRAF STRIPE, 5 IN, WHITE	5077	0.13	660.01
160	652-5701	LF		SOLID TRAF STRIPE, 24, WHITE	253	4.2	1062.6
165	653-0120	EA		THERM PVMT MARK, ARROW, TP 2	26	78	2028
170	653-0210	EA		THERM PVMT MARK, WORD , TP 1	18	115	2070
175	653-1501	LF		THERMO SOLID TRAF ST 5 IN, WHI	5077	0.45	2284.65
180	653-1502	LF		THERMO SOLID TRAF ST, 5 IN YEL	2368	0.48	1136.64
185	653-6004	SY		THERM TRAF STRIPING, WHITE	2610	3.65	9526.5
190	653-6006	SY		THERM TRAF STRIPING, YELLOW	1276	3.9	4976.4
195	654-1001	EA		RAISED PVMT MARKERS TP 1	326	4.15	1352.9
200	639-5000	EA		PRESTRESSED CONC STR POLE, TP- MPO TIP NO. D-290	2	7000	14000
205	647-1000	LS		TRAF SIGNAL INSTALLATION NO - DOUGLAS BLVD AT SR 5	1	60000	60000

JOB DETAIL ESTIMATE

JOB NUMBER : 0012618_SR5 SPEC YEAR: 13
DESCRIPTION: SR 5(BILL ARP RD) CONGESTION & TRAFFIC FLOW IMPROVEMENTS
MPO TIP NO. DO-290

ITEMS FOR JOB 0012618_SR5

LINE	ITEM	ALT	UNITS	DESCRIPTION	QUANTITY	PRICE	AMOUNT
210	647-1000	LS		TRAF SIGNAL INSTALLATION NO - I-20 WB RAMP AT SR 5	1	63000	63000
215	647-1000	LS		TRAF SIGNAL INSTALLATION NO - CONCOURSE PKWY AT SR 5	1	60900	60900
220	647-2141	EA		PULL BOX, PB-4S	2	795	1590
225	682-6233	LF		CONDUIT, NONMETL, TP 3, 2 IN	2700	8.65	23355
230	682-9950	LF		DIRECTIONAL BORE - 5 IN	1900	7.8	14820
235	163-0232	AC		TEMPORARY GRASSING	2	376	752
240	163-0240	TN		MULCH	29	141	4089
245	163-0550	EA		CONS & REM INLET SEDIMENT TRAP	16	157	2512
250	165-0010	LF		MAINT OF TEMP SILT FENCE, TP A	1475	0.38	560.5
255	165-0105	EA		MAINT OF INLET SEDIMENT TRAP	16	42	672
260	171-0010	LF		TEMPORARY SILT FENCE, TYPE A	2950	1.54	4543
265	700-6001	LS		GRASSING - COMPLETE	1	10000	10000

ITEM TOTAL 784320.2
INFLATED ITEM TOTAL 784320.2

TOTALS FOR JOB 0012618_SR5

ESTIMATED COST: 784320.2
CONTINGENCY PERCENT (10.0): 78432.02
ESTIMATED TOTAL: 862752.22

LIQUID AC COST ADJUSTMENT FORM

MPO TIP NO.	DO-290
P.I. NO.	0012618
DATE	10/14/2014

CALL NO.

INDEX (TYPE)	DATE	INDEX
REG. UNLEADED	Oct-14	$ 3.312
DIESEL		$ 3.718
LIQUID AC		$ 615.00

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)				**23708.25**	**$**	**23,708.25**
Monthly Asphalt Cement Price month placed (APM)	Max. Cap	60%	$	984.00		
Monthly Asphalt Cement Price month project let (APL)			$	615.00		
Total Monthly Tonnage of asphalt cement (TMT)				64.25		

ASPHALT	Tons	%AC	AC ton
Leveling		5.0%	0
12.5 OGFC		5.0%	0
12.5 mm	600	5.0%	30
9.5 mm SP		5.0%	0
25 mm SP	410	5.0%	20.5
19 mm SP	275	5.0%	13.75
	1285		**64.25**

BITUMINOUS TACK COAT

Price Adjustment (PA)			**$**	**515.09**	**$**	**515.09**
Monthly Asphalt Cement Price month placed (APM)	Max. Cap	60%	$	984.00		
Monthly Asphalt Cement Price month project let (APL)			$	615.00		
Total Monthly Tonnage of asphalt cement (TMT)				1.3959078		

Bitum Tack Gals	gals/ton	tons
325	232.8234	1.3959078

DRAFT

MPO TIP NO.	DO-290		CALL NO.
P.I. NO.	0012618		
DATE	10/14/2014		

BITUMINOUS TACK COAT (surface treatment)

Price Adjustment (PA)				**0**	**$ -**
Monthly Asphalt Cement Price month placed (APM)	Max. Cap	60%	$	984.00	
Monthly Asphalt Cement Price month project let (APL)			$	615.00	
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	**$**	**24,223.34**

DRAFT

RIGHT-OF-WAY COST ESTIMATE

Parcel 1: Walgreens Parcel = $233,000

Parcel 3: Douglasville Family Dental Parcel = $67,000

GEORGIA DEPARTMENT OF TRANSPORTATION
PRELIMINARY ROW COST ESTIMATE SUMMARY

Date:	3/24/2015	Project:	SR 5 Improvements
Revised:		County:	Douglas
		PI:	12618

Description: Operational improvements to the SR 5 corridor

Project Termini: Walgreens Parcel (Parcel 1)

Existing ROW:

Parcels: 1

Required ROW:

Land and Improvements		$160,133.94
Proximity Damage	*$0.00*	
Consequential Damage	*$0.00*	
Cost to Cures	*$0.00*	
Trade Fixtures	*$0.00*	
Improvements	*$0.00*	
Valuation Services		$2,500.00
Legal Services		$38,175.00
Relocation		$2,000.00
Demolition		$15,000.00
Administrative		$14,500.00
TOTAL ESTIMATED COSTS		$232,308.94
TOTAL ESTIMATED COSTS (ROUNDED)		***$233,000.00***

Preparation Credits	Hours	Signature

Prepared By: _____ CG#: _____ (DATE)

Approved By: _____ CG#: _____ (DATE)

NOTE: No Market Appreciation is included in this Preliminary Cost Estimate

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GEORGIA DEPARTMENT OF TRANSPORTATION
PRELIMINARY ROW COST ESTIMATE SUMMARY

Date:	3/24/2015	Project:	SR 5 Improvements
Revised:		County:	Douglas
		PI:	12618

Description: Operational improvements to the SR 5 corridor

Project Termini: Douglasville Family Dental Center (Parcel 3 REQD)

Existing ROW:

Parcels: 1 Required ROW:

Land and Improvements		$9,023.24
Proximity Damage	*$0.00*	
Consequential Damage	*$0.00*	
Cost to Cures	*$0.00*	
Trade Fixtures	*$0.00*	
Improvements	*$0.00*	
Valuation Services		$2,500.00
Legal Services		$38,175.00
Relocation		$2,000.00
Demolition		$0.00
Administrative		$14,500.00
TOTAL ESTIMATED COSTS		$66,198.24
TOTAL ESTIMATED COSTS (ROUNDED)		***$67,000.00***

Preparation Credits	Hours	Signature

Prepared By: CG#: (DATE)

Approved By: CG#: (DATE)

NOTE: No Market Appreciation is included in this Preliminary Cost Estimate

allsop

UTILITY RELOCATION COST ESTIMATE

UTILITY COST ESTIMATE

FILE P.I. No. 0012618, Douglas County **DATE** May 7, 2015

FROM Scott Mohler, Project Manager, AECOM

SUBJECT UPDATED UTILITY COST ESTIMATE
As requested, we are furnishing you with a Conceptual Cost estimate for each utility with facilities potentially located within the project limits.

FACILITY OWNER	NON-REIMBURSABLE	REIMBURSABLE
AT&T	$ 10,000	$ -
Georgia Power	$ 46,000	$ -
Greystone	$ -	$ -
Atlanta Gas & Light	$ 100,000	$ -
Comcast	$ 10,000	$ -
*DDCWSA	$ -	$ 18,500
Level 3 Communications	$ -	$ -
Plantation Pipeline	$ -	$ -
TOTALS		
TOTAL NON-REIMBURSABLE COST:	$ 166,000	
TOTAL REIMBURSABLE COST:	$ 18,500	
TOTAL RELOCATIONS:	$ 184,500	

*DDCWSA = Douglas County Water & Sewer Authority

The information contained in this estimate was provided by each facility owner, with the exception of AT&T, Comcast, and DDCWSA. The estimated cost for the relocation and/or adjustment of the AT&T and Comcast facilities was assumed to be approximately $10,000 and associated with movement of the GA Power poles. The cost to relocate DDCWSA facilities was estimated using GDOT pay items. Please be advised this is an estimate and may be revised when prior rights research is completed.

If you have any questions, please contact Jeff Henry at 678-808-8910.

ATTACHMENT 3

CRASH SUMMARIES

CRASH HISTORY

Crash data was obtained for the SR 5 study area from the Georgia DOT. The data for the last three calendar years is provided in Appendix G.

Table 11 summarizes the crash history by intersection.

Table 11: CRASH FREQUENCY

INTERSECTION	TYPE OF COLLISION	2011	2012	2013
CONCOURSE PKWY	ANGLE	14	5	9
	REAR END	7	7	11
	HEAD ON	1	0	0
	SIDESWIPE	5	6	7
	OTHER	1	2	1
	TOTAL	28	20	28
I-20 INTERCHANGE	ANGLE	20	21	13
	REAR END	25	19	25
	HEAD ON	0	0	0
	SIDESWIPE	6	4	6
	OTHER	3	4	1
	TOTAL	54	48	45
DOUGLAS BLVD	ANGLE	40	35	30
	REAR END	43	45	57
	HEAD ON	1	0	4
	SIDESWIPE	16	14	11
	OTHER	1	2	3
	TOTAL	101	96	105
ARBOR PKWY	ANGLE	3	2	6
	REAR END	14	10	9
	HEAD ON	0	2	0
	SIDESWIPE	2	3	3
	OTHER	2	0	0
	TOTAL	21	17	18

Wilburn Engineering, LLC

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Table 11: CRASH FREQUENCY (Continued)

INTERSECTION	TYPE OF COLLISION	2011	2012	2013
STEWART PKWY	ANGLE	5	6	8
	REAR END	2	6	11
	HEAD ON	0	0	1
	SIDESWIPE	0	5	3
	OTHER	0	0	1
	TOTAL	7	17	24

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	ACC #	DATE	TIME	STREET A	STREET B	INJURIES	FATALITIES	TP COLLISION	IMPACT	LIGHT	SURFACE	DIR VEH 1	MNVR VEH 1	DIR VEH 2	MNVR VEH 2
1	3639280	1/15/2011	17:50	ST RT 5	CONCOURSE PKWY	0	0	Angle	On Roadway	Dusk	Dry	South	Straight	South	Stopped
2	3866429	2/22/2011	11:44	CONCOURS PKWY	HWY 5	0	0	Angle	On Roadway	Daylight	Dry	North	Turning Left	North	Straight
3	3866420	2/26/2011	9:11	CONCOURSE PKWY	HWG 5	0	0	Angle	On Roadway	Daylight	Dry	East	Turning Left	West	Straight
4	3706601	3/27/2011	15:22	HWY 5	CONCOURSE PKWY	0	0	Angle	On Roadway	Daylight	Dry	North	Turning Right	North	Changing Lanes
5	3821638	5/2/2011	19:08	CONCOURSE PKWY	HIGHWAY 5	0	0	Angle	On Roadway	Dusk	Dry	East	Turning Left	East	Straight
6	3819697	5/14/2011	11:23	CONCOURSE PKWY	HWY 5	0	0	Angle	On Roadway	Daylight	Dry	East	Changing Lanes	East	Straight
7	3820393	5/27/2011	13:04	CONCOURSE PKWY	ST RT 5	0	0	Angle	On Roadway	Daylight	Dry	North	Turning Left	West	Straight
8	3997175	6/22/2011	1:05	CONCOURSE PKWY	HIGHWAY 5	0	0	Angle	On Roadway	Dark-Lighted	Dry	East	Turning Right	East	Straight
9	3865623	7/13/2011	14:06	CONCOURSE PKWY	ST RT 5	0	0	Angle	On Roadway	Daylight	Dry	North	Turning Left	East	Straight
10	3867530	7/13/2011	11:23	CONCOURSE PKWY	HWY 5	0	0	Angle	On Roadway	Daylight	Dry	North	Turning Left	West	Straight
11	3977978	8/20/2011	15:58	CONCOURSE PKWY	ST RT 5	0	0	Angle	On Roadway	Daylight	Dry	North	Turning Left	West	Straight
12	3981951	11/25/2011	17:04	CONCOURSE PKWY	HWY 5	0	0	Angle	On Roadway	Daylight	Dry	North	Turning Right	East	Straight
13	3981935	11/30/2011	14:58	CONCOURSE PKWY	HWY 5	1	0	Angle	On Roadway	Daylight	Dry	East	Changing Lanes	East	Straight
14	3996545	12/26/2011	11:50	CONCOURSE PKWY	HWY 5	0	0	Angle	On Roadway	Daylight	Dry	East	Turning Left	East	Straight
15	3981940	11/28/2011	10:14	HWY 5	CONERSE PKWY	2	0	Head On	On Roadway	Daylight	Wet	South	Turning Left	North	Straight
16	3790766	4/4/2011	13:15	ST RT 5	CONCOURSE PKWY	0	0	Rear End	On Roadway	Daylight	Dry	South	Straight	South	Stopped
17	3997314	6/7/2011	0:13	HWY 5	CONCOURSE PKWY	0	0	Rear End	On Roadway	Dusk	Dry	South	Straight	South	Straight
18	3978234	8/6/2011	0:00	CONCOURSE PKWY	ST RT 5	0	0	Rear End	On Roadway	Dark-Lighted	Dry	West	Backing	West	
19	3977986	8/17/2011	19:05	HWY 5	CONCOURSE PKWY	0	0	Rear End	On Roadway	Daylight	Dry	South	Straight	South	Stopped
20	3928415	9/9/2011	11:54	HWY 5	CONCOURSE PKWY	0	0	Rear End	On Roadway	Daylight	Dry	West	Turning Left	West	Turning Left
21	4000387	12/16/2011	11:34	HWY 5	CONCOURSE PKWY	1	0	Rear End	On Roadway	Daylight	Dry	South	Straight	South	Stopped
22	3996526	12/30/2011	20:12	HWY 5	CONCOURSE PKWY	0	0	Rear End	On Roadway	Dark-Lighted	Dry	South	Backing	South	Stopped
23	3639322	1/26/2011	20:56	HWY 5	CONCOURSE PKWY	0	0	Sideswipe-Sam	On Roadway	Dark-Not Lighte	Dry	North	Changing Lanes	North	Straight
24	3670447	2/19/2011	21:42	CONCOURSE PKWY	SR 5	0	0	Sideswipe-Sam	On Roadway	Dark-Lighted	Dry	East	Changing Lanes	East	Straight
25	3790786	4/30/2011	14:25	CONCOURSE PKWY	ST RT 5	0	0	Sideswipe-Sam	On Roadway	Daylight	Dry	East	Changing Lanes	East	Straight
26	3977961	8/25/2011	12:58	CONCOURSE PKWY	HWY 5	0	0	Sideswipe-Sam	On Roadway	Daylight	Dry	East		East	Straight
27	3932400	10/30/2011	23:14	HWY 5	CONCOURSE PKWY	0	0	Sideswipe-Sam	On Roadway	Dark-Lighted	Dry	South	Straight	East	Turning Left
28	3997112	6/18/2011	17:45	HWY 5	CONCOURSE PKWY	0	0					West	Turning Right	North	Straight
1	4028029	1/13/2012	16:57	CONCOURSE PKWY	ST RT5	0	0	Angle	On Roadway	Daylight	Dry	West	Stopped	West	Stopped
2	4114502	4/6/2012	14:32	ST RT 5	CONCOURSE PKWY	0	0	Angle	On Roadway	Daylight	Dry	East	Turning Left	South	Straight
3	4210219	7/12/2012	18:07	CONCOURSE PKWY	ST RT 5	0	0	Angle	On Roadway	Daylight	Dry	North	Entering/Leavir	East	Straight
4	4326574	11/9/2012	20:06	HWY 5	CONCOURSE PKWY	0	0	Angle	On Roadway	Dark-Lighted	Dry	South	Turning Left	North	Straight
5	4325506	11/28/2012	18:34	HWY 5	CONCOURSE PKWY	0	0	Angle	On Roadway	Dark-Not Lighte	Dry	West	Making U-turn	South	Straight
6	4092412	3/4/2012	20:37	HWY 5	CONCOURSE PKWY	0	0	Not A Collision	Median	Dark-Lighted	Dry	South	Straight		
7	4353354	12/23/2012	17:58	CORCOURSE PKWY	ST RT 5	1	0	Not A Collision	On Roadway	Daylight	Dry	None		East	Straight
8	4054190	2/19/2012	1:00	9294 HWY 5	CONCOURSE PKWY	0	0	Rear End	On Roadway	Dark-Lighted	Wet	North	Straight	North	Straight
9	4092424	3/2/2012	22:20	HWY 5	CONCOURSE PKWY	1	0	Rear End	On Roadway	Dark-Not Lighte	Wet	South	Straight	South	Straight
10	4092088	3/14/2012	17:00	CONCOURSE PKWY	ST RT 5	0	0	Rear End	On Roadway	Daylight	Dry	East	Straight	East	Stopped
11	4092442	3/30/2012	21:12	CONCOURSE PKWY	HWY5	0	0	Rear End	On Roadway	Dark-Lighted	Wet	West	Turning Left	West	Turning Left
12	4210252	7/5/2012	15:27	STRT 5	CONCOURSE PKWY	0	0	Rear End	On Roadway	Daylight	Dry	North	Straight	North	Stopped
13	4278549	9/27/2012	11:56	CONCOURSE PKWY	ST RT 5	0	0	Rear End	On Roadway	Daylight	Dry	West	Turning Left	West	Turning Left
14	4326290	11/9/2012	15:35	SE5	CONCOURSE PKWY	0	0	Rear End	On Roadway	Daylight	Dry	West	Turning Left	West	Turning Left
15	4054191	2/19/2012	0:34	HWY5	CONCOURSE PKWY	0	0	Sideswipe-Sam	On Roadway	Dark-Lighted	Wet	North	Changing Lanes	North	Turning Right
16	4092445	3/30/2012	17:15	CONCOURSE PKWY	ST RT 5	0	0	Sideswipe-Sam	On Roadway	Daylight	Dry	East	Changing Lanes	East	Straight
17	4149872	5/29/2012	13:50	CONCOURSE PKWY	STRT5	0	0	Sideswipe-Sam	On Roadway	Daylight	Dry	West	Changing Lanes	West	Straight

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	ACC #	DATE	TIME	STREET A	STREET B	INJURIES	FATALITIES	TP COLLISION	IMPACT	LIGHT	SURFACE	DIR VEH 1	MNVR VEH 1	DIR VEH 2	MNVR VEH 2
18	4244876	8/25/2012	6:52	HWY 5	CONCOURSE PKWY	0	0	Sideswipe-Sam	On Roadway	Daylight	Dry	South	Turning Left	North	Straight
19	4296289	10/19/2012	19:53	HWY 5	CONCOURSE PKWY	0	0	Sideswipe-Sam	On Roadway	Dark-Lighted	Dry	South	Changing Lanes	South	Straight
20	4326023	11/28/2012	17:20	CONCOURCSE PKWY	ST RT 5	1	0	Sideswipe-Sam	On Roadway	Dark-Not Lighte	Dry	North	Turning Left	East	Straight
1	4372722	1/5/2013	15:39	CONCOURSE PKWY	ST RT 5	0	0	Angle	On Roadway	Daylight	Dry	West	Entering/Leavir	East	Straight
2	4372749	1/11/2013	14:26	CONCOURSE PKWY	HWY 5	0	0	Angle	On Shoulder	Daylight	Wet	North	Turning Left	East	Straight
3	4446332	3/8/2013	21:08	ST RT 5	CONCOURSE PKWY	0	0	Angle	On Roadway	Daylight	Dry	South	Changing Lanes	South	Straight
4	4446096	3/19/2013	17:10	ST RT 5	CONCOURSE PKWY	0	0	Angle	On Roadway	Daylight	Dry	West	Turning Right	North	Straight
5	4446395	3/30/2013	15:22	CONCOURSE PWKY	ST RT 5	0	0	Angle	On Roadway	Daylight	Dry	North	Turning Left	East	Straight
6	4523614	6/17/2013	13:03	CORCOURSE PKWY	ST TR 5	0	0	Angle	On Roadway	Daylight	Dry	North	Turning Left	West	Straight
7	4606637	8/6/2013	16:48	ST RD 5	CONCOURSE PKWY	1	0	Angle	On Roadway	Daylight	Dry	East	Turning Left	North	Straight
8	4639061	9/15/2013	15:41	ST RT 5	CONCOURSE PKWY	0	0	Angle	On Roadway	Daylight	Dry	None		North	Straight
9	4727374	12/30/2013	16:09	CONCOURSE PKWY	ST RT 5	0	0	Angle	On Roadway	Daylight	Dry	North	Turning Left	East	Straight
10	4409631	2/16/2013	14:21	CONCOURSE PKWY	ST RT 5	0	0	Rear End	On Roadway	Daylight	Dry	West	Straight	West	Stopped
11	4446627	3/1/2013	18:30	ST RT 5	CONCOURSE PKWY	0	0	Rear End	On Roadway	Daylight	Dry	South	Straight	South	Stopped
12	4446266	3/4/2013	11:01	HWY 5	CONCOURSE PKWY	0	0	Rear End	On Roadway	Daylight	Dry	South	Straight	South	Stopped
13	4446040	3/9/2013	7:15	HWY 5	CONCOURSE PKWY	0	0	Rear End	On Roadway	Daylight	Dry	North	Straight	North	Stopped
14	4523628	6/13/2013	16:50	CONCOURSE PKWY	ST RT 5	0	0	Rear End	On Roadway	Daylight	Dry	West	Straight	West	Straight
15	4560628	7/26/2013	21:58	CONCOURSE PKWY	HWY 5	1	0	Rear End	On Roadway	Dark-Not Lighte	Dry	East	Straight	East	Straight
16	4639280	9/16/2013	16:53	CONCOURSE PKWY	SR 5	0	0	Rear End	On Roadway	Daylight	Dry	West	Straight	West	Stopped
17	4657673	10/6/2013	14:32	CONCOURSE PKWY	SR 5	0	0	Rear End	On Roadway	Daylight	Dry	West	Backing	West	Stopped
18	4657690	10/7/2013	16:51	HWY 5	CONCOURSE PKWY	0	0	Rear End	On Roadway	Daylight	Dry	North	Straight	North	Stopped
19	4683194	11/28/2013	19:49	HWY 5	CONCOURSE PKWY	0	0	Rear End	On Roadway	Dark-Lighted	Dry	South	Straight	South	Straight
20	4727342	12/24/2013	12:41	ST RT 5	CONCOURSE PKWY	0	0	Rear End	On Roadway	Daylight	Dry	South		South	
21	4519746	5/28/2013	20:10	CONCOURSE	SR 5	1	0	Sideswipe-Sam	On Roadway	Daylight	Dry	East	Changing Lanes	North	Straight
22	4523588	6/7/2013	12:59	ST RT 5	CONCOURSE PKWY	0	0	Sideswipe-Sam	On Roadway	Daylight	Dry	South	Turning Left	South	Turning Left
23	4606796	8/3/2013	15:51	HWY 5	CONCOURSE PKWY	0	0	Sideswipe-Sam	On Roadway	Daylight	Dry	North	Changing Lanes	North	Turning Right
24	4608050	8/16/2013	10:23	CONCOURSE PKWY	SR 5	0	0	Sideswipe-Sam	On Roadway	Daylight	Dry	East	Changing Lanes	East	Straight
25	4657946	10/21/2013	7:16	CONCOURSE PLA	ST RT 5	0	0	Sideswipe-Sam	On Roadway	Dark-Lighted	Dry	East	Changing Lanes	East	Straight
26	4727383	12/24/2013	15:44	ST RT 5	CONCOURSE PKWY	0	0	Sideswipe-Sam	On Roadway	Daylight	Dry	North	Changing Lanes	North	Straight
27	4727214	12/28/2013	21:29	HWY 5	CONCOURSE PKWY	0	0	Sideswipe-Sam	On Roadway	Dark-Lighted	Wet	South	Straight	South	Turning Left
28	4465896	4/4/2013	21:47	HWY 5	CONCOURSE PKWY	0	0					South	Straight	South	Turning Left
1	3639227	1/12/2011	8:59	DOUGLAS BLVD	ST RT 5	0	0	Angle	On Roadway	Daylight	Icy	East	Straight	West	Straight
2	3639318	1/28/2011	15:48	ST RT 5	DOUGLAS BLVD	0	0	Angle	On Roadway	Daylight	Dry	North	Turning Right	North	Straight
3	3639314	1/29/2011	16:16	DOUGLAS BLVD	ST RT 5	0	0	Angle	On Roadway	Daylight	Dry	East	Turning Left	West	Straight
4	3639310	1/31/2011	20:25	DOUGLAS BLVD	SR 5	0	0	Angle	On Roadway	Dark-Lighted	Wet	West	Turning Left	West	Straight
5	3670526	2/1/2011	18:25	ST RT 5	DOUGLAS BLVD	0	0	Angle	On Roadway	Dark-Lighted	Wet	West	Turning Right	North	Turning Left
6	3670472	2/13/2011	14:53	DOUGLAS BLVD	ST RT 5	0	0	Angle	On Roadway	Daylight	Dry	South	Straight	West	Straight
7	3670450	2/19/2011	14:15	S R 5	DOUGLAS BLVD	1	0	Angle	On Roadway	Daylight	Dry	South	Changing Lanes	South	Straight
8	3670435	2/25/2011	10:31	DOUGLAS BLVD	HWY 5	2	0	Angle	On Shoulder	Daylight	Dry	West	Changing Lanes	West	Straight
9	3706690	3/5/2011	16:00	DOUGLAS BLVD	ST RT 5	0	0	Angle	On Roadway	Daylight	Wet	South	Turning Left	West	Straight
10	3706673	3/9/2011	15:09	DOUGLAS BLVD	SR 5	0	0	Angle	On Roadway	Daylight	Wet	West	Changing Lanes	West	Straight
11	3706667	3/12/2011	13:34	DOUGLAS BLVD	S R 5	0	0	Angle	On Roadway	Daylight	Dry	East	Turning Left	West	Straight
12	3706631	3/19/2011	23:12	DOUGLAS BLVD	SR 5	1	0	Angle	On Roadway	Dark-Lighted	Dry	North	Entering/Leavir	East	Straight

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	ACC #	DATE	TIME	STREET A	STREET B	INJURIES	FATALITIES	TP COLLISION	IMPACT	LIGHT	SURFACE	DIR VEH 1	MNVR VEH 1	DIR VEH 2	MNVR VEH 2
13	3706623	3/22/2011	10:34	DOUGLAS BLVD	ST RT 5	2	0	Angle	On Roadway	Daylight	Dry	West	Straight	South	Straight
14	3790773	4/2/2011	8:15	ST RT 5	DOUGLAS BLVD	0	0	Angle	On Roadway	Daylight	Dry	North	Turning Right	North	Straight
15	3790768	4/3/2011	14:55	DOUGLAS BLVD	ST RT 5	0	0	Angle	On Roadway	Daylight	Dry	South	Turning Left	West	Straight
16	3790738	4/13/2011	16:14	DOUGLAS BLVD	HWY 5	0	0	Angle	On Roadway	Daylight	Dry	North	Turning Left	West	Straight
17	3790736	4/23/2011	21:20	DOUGLAS BLVD	SR 5	0	0	Angle	On Roadway	Dark-Lighted	Dry	North	Turning Left	West	Straight
18	3819733	5/6/2011	14:15	DOUGLAS BLVD	ST RT 5	0	0	Angle	On Roadway	Daylight	Dry	South	Straight	West	Straight
19	3819719	5/8/2011	10:40	DOUGLAS BLVD	ST RT 5	0	0	Angle	On Roadway	Daylight	Dry	South	Straight	West	Straight
20	3819707	5/11/2011	15:59	DOUGLAS BLVD	ST RT 5	0	0	Angle	On Roadway	Daylight	Dry	East	Turning Left	South	Stopped
21	3819701	5/14/2011	11:50	DOUGLAS BLVD	ST RT 5	0	0	Angle	On Roadway	Daylight	Dry	North	Turning Left	West	Straight
22	3820408	5/22/2011	13:52	DOUGLAS BLVD	ST RT 5	0	0	Angle	On Roadway	Daylight	Dry	West	Changing Lanes	West	Straight
23	3820378	5/31/2011	12:09	DOUGLAS BLVD	HWY 5	0	0	Angle	On Roadway	Daylight	Dry	South	Making U-turn	East	Straight
24	3997291	6/14/2011	19:40	DOUGLAS BLVD	HIGHWAY 5	1	0	Angle	On Roadway	Dusk	Dry	North	Entering/Leavir	East	Straight
25	3865649	7/5/2011	13:45	DOUGLAS BLVD	HWY 5	0	0	Angle	On Roadway	Daylight	Dry	North		West	
26	3866442	7/15/2011	16:01	DOUGLAS BLVD	ST RT 5	1	0	Angle	On Roadway	Daylight	Dry	East	Turning Left	West	Straight
27	3977956	8/27/2011	21:10	HWY 5	DOUGLAS BLVD	0	0	Angle	On Roadway	Dark-Lighted	Dry	North	Straight	East	Turning Left
28	3932444	9/21/2011	12:25	DOUGLAS BLVD	HWY 5	0	0	Angle	On Roadway	Daylight	Dry	East	Turning Right	East	Stopped
29	3932431	9/30/2011	16:24	DOUGLAS BLVD	ST RT 5	0	0	Angle	On Roadway	Daylight	Dry	North	Straight	West	Straight
30	3932563	10/1/2011	17:07	DOUGLAS BLVD	HWY 5	1	0	Angle	On Roadway	Daylight	Dry	North	Turning Left	West	Straight
31	3981929	11/2/2011	5:43	HIGHWAY 5	DOUGLAS BULD	0	0	Angle	On Roadway	Dark-Lighted	Dry	East	Turning Left	West	Straight
32	3981904	11/6/2011	17:05	DOUGLAS BLVD	HWY 5	0	0	Angle	On Roadway	Daylight	Dry	South	Turning Right	West	Straight
33	3981987	11/18/2011	18:55	DOUGLAS BLVD	ST RT 5	0	0	Angle	On Roadway	Dark-Lighted	Dry	East	Turning Left	West	Straight
34	3981965	11/22/2011	21:42	DOUGLAS BLVD	SR 5	3	0	Angle	On Roadway	Dark-Lighted	Wet	West	Turning Left	East	Straight
35	3981947	11/26/2011	19:34	DOUGLAS BLVD	HWY 5	0	0	Angle	On Roadway	Dark-Lighted	Dry	West	Changing Lanes	West	Turning Left
36	4000325	12/2/2011	14:04	HWY 5	DOUGLAS BLVD	0	0	Angle	On Roadway	Daylight	Dry	West	Turning Left	East	Straight
37	4000304	12/8/2011	12:16	DOUGLAS BLVD	HWY 5	0	0	Angle	On Shoulder	Daylight	Dry	West	Turning Left	West	Straight
38	4000294	12/12/2011	13:48	DOUGLAS BLVD	ST RT 5	0	0	Angle	On Roadway	Daylight	Dry	North	Turning Left	West	Straight
39	4000374	12/19/2011	18:07	DOUGLAS BUND	HWY 5	1	0	Angle	On Roadway	Dawn	Dry	North	Turning Left	West	Straight
40	3999793	12/24/2011	11:10	DOUGLAS BVLD	HWY 5	0	0	Angle	On Roadway	Daylight	Dry	West	Turning Right	West	Straight
41	3706606	3/26/2011	20:37	DOUGLAS BLVD	HWY 5	0	0	Head On	On Roadway	Daylight	Wet	East	Turning Left	West	Straight
42	3932399	10/31/2011	9:26	DOUGLAS BLVD	HWY 5	1	0	Not A Collision	On Roadway	Daylight	Dry	None		East	Straight
43	3639245	1/5/2011	19:09	DOUGLAS BLVD	SR 5	0	0	Rear End	On Roadway	Dark-Lighted	Wet	West	Straight	West	Stopped
44	3639281	1/15/2011	16:25	DOUGLAS BLVD	ST RT 5	0	0	Rear End	On Roadway	Daylight	Dry	West	Straight	West	Stopped
45	3639266	1/19/2011	13:01	ST RT 5	DOUGLAS BLVD	0	0	Rear End	On Roadway	Daylight	Dry	North	Straight	North	Stopped
46	3670524	2/7/2011	8:36	DOUGLAS BLVD	ST RT 5	0	0	Rear End	On Roadway	Daylight	Dry	West	Straight	West	Stopped
47	3706674	3/9/2011	13:17	ST RT 5	DOUGLAS BLVD	0	0	Rear End	On Roadway	Daylight	Wet	South	Straight	South	Stopped
48	3706668	3/12/2011	11:41	DOUGLAS BLVD	S R 5	0	0	Rear End	On Roadway	Daylight	Dry	West	Straight	West	Stopped
49	3706642	3/14/2011	15:29	ST RT 5	DOUGLAS BLVD	0	0	Rear End	On Roadway	Daylight	Dry	South	Stopped	South	Straight
50	3706614	3/24/2011	14:11	DOUGLAS BLVD	ST RT 5	1	0	Rear End	On Roadway	Daylight	Dry	West	Straight	West	Stopped
51	3706589	3/30/2011	12:15	DOUGLAS BLVD	ST RT 5	0	0	Rear End	On Roadway	Daylight	Dry	West	Straight	West	Straight
52	3790457	4/8/2011	15:40	DOUGLAS BLVD	ST RT 5	0	0	Rear End	On Roadway	Daylight	Dry	West	Straight	West	Stopped
53	3790230	4/17/2011	10:04	HWY 5	DOUGLAS BLVD	0	0	Rear End	On Roadway	Daylight	Dry	North	Straight	North	Straight
54	3790716	4/28/2011	16:31	DOUGLAS BLVD	SR 5	1	0	Rear End	On Roadway	Daylight	Dry	West	Straight	West	Stopped
55	3819726	5/7/2011	13:07	DOUGLAS BLVD	ST RT 5	0	0	Rear End	On Roadway	Daylight	Dry	West	Straight	West	Stopped
56	3819700	5/14/2011	12:25	DOUGLAS BLVD	ST RT 5	0	0	Rear End	On Roadway	Daylight	Dry	West	Straight	West	Straight
57	3820410	5/20/2011	19:20	HWY 5	DOUGLAS BLVD	0	0	Rear End	On Roadway	Daylight	Dry	North	Straight	North	Stopped

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	ACC #	DATE	TIME	STREET A	STREET B	INJURIES	FATALITIES	TP COLLISION	IMPACT	LIGHT	SURFACE	DIR VEH 1	MNVR VEH 1	DIR VEH 2	MNVR VEH 2
58	3997315	6/6/2011	17:19	ST RT 5	DOUGLAS BLVD	0	0	Rear End	On Roadway	Daylight	Dry	South	Straight	South	Straight
59	3997311	6/7/2011	15:16	ST AT 5	DOUGLAS BLVD	0	0	Rear End	On Roadway	Daylight	Dry	South	Straight	South	Straight
60	3865646	7/5/2011	19:43	DOUGLAS BLVD	SR 5	2	0	Rear End	On Roadway	Daylight	Dry	West	Stopped	West	Stopped
61	3867733	7/25/2011	14:15	ST RT 5	DOUGLAS BLVD	0	0	Rear End	On Roadway	Daylight	Wet	North	Straight	North	Stopped
62	3867729	7/26/2011	20:40	HWY 5	DOUGLAS BLVD	1	0	Rear End	On Roadway	Dusk	Dry	South	Straight	South	Stopped
63	3866416	7/28/2011	14:20	STRT 5	DOUGLAS BLVD	0	0	Rear End	On Roadway	Daylight	Dry	North	Straight	North	Stopped
64	3978254	8/1/2011	16:19	DOUGLAS BLVD	HWY 5	0	0	Rear End	On Roadway	Daylight	Dry	South	Backing	South	Stopped
65	3978257	8/1/2011	6:36	S R 5	DOUGLAS BLVD	0	0	Rear End	On Roadway	Dusk	Dry	North	Straight	North	Straight
66	3978249	8/3/2011	10:39	DOUGLASS BLVD	ST RT 5	0	0	Rear End	On Roadway	Daylight	Dry	West	Backing	West	Stopped
67	3978271	8/14/2011	14:13	9552 HWY 5	DOUGLAS BLVD	0	0	Rear End	On Roadway	Daylight	Dry	North	Straight	North	Straight
68	3977942	8/31/2011	10:30	DOUGLAS BLVD	ST RT 5	0	0	Rear End	On Roadway	Daylight	Dry	West	Straight	West	Stopped
69	3932451	9/20/2011	8:21	HWY 5	DOUGLAS BLVD	0	0	Rear End	On Roadway	Daylight	Wet	South	Straight	South	Entering/Leavir
70	3932450	9/20/2011	8:57	HWY 5	DOUGLAS RVID	0	0	Rear End	On Roadway	Daylight	Wet	South	Straight	South	Turning Right
71	3932445	9/21/2011	9:13	DOUGLAS BLVD	HWY 5	0	0	Rear End	On Roadway	Daylight	Dry	East	Straight	East	Stopped
72	3932430	9/30/2011	15:34	DOUGLAS BLVD	ST RT 5	0	0	Rear End	On Roadway	Daylight	Dry	West	Straight	West	Stopped
73	3932433	9/30/2011	11:07	ST RT 5	DOUGLAS BLVD	0	0	Rear End	On Roadway	Daylight	Dry	South	Straight	South	Stopped
74	3932559	10/2/2011	14:58	DOUGLAS BLVD	HWY 5	0	0	Rear End	On Roadway	Daylight	Dry	West	Straight	West	Stopped
75	3932372	10/24/2011	18:28	HWY 5	DOUGLAS BLVD	0	0	Rear End	On Roadway	Daylight	Dry	North	Straight	North	Straight
76	3981974	11/4/2011	6:04	HWY 5	DOUGLAS BLVD	0	0	Rear End	On Roadway	Daylight	Dry	None		South	Stopped
77	3981872	11/14/2011	11:09	DOUGLAS BLVD	STRT 5	0	0	Rear End	On Roadway	Daylight	Dry	East	Straight	East	Stopped
78	3981996	11/16/2011	17:23	DOUGLAS BLVD	HWY 5	0	0	Rear End	On Roadway	Daylight	Dry	West	Straight	West	Straight
79	4000335	12/1/2011	9:25	DOUGLAS BLVD	ST RT 5	1	0	Rear End	On Roadway	Daylight	Dry	West	Straight	West	Stopped
80	4000299	12/10/2011	15:10	ST RT 5	DOUGLAS BLVD	0	0	Rear End	On Roadway	Daylight	Dry	North	Straight	North	Stopped
81	4000292	12/12/2011	23:01	HWY 5	DOUGLAS BLVD	0	0	Rear End	Ramp	Daylight	Dry	West	Straight	None	
82	4000358	12/21/2011	17:00	DOUGLAS BLVD	HWY 5	0	0	Rear End	On Roadway	Daylight	Wet	East	Straight	East	Straight
83	3999798	12/23/2011	20:21	HIGHWAY 5	DOUGLAS BLVD	1	0	Rear End	On Roadway	Dark-Lighted	Dry	North	Straight	North	Straight
84	3996544	12/26/2011	20:00	DOUGLAS BLVD	HWY 5	0	0	Rear End	On Roadway	Dark-Not Lighte	Dry	West	Straight	West	Straight
85	3996524	12/31/2011	10:53	HWY 5	DOUGLAS BLVD	0	0	Rear End	On Roadway	Daylight	Dry	South	Straight	South	Stopped
86	3639333	1/24/2011	15:41	DOUGLAS BLVD	ST RT 5	0	0	Sideswipe-Sam	On Roadway	Daylight	Dry	East	Changing Lanes	East	Straight
87	3670457	2/18/2011	14:17	DOUGLAS BLVD	ST RT 5	0	0	Sideswipe-Sam	On Roadway	Daylight	Dry	West	Changing Lanes	West	Straight
88	3670437	2/23/2011	16:00	DOUGLAS BLVD	ST RT5	0	0	Sideswipe-Sam	On Roadway	Daylight	Dry	West		West	Straight
89	3790767	4/3/2011	18:15	DOUGLAS BLVD	ST RT 5	0	0	Sideswipe-Sam	On Roadway	Daylight	Dry	West	Changing Lanes	West	Straight
90	3819706	5/11/2011	16:53	DOUGLAS BLVD	ST R T5	0	0	Sideswipe-Sam	On Roadway	Daylight	Dry	West	Changing Lanes	West	Straight
91	3997224	6/8/2011	12:15	DOUGLAS BLVD	ST RT 5	0	0	Sideswipe-Sam	On Roadway	Daylight	Dry	East	Changing Lanes	East	Straight
92	3997289	6/15/2011	10:47	DOUGLAS BLVD	ST RT 5	0	0	Sideswipe-Sam	On Roadway	Daylight	Dry	West	Changing Lanes	West	Straight
93	3997116	6/18/2011	12:15	ST RT 5	DOUGLAS BLVD	0	0	Sideswipe-Sam	On Roadway	Daylight	Dry	South	Changing Lanes	South	Straight
94	3977957	8/24/2011	13:08	DOUGLAS BLVD	ST RT 5	0	0	Sideswipe-Sam	On Roadway	Daylight	Dry	East	Changing Lanes	East	Straight
95	3977940	8/31/2011	19:04	DOUGLAS BLVD	HG 5	0	0	Sideswipe-Sam	On Roadway	Daylight	Dry	East	Stopped	East	Turning Left
96	3932683	9/17/2011	19:27	HWY 5	DOUGLAS BLVD	0	0	Sideswipe-Sam	On Roadway	Dusk	Dry	South	Changing Lanes	South	Straight
97	3932432	9/30/2011	13:20	DOUGLAS BLVD	ST RT 5	0	0	Sideswipe-Sam	On Roadway	Daylight	Dry	None		West	Straight
98	3981887	11/9/2011	18:34	DOUGLAS BLVD	HWY 5	0	0	Sideswipe-Sam	On Roadway	Daylight	Wet	East	Changing Lanes	East	Straight
99	4000295	12/11/2011	15:59	DOUGLAS BLVD	ST RT 5	0	0	Sideswipe-Sam	On Roadway	Daylight	Dry	West	Changing Lanes	West	Stopped
100	4000366	12/20/2011	15:00	ST RT 5	DOUGLAS BLVD	0	0	Sideswipe-Sam	On Roadway	Daylight	Wet	South	Changing Lanes	South	Straight
101	3996550	12/24/2011	18:17	DOUGLAS BLVD	HWY 5	0	0	Sideswipe-Sam	On Roadway	Dusk	Dry	West	Turning Left	West	Straight
1	4027988	1/6/2012	15:24	DOUGLAS BLVD	ST RT 5	0	0	Angle	On Roadway	Daylight	Dry	East	Turning Left	East	Straight

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	ACC #	DATE	TIME	STREET A	STREET B	INJURIES	FATALITIES	TP COLLISION	IMPACT	LIGHT	SURFACE	DIR VEH 1	MNVR VEH 1	DIR VEH 2	MNVR VEH 2
2	4028023	1/14/2012	14:02	DOUGLAS BLVD	ST RT 5	0	0	Angle	On Roadway	Daylight	Dry	East	Stopped	East	Straight
3	4028051	1/15/2012	12:10	ST RT 5	DOUGLAS BLVD	0	0	Angle	On Roadway	Daylight	Dry	West	Turning Right	East	Turning Left
4	4028087	1/27/2012	12:18	ST RT 5	DOUGLAS BLVD	0	0	Angle	On Roadway	Daylight	Dry	West	Entering/Leavir	North	Straight
5	4054194	2/18/2012	16:44	DOUGLAS BLVD	SR 5	0	0	Angle	On Roadway	Daylight	Wet	East	Turning Left	West	Straight
6	4092429	3/1/2012	17:52	DOUGLAS BLVD	ST RT 5	0	0	Angle	On Roadway	Daylight	Dry	South	Turning Left	East	Straight
7	4092092	3/13/2012	18:10	HWY 5	DOUGLAS BLVD	0	0	Angle	On Roadway	Daylight	Dry	North	Turning Right	North	Turning Left
8	4092084	3/15/2012	13:13	DOUGLAS BLVD	ST RT 5	0	0	Angle	On Roadway	Daylight	Dry	North	Turning Left	West	Straight
9	4092457	3/26/2012	14:55	DOUGLAS BLVD	ST RT 5	0	0	Angle	On Roadway	Daylight	Dry	North	Turning Left	West	Straight
10	4114475	4/13/2012	10:00	DOUGLAS BLVD	ST RD 5	0	0	Angle	On Roadway	Daylight	Dry	North	Turning Left	East	Straight
11	4114425	4/21/2012	12:16	DOUN S BLUN	SR 5	0	0	Angle	On Roadway	Daylight	Dry	East	Turning Left	West	Straight
12	4114404	4/27/2012	7:46	DOUGLAS BLVD	ST RT5	0	0	Angle	On Roadway	Daylight	Dry	North	Straight	East	Straight
13	4149789	5/1/2012	11:21	DOUGLAS BLVD	STRD5	0	0	Angle	On Roadway	Daylight	Dry	East	Turning Left	West	Straight
14	4150275	5/12/2012	21:42	HWY 5	DOUGLAS BLVD	0	0	Angle	On Roadway	Dark-Lighted	Wet	West	Turning Right	East	Turning Left
15	4149851	5/26/2012	17:56	DOUGLAS BLVD	ST RT 5	0	0	Angle	On Roadway	Daylight	Dry	East	Changing Lanes	East	Straight
16	4163741	6/18/2012	13:20	DOUGLAS BLVD	ST RT 15	2	0	Angle	On Roadway	Daylight	Dry	South	Turning Left	East	Straight
17	4210256	7/4/2012	14:06	DOUGLAS BLVD	ST RT 5	0	0	Angle	On Roadway	Daylight	Dry	South	Turning Left	West	Straight
18	4210225	7/11/2012	14:02	ST RT 5	DOUGLAS BLVD	0	0	Angle	On Roadway	Daylight	Dry	East	Straight	South	Straight
19	4210226	7/11/2012	14:02	ST RT 5	DOUGLAS BLVD	0	0	Angle	On Roadway	Daylight	Dry	East	Straight	South	Straight
20	4210221	7/12/2012	15:07	DOUGLAS BLVD	ST RT 5	0	0	Angle	On Roadway	Daylight	Wet	South	Turning Left	West	Straight
21	4210214	7/14/2012	15:40	DOUGLAS BLVD	ST RT 5	0	0	Angle	On Roadway	Daylight	Dry	West	Turning Right	West	Stopped
22	4278555	9/23/2012	12:45	S R 5	DOUGLAS BLVD	0	0	Angle	On Roadway	Daylight	Dry	East	Turning Left	North	Straight
23	4295947	10/5/2012	13:35	DOUGLAS BLVD	ST RT 5	3	0	Angle	On Roadway	Daylight	Dry	East	Turning Left	West	Straight
24	4296263	10/28/2012	15:21	DOUGLAS BLVD	SR 5	0	0	Angle	On Roadway	Daylight	Dry	West	Straight	South	Turning Left
25	4325734	11/2/2012	14:33	DOVLAS BLVD	ST RT 5	0	0	Angle	On Roadway	Daylight	Dry	East	Changing Lanes	East	Straight
26	4325741	11/16/2012	13:41	DOUGLAS BLVD	ST RT 15	0	0	Angle	On Roadway	Daylight	Dry	North	Entering/Leavir	East	Straight
27	4326594	11/17/2012	15:18	ST RT 5	DOUGLAS BLVD	0	0	Angle	On Roadway	Daylight	Dry	North	Changing Lanes	North	Straight
28	4326721	11/23/2012	11:18	DOUGLAS RLVO	SR 5	0	0	Angle	On Roadway	Daylight	Dry	East	Turning Left	East	Turning Left
29	4325487	11/24/2012	12:33	DOUGLAS BLVD	ST RT 5	0	0	Angle	On Roadway	Daylight	Dry	East	Backing	North	Straight
30	4353365	12/8/2012	18:30	DOUGLAS BLVD	ST RT 5	0	0	Angle	On Roadway	Dark-Not Lighte	Wet	West	Straight	South	Straight
31	4353042	12/17/2012	12:38	DOUGLAS BLVD	ST RT 5	0	0	Angle	On Roadway	Daylight	Dry	South	Straight	West	Straight
32	4353133	12/25/2012	10:06	DOUGLAS BLVD	HWY 5	2	0	Angle	On Roadway	Daylight	Wet	West	Turning Right	West	Straight
33	4353351	12/26/2012	13:33	DOUGLAS BLVD	ST RT 5	0	0	Angle	On Roadway	Daylight	Dry	East	Entering/Leavir	East	Straight
34	4353509	12/27/2012	10:46	ST RT 5	DOUGLAS BLVD	0	0	Angle	On Roadway	Daylight	Dry	North	Entering/Leavir	North	Straight
35	4353430	12/3/2012	19:14	HWY 5	DOUGLAS BLVD	1	0	Not A Collision	Off Roadway	Dark-Lighted	Dry	South	Straight		
36	4352897	12/9/2012	13:40	DOUGLAS BLVD	ST RT 5	1	0	Not A Collision	On Roadway	Daylight	Dry	East	Straight		
37	4028042	1/17/2012	15:39	DOUGLAS BLVD	SR 5	0	0	Rear End	On Roadway	Daylight	Dry	East	Straight	East	Stopped
38	4028061	1/20/2012	15:59	DOUGLAS BLVD	HWY 5	0	0	Rear End	On Roadway	Daylight	Wet	South	Turning Right	North	Turning Left
39	4135700	2/10/2012	15:45	DOUGLAS BLVD	ST RD 5	0	0	Rear End	On Roadway	Daylight	Dry	West		East	
40	4056465	2/14/2012	23:39	DOUGLAS BLVD	SR 5	1	0	Rear End	Off Roadway	Dark-Lighted	Dry	East	Straight	None	Parked
41	4054172	2/16/2012	12:46	DOUGLAS BLVD	HWY5	0	0	Rear End	On Roadway	Daylight	Wet	East	Straight	East	Stopped
42	4054195	2/29/2012	16:57	DOUGLAS BLVD	HWY 5	0	0	Rear End	On Roadway	Daylight	Dry	West	Straight	West	Stopped
43	4092433	2/29/2012	16:57	DOUGLAS BLVD	HWY 5	0	0	Rear End	On Roadway	Daylight	Dry	West	Straight	West	Stopped
44	4092077	3/15/2012	17:58	ST RT 5	DOUGLAS BLVD	1	0	Rear End	On Roadway	Daylight	Wet	North	Straight	North	Stopped
45	4092070	3/16/2012	18:57	HWY 5	DOUGLAS BLVD	0	0	Rear End	On Roadway	Daylight	Dry	South	Straight	South	Stopped
46	4114476	4/13/2012	7:30	ST RT 5	DOUGLAS BLVD	1	0	Rear End	On Roadway	Daylight	Dry	North	Straight	North	Straight

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47	4114435	4/18/2012	20:12	SR 5	DOUGLAS BLVD	0	0	Rear End	On Roadway	Dusk	Dry	North	Straight	North	Stopped
48	4114411	4/24/2012	10:48	DOUGOLAS BLVD	HWY 5	0	0	Rear End	On Roadway	Daylight	Dry	East	Straight	East	Straight
49	4149827	5/7/2012	19:35	SR 5	DOUGLAS BLVD	0	0	Rear End	On Roadway	Dark-Lighted	Dry	North	Straight	North	Stopped
50	4150286	5/17/2012	17:22	HWY 5	DOUGLAS BLVD	0	0	Rear End	On Roadway	Daylight	Dry	North	Straight	North	Stopped
51	4149859	5/23/2012	16:58	DOUGLAS BLVD	HWY 5	0	0	Rear End	On Roadway	Daylight	Dry	West	Straight	West	Straight
52	4149873	5/24/2012	12:42	DOUGLAS BLVD	SR 5	0	0	Rear End	On Roadway	Daylight	Dry	West	Straight	West	Stopped
53	4149865	5/30/2012	12:43	DOUGLAS BLVD	SR 5	0	0	Rear End	On Roadway	Daylight	Dry	West	Straight	West	Stopped
54	4161825	6/9/2012	14:59	SR 5	DOUGLAS BLVD	0	0	Rear End	On Roadway	Daylight	Dry	South	Straight	South	Stopped
55	4161844	6/14/2012	17:34	DOUGLAS BLVD	ST RT 5	0	0	Rear End	On Roadway	Daylight	Dry	West	Straight	West	Stopped
56	4163810	6/28/2012	22:30	HWY 5	DOUGLAS BLVD	0	0	Rear End	On Roadway	Dark-Lighted	Dry	South	Straight	South	Stopped
57	4210236	7/8/2012	13:38	DOUGLAS BLVD	SR 5	0	0	Rear End	On Roadway	Daylight	Dry	West	Straight	West	Stopped
58	4208653	7/9/2012	12:57	STRT 5	DOUGLAS BLVD	1	0	Rear End	On Roadway	Daylight	Dry	North	Straight	North	Stopped
59	4208631	7/29/2012	18:12	HWY 5	DOUGLAS BLVD	0	0	Rear End	On Roadway	Daylight	Dry	North	Straight	North	Straight
60	4244263	8/1/2012	14:05	DOUGLAS BLVD	ST RT 5	0	0	Rear End	On Roadway	Daylight	Dry	West	Straight	West	Stopped
61	4244261	8/2/2012	13:50	ST RT 5	DOUGLAS BLVD	0	0	Rear End	On Roadway	Daylight	Dry	North	Straight	North	Stopped
62	4244882	8/24/2012	8:27	HWY 5	DOUGLAS BLVD	0	0	Rear End	On Roadway	Daylight	Dry	North	Straight	North	Straight
63	4244873	8/26/2012	19:46	HWY 5	DOUGLAS BLVD	0	0	Rear End	On Roadway	Daylight	Dry	North	Straight	North	Stopped
64	4279220	9/15/2012	20:21	DOUGLAS BLVD	HWY 5	0	0	Rear End	On Roadway	Dark-Lighted	Dry	West	Straight	West	Stopped
65	4278559	9/21/2012	18:06	DOUGLAS BLVD	ST RT 5	0	0	Rear End	On Roadway	Daylight	Dry	West	Straight	West	Stopped
66	4278557	9/22/2012	12:28	DOUGLAS BLVD	ST RT 5	1	0	Rear End	On Roadway	Daylight	Dry	West	Straight	West	Stopped
67	4278551	9/24/2012	15:21	HWY 5	DOUGLAS BLVD	0	0	Rear End	On Roadway	Daylight	Dry	South	Straight	South	Stopped
68	4296229	10/7/2012	17:34	DOUGLAS BLVD	SR 5	0	0	Rear End	On Roadway	Daylight	Dry	West	Straight	West	Stopped
69	4296228	10/8/2012	14:04	ST RT 5	DOUGLAS BLVD	0	0	Rear End	On Roadway	Daylight	Dry	North	Straight	North	Straight
70	4296222	10/13/2012	12:39	ST RT 5	DOUGLAS BLVD	0	0	Rear End	On Roadway	Daylight	Dry	North	Straight	North	Turning Right
71	4326008	11/17/2012	19:07	SR 5	DOUGLAS BLVD	0	0	Rear End	On Roadway	Dark-Lighted	Dry	North	Straight	North	Stopped
72	4326306	11/23/2012	22:44	DOUGLAS BLVD	HWY 5	0	0	Rear End	On Roadway	Dark-Lighted	Dry	West	Backing	West	Straight
73	4326303	11/26/2012	15:23	SR 5	DOUGLAS BLVD	1	0	Rear End	On Roadway	Daylight	Dry	North	Straight	North	Stopped
74	4325284	11/28/2012	17:23	DOUGLAS BLVD	ST RT 5	0	0	Rear End	On Roadway	Dusk	Dry	East	Straight	East	Stopped
75	4353438	12/2/2012	13:23	DOUGLAS BLVD	ST RT 5	0	0	Rear End	On Roadway	Daylight	Dry	West	Straight	West	Stopped
76	4353120	12/5/2012	7:02	DOUGLAS BLVD	HWY 5	0	0	Rear End	On Roadway	Dark-Not Lighte	Dry	East	Backing	West	Stopped
77	4352949	12/12/2012	7:43	9502 HWY 5	DOUGLAS BLVD	0	0	Rear End	On Roadway	Daylight	Dry	North	Straight	North	Straight
78	4353043	12/16/2012	11:16	ST RT 5	DOUGLAS BLVD	0	0	Rear End	On Roadway	Daylight	Wet	South	Straight	South	Stopped
79	4352973	12/21/2012	14:45	DOUGLAS BLVD	HWY 5	0	0	Rear End	On Roadway	Daylight	Dry	East	Straight	East	Straight
80	4353513	12/21/2012	14:25	ST RT 5	DOUGLAS BLVD	0	0	Rear End	On Roadway	Daylight	Dry	North	Straight	North	Stopped
81	4352853	12/24/2012	20:27	SR 5	DOUGLAS BLVD	0	0	Rear End	On Roadway	Dark-Lighted	Wet	North	Straight	North	Straight
82	4244359	8/19/2012	2:02	DOUGLAS BLVD	HWY 5	1	0	Sideswipe-Oppo	On Roadway	Dark-Not Lighte	Wet	West	Turning Right	East	Stopped
83	4028027	1/13/2012	18:52	DOUGLAS BLVD	HWY 5	0	0	Sideswipe-Sam	On Roadway	Dark-Not Lighte	Dry	West	Changing Lanes	West	Straight
84	4054166	2/17/2012	21:55	HWY 5	DOUGLAS BLVD	0	0	Sideswipe-Sam	On Roadway	Dark-Not Lighte	Dry	North	Straight	North	Straight
85	4149855	5/25/2012	11:01	DOUGLES BLVD	SR 5	0	0	Sideswipe-Sam	On Roadway	Daylight	Dry	East	Changing Lanes	East	Straight
86	4161807	6/3/2012	7:25	ST RT 5	DOUGLAS BLVD	0	0	Sideswipe-Sam	On Roadway	Daylight	Dry	North	Stopped	North	Straight
87	4210242	7/6/2012	22:34	HWY 5	DOUGLAS BLVD	0	0	Sideswipe-Sam	On Roadway	Dark-Not Lighte	Dry	South	Straight	South	Straight
88	4208660	7/17/2012	3:59	DOUGLAS BLVD	HWY 5	0	0	Sideswipe-Sam	On Roadway	Daylight	Dry	West	Turning Right	West	Stopped
89	4208640	7/26/2012	16:01	DOUGLAS BLVD	ST RT 5	0	0	Sideswipe-Sam	On Roadway	Daylight	Dry	West	Changing Lanes	West	Straight
90	4279222	9/15/2012	11:52	DOUGLAS BLVD	ST RT 5	0	0	Sideswipe-Sam	On Roadway	Daylight	Dry	East	Stopped	East	Straight
91	4296221	10/14/2012	0:29	HWY 5	DOUGLAS BLVD	0	0	Sideswipe-Sam	On Roadway	Dark-Lighted	Dry	South	Turning Right	South	Turning Left

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	ACC #	DATE	TIME	STREET A	STREET B	INJURIES	FATALITIES	TP COLLISION	IMPACT	LIGHT	SURFACE	DIR VEH 1	MNVR VEH 1	DIR VEH 2	MNVR VEH 2
92	4325271	11/15/2012	10:32	DOUGLAS BLVD	SR 5	0	0	Sideswipe-Sam	On Roadway	Daylight	Dry	None	Turning Right	East	Stopped
93	4353511	12/22/2012	19:44	DOUGLAS BLVD	SR 5	0	0	Sideswipe-Sam	On Roadway	Dark-Lighted	Dry	West	Changing Lanes	West	Straight
94	4352972	12/22/2012	22:27	SR 5	DOUGLAS BLVD	0	0	Sideswipe-Sam	On Roadway	Dark-Lighted	Dry	North	Turning Left	North	Turning Right
95	4353347	12/28/2012	19:01	SR 5	DOUGLAS BLVD	0	0	Sideswipe-Sam	On Roadway	Dark-Lighted	Wet	South	Changing Lanes	South	Straight
96	4150246	5/12/2012	10:22	SR 5	DOUGLAS BLVD	0	0		On Roadway	Daylight	Wet	West	Turning Right	East	Turning Left
1	4373434	1/1/2013	16:48	ST RT 5	DOUGLAS BLVD	0	0	Angle	On Roadway	Daylight	Wet	North	Turning Right	North	Straight
2	4373620	1/19/2013	18:21	DOUGLAS BLVD	SR 5	0	0	Angle	On Roadway	Daylight	Dry	North	Turning Right	North	Straight
3	4560376	1/20/2013	12:27	DOUGLAS BLVD	ST RT 5	0	0	Angle	On Roadway	Daylight	Dry	South	Entering/Leavir	West	Stopped
4	4446563	3/2/2013	11:54	DOUGLAS BLVD	HIGHWAY 5	0	0	Angle	On Roadway	Daylight	Dry	North	Turning Left	West	Straight
5	4446626	3/2/2013	10:11	DOUGLAS BLVD	ST RT 5	2	0	Angle	On Roadway	Daylight	Dry	North	Turning Left	East	Straight
6	4446397	3/26/2013	19:43	ST RT 5	DOUGLAS BLVD	0	0	Angle	On Roadway	Daylight	Dry	East	Turning Right	West	Stopped
7	4465933	4/5/2013	12:32	DOUGLAS BLVD	HWY 5	0	0	Angle	On Roadway	Daylight	Dry	None	Changing Lanes	West	Straight
8	4465679	4/10/2013	15:03	DOUGLAS BLVD	ST RT 5	2	0	Angle	On Roadway	Daylight	Dry	South	Turning Left	East	Straight
9	4519753	5/12/2013	4:59	DOUGLAS BLVD	SR 5	0	0	Angle	On Roadway	Daylight	Dry	South	Turning Left	West	Straight
10	4519762	5/12/2013	13:54	DOUGLAS BLVD	ST RT 5	0	0	Angle	On Roadway	Daylight	Dry	South	Straight	West	Straight
11	4519557	5/16/2013	21:21	DOUGLAS BLVD	HWY 5	0	0	Angle	On Roadway	Dark-Lighted	Dry	North	Entering/Leavir	East	Straight
12	4519751	5/18/2013	18:08	DOUGLAS BLVD	SR 5	2	0	Angle	On Roadway	Daylight	Dry	South	Turning Left	West	Straight
13	4519711	5/25/2013	12:29	DOUGLAS BLVD	ST RT 5	0	0	Angle	On Roadway	Daylight	Dry	East	Changing Lanes	East	Stopped
14	4519494	5/26/2013	0:37	HWY 5	DOUGLAS BLVD	1	0	Angle	On Roadway	Dark-Lighted	Dry	East	Straight	South	Straight
15	4560529	7/13/2013	15:17	DOUGLAS BLVD	SR 5	0	0	Angle	On Roadway	Daylight	Dry	East	Turning Left	West	Straight
16	4560623	7/27/2013	12:02	DOUGLAS BLVD	ST RT 5	0	0	Angle	On Roadway	Daylight	Dry	North	Turning Left	East	Straight
17	4606641	8/2/2013	12:26	ST RT 5	DOUGLAS BLVD	0	0	Angle	On Roadway	Daylight	Dry	South	Changing Lanes	South	Straight
18	4606404	8/10/2013	11:57	DOUGLAS BLVD	SR 5	0	0	Angle	On Roadway	Daylight	Dry	North	Turning Left	East	Straight
19	4606836	8/20/2013	13:32	DOUGLAS BLVD	ST RT5	0	0	Angle	On Roadway	Daylight	Dry	West	Turning Right	West	Straight
20	4639073	9/6/2013	13:55	DOUGLAS BLVD	ST RT 5	1	0	Angle	On Roadway	Daylight	Dry	North	Turning Left	West	Straight
21	4639048	9/21/2013	13:07	DOUGLAS BLVD	HWY 5	0	0	Angle	On Roadway	Daylight	Wet	East	Turning Left	West	Straight
22	4657648	10/30/2013	21:54	DOUGLAS BLVD	HWY 5	0	0	Angle	On Roadway	Dark-Not Lighte	Dry	West	Straight	West	Turning Right
23	4683021	11/2/2013	21:33	DOUGLAS BLVD	HWY 5	0	0	Angle	On Roadway	Dark-Lighted	Dry	South	Straight	West	Straight
24	4683011	11/15/2013	10:48	DOUGLAS BLVD	HWY 5	1	0	Angle	On Roadway	Daylight	Wet	East	Turning Left	West	Straight
25	4683147	11/17/2013	13:01	DOUGLAS BLVD	S R 5	0	0	Angle	On Roadway	Daylight	Wet	South	Turning Left	West	Negotiating A C
26	4683031	11/26/2013	12:15	DOUGLAS BLVD	HWY 5	0	0	Angle	On Roadway	Daylight	Wet	South	Turning Left	West	Turning Left
27	4727327	12/8/2013	18:20	HWY 5	DOUGLAS BLVD	0	0	Angle	On Roadway	Dark-Lighted	Wet	North	Turning Right	North	Turning Left
28	4727178	12/20/2013	14:03	DOUGLAS BLVD	HWY 5	0	0	Angle	On Roadway	Daylight	Dry	South	Turning Left	West	Straight
29	4727294	12/20/2013	20:45	DOUGLAS BLVD	SR 5	2	0	Angle	On Roadway	Dark-Lighted	Dry	South	Turning Right	East	Straight
30	4727132	12/30/2013	12:01	DOUGLAS BLVD	ST RT 5	0	0	Angle	On Roadway	Daylight	Dry	North	Turning Left	West	Straight
31	4465680	4/9/2013	14:49	DOUGLAS BLVD	ST RD 5	0	0	Head On	On Roadway	Daylight	Dry	North	Turning Left	West	Straight
32	4519517	5/3/2013	18:30	DOUGLAS BLVD	HWY 5	2	0	Head On	On Roadway	Daylight	Dry	North	Turning Left	West	Straight
33	4519542	5/9/2013	19:44	DOUGLAS BLVD	HWY 5	0	0	Head On	On Roadway	Daylight	Dry	North	Backing	South	Stopped
34	4639309	9/2/2013	12:54	DOUGLAS BLVD	HWY 5	0	0	Head On	On Roadway	Daylight	Wet	West	Straight	East	Turning Left
35	4409630	2/16/2013	16:26	DOUGLAS BLVD	HWY 5	0	0	Not A Collision	Off Roadway	Daylight	Dry	West	Straight	West	Straight
36	4372714	1/19/2013	20:37	HWY 5	DOUGLAS BLVD	0	0	Rear End	On Roadway	Dark-Lighted	Dry	North	Backing	North	Straight
37	4409043	2/7/2013	19:22	SR 5	DOUGLAS BLVD	0	0	Rear End	On Roadway	Dark-Lighted	Wet	South	Straight	South	Straight
38	4409038	2/9/2013	11:05	DOUGLAS BLVD	ST RT 5	0	0	Rear End	On Roadway	Daylight	Dry	West	Straight	West	Stopped
39	4409036	2/10/2013	12:13	ST RD 5	DOUGLAS BLVD	0	0	Rear End	On Roadway	Daylight	Dry	North	Straight	North	Stopped
40	4409032	2/11/2013	15:28	DOUGLAS BLVD	SR 5	0	0	Rear End	On Roadway	Daylight	Wet	West	Straight	West	Stopped

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41	4409617	2/23/2013	13:14	DOUGLAS BLVD	SR 5	0	0	Rear End	On Roadway	Daylight	Dry	West	Straight	West	Stopped
42	4409060	2/28/2013	11:44	ST RT 5	DOUGLAS BLVD	0	0	Rear End	On Roadway	Daylight	Dry	South	Straight	South	Stopped
43	4446621	3/7/2013	19:09	DOUGLAS BLVD	ST RT 5	0	0	Rear End	On Roadway	Daylight	Dry	East	Straight	East	Stopped
44	4446354	3/12/2013	11:25	ST RT 5	DOUGLAS BLVD	0	0	Rear End	On Roadway	Daylight	Dry	South	Straight	South	Stopped
45	4446639	3/18/2013	13:19	DOUGLAS BLVD	ST RT 5	0	0	Rear End	On Roadway	Daylight	Wet	West	Straight	West	Stopped
46	4446635	3/24/2013	11:04	DOUGLAS BLVD	SR 5	0	0	Rear End	On Roadway	Daylight	Wet	West	Straight	West	Stopped
47	4465652	4/12/2013	23:55	DOUGLAS BLVD	SR 5	0	0	Rear End	On Roadway	Dark-Lighted	Dry	West	Straight	West	Stopped
48	4465675	4/12/2013	16:54	DOUGLAS BLVD	ST RD 5	0	0	Rear End	On Roadway	Daylight	Dry	East	Straight	East	Stopped
49	4465993	4/13/2013	5:43	HWY 5	DOUGLAS BLVD	0	0	Rear End	On Roadway	Dark-Lighted	Dry	North	Straight	North	Turning Right
50	4519506	5/19/2013	19:17	DOUGLAS BLVD	HWY 5	0	0	Rear End	On Roadway	Daylight	Wet	West	Straight	West	Stopped
51	4519505	5/20/2013	12:20	DOUGLAS BLVD	HWY 5	1	0	Rear End	On Roadway	Daylight	Dry	West	Straight	West	Stopped
52	4519502	5/22/2013	13:47	DOUGLAS BLVD	SR 5	0	0	Rear End	On Roadway	Daylight	Dry	West	Straight	West	Stopped
53	4519709	5/26/2013	15:34	ST RD 5	DOUGLAS BLVD	0	0	Rear End	On Roadway	Daylight	Dry	South	Straight	South	Stopped
54	4519708	5/26/2013	17:44	ST RT5	DOUGLAS BLVD	0	0	Rear End	On Roadway	Daylight	Dry	None		South	Stopped
55	4519739	5/30/2013	13:24	DOUGLAS BLVD	ST RT 5	0	0	Rear End	On Roadway	Daylight	Dry	West	Straight	West	Stopped
56	4523593	6/5/2013	13:14	DOUGLAS BLVD	ST RT 5	0	0	Rear End	On Roadway	Daylight	Dry	East	Straight	East	Stopped
57	4523586	6/7/2013	16:32	DOUGLAS BLVD	ST RT 5	0	0	Rear End	On Roadway	Daylight	Wet	West	Straight	West	Straight
58	4523548	6/14/2013	18:12	DOUGLAS BLVD	HWY 5	0	0	Rear End	On Roadway	Daylight	Dry	West	Straight	West	Stopped
59	4523623	6/14/2013	14:34	DOUGLAS BLVD	SR 5	0	0	Rear End	On Roadway	Daylight	Dry	West	Straight	West	Stopped
60	4523656	6/26/2013	13:45	DOUGLES BLVD	HWY 5	0	0	Rear End	On Roadway	Daylight	Dry	West	Straight	West	Stopped
61	4523653	6/27/2013	16:31	HWY 5	DOUGLAS BLVD	1	0	Rear End	On Roadway	Daylight	Dry	South	Straight	South	Stopped
62	4523647	6/29/2013	14:46	DOUGLAS BLVD	ST RT 5	0	0	Rear End	On Roadway	Daylight	Dry	West	Straight	West	Stopped
63	4562483	7/3/2013	17:55	ST RT 5	DOUGLAS BLVD	0	0	Rear End	On Roadway	Daylight	Wet	North	Turning Right	North	Turning Right
64	4560439	7/7/2013	15:01	SR 5	DOUGLAS BLVD	1	0	Rear End	On Roadway	Daylight	Dry	North	Straight	North	Stopped
65	4560634	7/15/2013	8:59	S R 5	DOUGLAS BLVD	0	0	Rear End	On Roadway	Daylight	Dry	South	Straight		
66	4560633	7/15/2013	14:34	HWY 5	DOUGLAS BLVD	0	0	Rear End	On Roadway	Daylight	Dry	North	Straight	North	Stopped
67	4560538	7/19/2013	16:00	HWY 5	DOUGLAS BLVD	0	0	Rear End	On Roadway	Daylight	Dry	South	Straight	South	Stopped
68	4606403	8/11/2013	17:05	DOUGLAS BLVD	ST RT 5	1	0	Rear End	On Roadway	Daylight	Dry	West	Straight	West	Stopped
69	4608048	8/18/2013	16:36	DOUGLAS BLVD	HWY 5	0	0	Rear End	On Roadway	Daylight	Wet	West	Straight	West	Stopped
70	4606395	8/22/2013	16:07	ST RT 5	DOUGLAS BLVD	0	0	Rear End	On Roadway	Daylight	Dry	North	Straight	North	Stopped
71	4606621	8/22/2013	16:27	ST RT 5	DOUGLAS BLVD	0	0	Rear End	On Roadway	Daylight	Dry	North	Straight	North	Stopped
72	4608205	8/23/2013	10:10	HWY 5	DOUGLAS BLVD	1	0	Rear End	On Roadway	Daylight	Dry	North	Straight	North	Straight
73	4606615	8/30/2013	10:22	DOUGLAS BLVD	ST RT 5	0	0	Rear End	On Roadway	Daylight	Dry	West	Straight	West	Stopped
74	4639305	9/4/2013	16:52	DOUGLAS BLVD	ST RT 5	0	0	Rear End	On Roadway	Daylight	Dry	East	Straight	East	Straight
75	4639299	9/6/2013	14:54	ST RT 5	DOUGLAS BLVD	0	0	Rear End	On Roadway	Daylight	Dry	South		South	Stopped
76	4639267	9/21/2013	17:03	HWY 5	DOUGLAS BLVD	0	0	Rear End	On Roadway	Daylight	Wet	North	Straight	North	Stopped
77	4639265	9/22/2013	16:57	DOUGLAS BLVD	HWY 5	0	0	Rear End	On Roadway	Daylight	Dry	East	Backing	East	Stopped
78	4639255	9/26/2013	6:54	HWY 5 SQ 5	DOUGLAS BLVD	0	0	Rear End	On Roadway	Dark-Lighted	Dry	North		North	Stopped
79	4657921	10/6/2013	13:07	HWY 5	DOUGLAS BLVD	1	0	Rear End	On Roadway	Daylight	Dry	North	Straight	North	Stopped
80	4657725	10/7/2013	15:36	SR 5	DOUGLAS BLVD	3	0	Rear End	On Roadway	Daylight	Dry	North	Straight	North	Stopped
81	4657937	10/11/2013	7:26	ST RT 5	DOUGLAS BLVD	0	0	Rear End	On Roadway	Daylight	Dry	North	Straight	North	Stopped
82	4683015	11/7/2013	22:11	DOUGLAS BLVD	SR 5	0	0	Rear End	On Roadway	Dark-Lighted	Dry	West	Straight	West	Stopped
83	4683014	11/9/2013	20:00	HWY 5	DOUGLAS BLVD	0	0	Rear End	On Roadway	Dark-Lighted	Dry	North	Straight	North	Stopped
84	4683058	11/17/2013	11:39	HWY 5	DOUGLAS BLVD	0	0	Rear End	On Roadway	Daylight	Wet	South	Straight	South	Stopped
85	4683140	11/22/2013	22:03	DOUGLAS BLVD	HWY 5	1	0	Rear End	On Roadway	Dark-Lighted	Wet	East	Turning Left	East	Stopped

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86	4683143	11/22/2013	9:55	HWY 5	DOUGLAS BLVD	0	0	Rear End	On Roadway	Daylight	Dry	North	Straight	North	Stopped
87	4727112	12/3/2013	11:38	DOUGLAS BLVD	HWY 5	0	0	Rear End	On Roadway	Daylight	Wet	West	Straight	West	Stopped
88	4727279	12/11/2013	13:56	DOUGLAS BLVD	HWY 5	0	0	Rear End	On Roadway	Daylight	Dry	East	Straight	East	Stopped
89	4727320	12/14/2013	13:38	DOUGLAS BLVD	ST PT 5	0	0	Rear End	On Roadway			East	Straight	East	Stopped
90	4727317	12/15/2013	18:45	DOUGLAS BLVD	S R 5	0	0	Rear End	On Roadway	Dark-Not Lighte	Dry	West	Straight	West	Stopped
91	4727122	12/20/2013	12:36	DOUGLAS BLVD	ST RT 5	0	0	Rear End	On Roadway	Daylight	Dry	East	Straight	East	Stopped
92	4727223	12/26/2013	16:47	S R 5	DOUGLAS BLVD	0	0	Rear End	On Roadway	Daylight	Dry	North	Straight	North	Stopped
93	4519735	5/11/2013	13:03	DOUGLASBLDG	SR 5	0	0	Sideswipe-Opp	On Roadway	Daylight	Dry	West	Straight	West	Stopped
94	4465926	4/9/2013	15:14	ST RT 5	DOUGLAS BLVD	0	0	Sideswipe-Sam	On Roadway	Daylight	Dry	North	Turning Left	North	Turning Right
95	4519744	5/9/2013	6:50	S R 5	DOUGLAS BLVD	0	0	Sideswipe-Sam	On Roadway	Daylight	Dry	South	Straight	South	Straight
96	4560271	7/5/2013	18:53	9459 HWY 5	DOUGLAS BLVD	0	0	Sideswipe-Sam	On Roadway	Daylight	Wet	South	Changing Lanes	South	Straight
97	4606634	8/9/2013	12:36	DOUGLAS BLVD	SR 5	0	0	Sideswipe-Sam	On Roadway	Daylight	Dry	West	Changing Lanes	West	Straight
98	4608052	8/13/2013	19:13	DOUGLAS BLVD	HWY 5	0	0	Sideswipe-Sam	On Roadway	Daylight	Dry	East	Turning Right	East	Stopped
99	4608038	8/30/2013	19:50	HWY 5	DOUGLAS BLVD	0	0	Sideswipe-Sam	On Roadway	Daylight	Dry	South	Turning Left	South	Turning Left
100	4657918	10/23/2013	11:43	HWY 5 S BOUND	DOUGLAS BLVD	1	0	Sideswipe-Sam	On Roadway	Daylight	Dry	East	Turning Left	East	Turning Left
101	4657655	10/25/2013	15:16	DOUGLAS BLVD	HWY 5	0	0	Sideswipe-Sam	On Roadway	Daylight	Dry	West	Changing Lanes	West	Straight
102	4727335	11/2/2013	22:29	DOUGLAS BLVD	HY5	0	0	Sideswipe-Sam	On Roadway	Dark-Lighted	Wet	West	Straight	West	Straight
103	4727213	12/30/2013	20:01	DOUGLAS BLVD	HWY 5	0	0	Sideswipe-Sam	On Roadway	Dark-Lighted	Wet	East	Straight	East	Straight
104	4606829	8/27/2013	11:39	SR 5	DOUGLAS BLVD	0	0		On Roadway	Daylight	Dry	North	Changing Lanes	North	Changing Lanes
105	4683216	11/9/2013	12:32	DOUGLAS BLVD	ST RT 51	0	0		On Roadway	Daylight	Dry	West	Changing Lanes	West	Straight
1	3639311	1/31/2011	18:53	9607 HIGHWAY 5	ARBOR PKWY	0	0	Angle	On Roadway	Dark-Lighted	Wet	South	Straight	North	Turning Left
2	4000309	12/7/2011	12:22	HWY 5	ARBOR PKWY	0	0	Angle	On Roadway	Daylight	Dry	North	Straight	West	Turning Right
3	3999803	12/23/2011	14:05	ST RT 5	ARBOR PKWY	0	0	Angle	On Roadway	Daylight	Dry	South	Passing	South	Turning Right
4	3849137	8/25/2011	15:25	ARBOR PKWY	SR 5	0	0	Not A Collision	On Roadway	Daylight	Dry	West	Backing	West	Stopped
5	3932374	10/21/2011	15:46	ARBOR PKWY	ST RT 5	0	0	Not A Collision	Off Roadway	Daylight	Dry	West	Straight		
6	3639323	1/26/2011	17:26	ST RT 5	ARBOUR PKWY	0	0	Rear End	On Roadway	Daylight	Dry	North	Backing	North	Stopped
7	3790755	4/21/2011	18:56	9610 HWY 5	ARBOR PKWY	0	0	Rear End	On Roadway	Daylight	Dry	None		None	
8	3790741	4/23/2011	12:29	ST RT 5	ARBOR PKWY	0	0	Rear End	On Roadway	Daylight	Dry	North	Straight	North	Stopped
9	3790790	4/30/2011	10:02	HWY 5	ARBOR PKWY	0	0	Rear End	On Roadway	Daylight	Dry	South	Straight	South	Straight
10	3820407	5/23/2011	16:30	ST RT 5	ARBOR PKWY	0	0	Rear End	On Roadway	Daylight	Dry	North	Straight	North	Stopped
11	3833694	6/1/2011	13:03	HWY 5	ARBOR PKWY	2	0	Rear End	On Roadway	Daylight	Dry	South	Straight	South	Stopped
12	3997115	6/18/2011	14:38	HWY 5	ARBOR PKWY	0	0	Rear End	On Roadway	Daylight	Dry	North	Straight	North	Stopped
13	3997152	6/29/2011	10:43	ST RT 5	ARBOR PKWY	0	0	Rear End	On Roadway	Daylight	Dry	North	Turning Left	North	Straight
14	3865622	7/13/2011	19:39	HWY 5	ARBOR PKWY	0	0	Rear End	On Roadway	Daylight	Dry	South	Straight	South	Stopped
15	3932560	10/2/2011	13:46	HWY 5	ARBOR PKWY	1	0	Rear End	On Roadway	Daylight	Dry	South	Straight	South	Straight
16	3932651	10/13/2011	19:39	HWY 5	ARBOR PKWY	0	0	Rear End	On Roadway	Dark-Lighted	Wet	South	Straight	South	Stopped
17	4000363	12/20/2011	16:10	ST RT 5	ARBOR PKWY	0	0	Rear End	On Roadway	Daylight	Wet	North	Straight	North	Straight
18	3999805	12/23/2011	12:51	ST RT 5	ARBOR PKWY	2	0	Rear End	On Roadway	Daylight	Dry	North	Straight	North	Stopped
19	3996548	12/24/2011	18:52	HWY 5	ARBOR PKWY	0	0	Rear End	On Roadway	Dark-Lighted	Dry	North	Straight	North	Stopped
20	3639253	1/3/2011	13:21	ST RT 5	ARBOR PKWY	0	0	Sideswipe-Sam	On Roadway	Daylight	Dry	West	Changing Lanes	West	Straight
21	3866417	7/27/2011	18:52	HWY 5	ARBOR PKWY	0	0	Sideswipe-Sam	On Roadway	Daylight	Dry	South	Straight	North	Stopped
1	4114469	4/13/2012	18:17	ARBOR PKWY	SR 5	0	0	Angle	On Roadway	Daylight	Dry	West	Entering/Leavir	West	Straight
2	4295952	10/4/2012	5:35	HWY 5	ARBOR PKWY	0	0	Angle	On Roadway	Dark-Lighted	Dry	North	Changing Lanes	North	Straight

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	ACC #	DATE	TIME	STREET A	STREET B	INJURIES	FATALITIES	TP COLLISION	IMPACT	LIGHT	SURFACE	DIR VEH 1	MNVR VEH 1	DIR VEH 2	MNVR VEH 2
3	4150248	5/11/2012	20:10	ARBOR PKWY	SR 5	0	0	Head On	On Roadway	Daylight	Dry	West	Stopped	West	Stopped
4	4296264	10/28/2012	21:23	9607 HWY 5	ARBOR PKWY	1	0	Head On	On Roadway	Dark-Lighted	Dry	North	Straight	South	Turning Left
5	4028000	1/3/2012	23:00	HIGHWAY 5	ARBOR PKWY	0	0	Rear End	On Roadway	Dark-Lighted	Dry	North	Turning Right	North	Straight
6	4028070	1/24/2012	19:25	ST RT 5	ARBOR PKWY	0	0	Rear End	On Roadway	Dark-Lighted	Dry	North	Straight	North	Stopped
7	4092101	3/11/2012	20:54	ST RT 5	ARBOR PKWY	0	0	Rear End	On Roadway	Dark-Lighted	Dry	North	Straight	North	Stopped
8	4149891	5/31/2012	15:19	ST RD 5	ARBOR PKWY	0	0	Rear End	On Roadway	Daylight	Dry	North	Straight	North	Stopped
9	4208652	7/9/2012	16:33	ST RT 5	ARBOR PKWY	0	0	Rear End	On Roadway	Daylight	Dry	North	Straight	North	Stopped
10	4208659	7/17/2012	17:42	SR 5	ARBOR PKWY	0	0	Rear End	On Roadway	Daylight	Wet	North	Straight	South	Stopped
11	4244219	8/11/2012	12:57	SR 5	ARBOR PKWY	0	0	Rear End	On Roadway	Daylight	Dry	North	Straight	North	Stopped
12	4295961	10/1/2012	16:51	ST RT 5	ARBOR PKWY	0	0	Rear End	On Roadway	Daylight	Wet	South	Straight	South	Turning Right
13	4353362	12/14/2012	18:31	ARBOR PKWY	ST RT 5	0	0	Rear End	On Roadway	Dark-Not Lighte	Dry	North	Straight	North	Stopped
14	4353289	12/21/2012	10:48	HWY 5	ARBOR PKWY	1	0	Rear End	On Roadway	Daylight	Dry	North	Straight	North	Stopped
15	4114492	4/9/2012	21:29	HWY 5	ARBOR PKWY	0	0	Sideswipe-Sam	On Roadway	Dark-Not Lighte	Dry	North	Changing Lanes	North	Changing Lanes
16	4244195	8/16/2012	19:39	HWY 5	ARBOR PKWY	0	0	Sideswipe-Sam	On Roadway	Daylight	Dry	North	Changing Lanes	North	Straight
17	4353368	12/5/2012	15:55	ST RT 5	ARBOR PKWY	0	0	Sideswipe-Sam	On Roadway	Daylight	Dry	North	Changing Lanes	North	Stopped
1	4373600	1/7/2013	14:55	ST RT 5	ARBOR PKWY	0	0	Rear End	On Roadway	Daylight	Dry	South	Straight	South	Straight
2	4446340	3/24/2013	13:05	ST RT 5	ARBOR PKWY	0	0	Angle	On Roadway	Daylight	Wet	North	Turning Right	North	Straight
3	4465684	4/6/2013	13:48	RT 5	ARBOR PKWY	0	0	Angle	On Roadway	Daylight	Dry	North	Changing Lanes	North	Straight
4	4523610	6/17/2013	14:35	ST RT 5	ARBOR PKWY	0	0	Angle	On Roadway	Daylight	Dry	West	Turning Right	North	Straight
5	4606844	8/9/2013	15:50	STRT 5	ARBOR PLACE BLVD	0	0	Angle	On Roadway	Daylight	Dry	North	Backing	North	Stopped
6	4657706	10/17/2013	13:05	HWY 5	ARBOR PKWY	0	0	Angle	On Roadway	Daylight	Wet	North	Turning Right	North	Straight
7	4683016	11/7/2013	18:30	HWY 5	ARBOR PKWY	0	0	Angle	On Roadway	Dark-Lighted	Dry	South	Turning Left	North	Turning Right
8	4465997	4/29/2013	16:35	HWY 5	ARBER PKWY	0	0	Rear End	On Roadway	Daylight	Dry	North	Straight	North	Stopped
9	4560370	7/10/2013	15:50	ST RT 5	ARBOR PKWY	0	0	Rear End	On Roadway	Daylight	Dry	North	Straight	North	Stopped
10	4606636	8/8/2013	18:13	RT 5	ARBOR PKWY	0	0	Rear End	On Roadway	Daylight	Wet	South	Straight	South	Stopped
11	4606620	8/23/2013	14:42	ST RT 5	ARBOR PKWY	0	0	Rear End	On Roadway	Daylight	Dry	North	Stopped	North	Straight
12	4657949	10/17/2013	16:50	STRT 5	ARBOR PKWY	1	0	Rear End	On Roadway	Daylight	Wet	North	Straight	North	Stopped
13	4683223	11/29/2013	14:32	HWY 5	ARBOR PKWY	0	0	Rear End	On Roadway	Daylight	Dry	North	Straight	North	Stopped
14	4727361	12/19/2013	13:30	ST RT 5	ARBOR PKWY	0	0	Rear End	On Roadway	Daylight	Dry	North	Straight	North	Straight
15	4727375	12/30/2013	12:43	HWY 5	ARBOR PKY	0	0	Rear End	On Roadway	Daylight	Dry	North	Straight	North	Stopped
16	4465905	4/25/2013	13:13	ST AT 5	ARBOR PKWY	0	0	Sideswipe-Sam	On Roadway	Daylight	Dry	South	Changing Lanes	South	Straight
17	4657704	10/18/2013	14:26	ST RT 5	ARBOR PKWY	0	0	Sideswipe-Sam	On Roadway	Daylight	Dry	North	Passing	North	Stopped
18	4683009	11/1/2013	7:57	ST RT 5	ARBOR PKWY	0	0	Sideswipe-Sam	On Roadway	Daylight	Wet	North	Changing Lanes	North	Straight
1	3614321	2/3/2011	20:55	SR 5	I 20	0	0	Angle	On Roadway	Dark-Lighted	Wet	North	Turning Left	South	Straight
2	3670509	2/5/2011	9:08	ST RT 5	1 20	2	0	Angle	On Roadway	Daylight	Wet	East	Turning Left	North	Straight
3	3670492	2/11/2011	6:22	HWY 5	I 20	0	0	Angle	On Roadway	Dark-Not Lighte	Dry	South	Turning Left	North	Straight
4	3670474	2/12/2011	23:37	SR 5	I 20	0	0	Angle	On Roadway	Dark-Lighted	Dry	West	Turning Left	South	Straight
5	3706634	3/18/2011	17:04	JT RT 5	I 20	0	0	Angle	On Roadway	Daylight	Dry	East	Turning Left	North	Straight
6	3706591	3/30/2011	9:36	ST RT 5	I 20	0	0	Angle	On Roadway	Daylight	Wet	North	Straight	West	Straight
7	3821640	5/2/2011	14:38	HWY 5	20 RP	0	0	Angle	On Roadway	Daylight	Dry	North	Straight	West	Turning Left
8	3819724	5/7/2011	13:40	ST RT 5	I 20	2	0	Angle	On Roadway	Daylight	Dry	East	Straight	North	Straight
9	3819717	5/8/2011	21:20	ST RT 5	I 20	1	0	Angle	On Roadway	Dark-Lighted	Dry	East	Turning Left	North	Straight
10	3820402	5/25/2011	9:33	HWY 5	20 RP	0	0	Angle	On Roadway	Daylight	Dry	North	Straight	West	Turning Left

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	ACC #	DATE	TIME	STREET A	STREET B	INJURIES	FATALITIES	TP COLLISION	IMPACT	LIGHT	SURFACE	DIR VEH 1	MNVR VEH 1	DIR VEH 2	MNVR VEH 2
11	3820398	5/26/2011	13:30	HWY 5	20 RP	0	0	Angle	On Roadway	Daylight	Dry	North	Entering/Leavir	North	Straight
12	3865645	7/6/2011	8:20	ST RT 5	1 20	0	0	Angle	On Roadway	Daylight	Dry	North	Straight	East	Turning Left
13	3865627	7/11/2011	14:24	HWY 5	I 20	0	0	Angle	On Roadway	Daylight	Dry	North	Turning Left	South	Stopped
14	3866439	7/17/2011	0:04	SR 5	I 20	1	0	Angle	On Roadway	Dark-Lighted	Dry	South	Turning Left	North	Straight
15	3867418	7/18/2011	14:39	ST RT 5	I 20	0	0	Angle	On Roadway	Daylight	Dry	East	Turning Left	South	Straight
16	3978270	8/15/2011	6:25	STRT 5	I 20	1	0	Angle	On Roadway	Daylight	Dry	South	Turning Left	North	Straight
17	3977975	8/21/2011	14:18	ST RT 5	I 20	1	0	Angle	On Roadway	Daylight	Dry	East	Turning Left	North	Turning Left
18	3932684	9/17/2011	14:03	ST RT 5	I 20	0	0	Angle	On Roadway	Daylight	Dry	North	Turning Right	North	Straight
19	4000365	12/20/2011	15:30	HWY 5	I 20	0	0	Angle	On Roadway	Daylight	Wet	East	Turning Left	South	Straight
20	3955325	12/23/2011	20:00	SR 5	I 20	1	0	Angle	On Roadway	Dark-Not Lighte	Dry	North	Straight	West	Turning Left
21	3639284	1/14/2011	22:57	34 EBI20	ST RT 5	0	0	Not A Collision	Off Roadway	Dark-Not Lighte	Icy	East	Changing Lanes	None	
22	3639274	1/16/2011	22:06	34 EBI20	HWY 5	2	0	Not A Collision	On Roadway	Dark-Lighted	Icy	East	Straight	None	
23	3639330	1/25/2011	3:41	34 EBI20	HWY 5	0	0	Not A Collision	On Shoulder	Dark-Not Lighte	Dry	East	Changing Lanes	None	
24	3670503	2/5/2011	19:25	SR 5	I 20	1	0	Rear End	On Roadway	Dark-Lighted	Dry	South	Turning Right	South	Stopped
25	3706684	3/7/2011	17:28	ST RT 5	I 20	0	0	Rear End	On Roadway	Daylight	Dry	South	Straight	South	Stopped
26	3706666	3/12/2011	14:05	EXIT EXIT 34 RP	HWY 5	0	0	Rear End	On Roadway	Daylight	Dry	East	Turning Right	East	Turning Right
27	3706584	3/31/2011	17:57	HWY 5	I 20	0	0	Rear End	On Roadway	Daylight	Dry	South	Straight	South	Stopped
28	3790762	4/20/2011	12:37	ST RT 5	I 20	1	0	Rear End	On Roadway	Daylight	Dry	South	Straight	South	Stopped
29	3790744	4/23/2011	3:05	HWY 5	I 20	0	0	Rear End	On Roadway	Dark-Lighted	Wet	South	Straight	South	Stopped
30	3790793	4/29/2011	19:53	SR 5	I 20	0	0	Rear End	On Roadway	Daylight	Dry	North	Straight	North	Stopped
31	3819739	5/6/2011	6:42	SR 5	I 20	1	0	Rear End	On Roadway	Daylight	Dry	North	Straight	North	Stopped
32	3819704	5/13/2011	15:58	ST RT 5	I 20	0	0	Rear End	On Roadway	Daylight	Wet	South	Straight	South	Stopped
33	3997304	6/10/2011	11:46	E20 E EXIT RP	HWY 5	0	0	Rear End	On Roadway	Daylight	Dry	East	Straight	East	Stopped
34	3997296	6/12/2011	11:24	HWY 5	I 20	0	0	Rear End	On Roadway	Daylight	Dry	North	Straight	North	Stopped
35	3997126	6/17/2011	1:28	HWY 5	20 RP	0	0	Rear End	On Roadway	Dark-Lighted	Dry	South	Straight	South	Stopped
36	3867740	7/15/2011	17:51	ST RT 5	I 20	0	0	Rear End	On Roadway	Daylight	Dry	South	Straight	South	Stopped
37	3866437	7/17/2011	15:42	HWY 5	I 20	0	0	Rear End	On Roadway	Daylight	Dry	North	Straight	North	Stopped
38	3978241	8/4/2011	16:57	ST RT 5	I 20	1	0	Rear End	On Roadway	Daylight	Wet	North	Straight	North	Stopped
39	3932682	9/18/2011	15:51	ST RT 5	I 20	0	0	Rear End	On Roadway	Daylight	Dry	South	Straight	South	Stopped
40	3932577	10/5/2011	16:08	ST RT 5	I 20	2	0	Rear End	On Roadway	Daylight	Dry	South	Straight	South	
41	3932653	10/13/2011	17:19	HWY 5	I 20	0	0	Rear End	On Roadway	Daylight	Wet	South	Straight	South	Stopped
42	3981879	11/12/2011	11:53	ST RT 5	I 20	0	0	Rear End	On Roadway	Daylight	Dry	North	Straight	North	Stopped
43	3981984	11/19/2011	8:01	HWY 5	I 20	0	0	Rear End	On Roadway	Daylight	Dry	West	Turning Right	West	Turning Right
44	4000379	12/17/2011	14:43	HWY 5	20 RP	0	0	Rear End	On Roadway	Daylight	Dry	South	Straight	South	Stopped
45	4000369	12/20/2011	13:51	HWY 5	I 20	0	0	Rear End	On Roadway	Daylight	Wet	South	Straight	South	Stopped
46	4000355	12/21/2011	18:06	ST RT 5	I 20	0	0	Rear End	On Roadway	Dark-Not Lighte	Wet	South	Straight	South	Stopped
47	4000352	12/22/2011	7:30	ST RT 5	I 20	0	0	Rear End	On Roadway	Daylight	Wet	North	Straight	North	Stopped
48	3996546	12/24/2011	19:58	34 WBI20	HWY 5	0	0	Rear End	On Roadway	Dark-Lighted	Dry	West	Turning Right	West	Turning Right
49	3670513	2/4/2011	16:27	HWY 5	I 20	0	0	Sideswipe-Sam	On Roadway	Daylight	Wet	South	Changing Lanes	South	Straight
50	3706678	3/8/2011	12:27	ST RT 5	I 20	0	0	Sideswipe-Sam	On Roadway	Daylight	Dry	North	Straight	North	Changing Lanes
51	3706662	3/13/2011	15:55	ST RT 5	I 20	1	0	Sideswipe-Sam	On Roadway	Daylight	Dry	East		South	Straight
52	3819750	5/3/2011	20:25	HWY 5	I 20	0	0	Sideswipe-Sam	On Roadway	Dark-Lighted	Wet	South	Changing Lanes	South	Straight
53	3977980	8/20/2011	15:07	ST RD5	I 20	0	0	Sideswipe-Sam	On Roadway	Daylight	Dry	North	Changing Lanes	North	Straight
54	3932369	10/22/2011	13:31	ST RT 5	I 20	0	0	Sideswipe-Sam	On Roadway	Daylight	Dry	South	Changing Lanes	South	Straight
1	4028031	1/13/2012	16:00	ST RT 5	I 20	0	0	Angle	On Roadway	Daylight	Dry	East	Turning Right	South	Straight

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	ACC #	DATE	TIME	STREET A	STREET B	INJURIES	FATALITIES	TP COLLISION	IMPACT	LIGHT	SURFACE	DIR VEH 1	MNVR VEH 1	DIR VEH 2	MNVR VEH 2
2	4028045	1/16/2012	17:52	SR 5	I 20	0	0	Angle	On Roadway	Daylight	Dry	South	Turning Left	North	Straight
3	4028102	1/31/2012	6:30	ST RT 5	I 20	1	0	Angle	On Roadway	Dark-Lighted	Dry	East	Turning Left	North	Straight
4	4056466	2/14/2012	19:21	SR 5	I 20	0	0	Angle	On Roadway	Dark-Not Lighte	Dry	None	Straight	North	Turning Left
5	4114506	4/5/2012	6:17	HWY 5	I 20	2	0	Angle	On Roadway	Dark-Lighted	Dry	East	Turning Left	North	Straight
6	4114431	4/12/2012	16:35	ST RT5	I 20	0	0	Angle	On Roadway	Daylight	Dry	West	Turning Left	South	Straight
7	4114419	4/23/2012	11:38	S R 5	I 20	0	0	Angle	On Roadway	Daylight	Dry	South	Turning Left	South	Turning Left
8	4092592	5/17/2012	6:00	HWY 5 I20 E ENTRANCE RP		1	0	Angle	On Roadway	Dark-Not Lighte	Dry	South	Turning Left	North	Straight
9	4161821	6/10/2012	1:32	HWY 5	I 20	0	0	Angle	On Roadway	Dark-Lighted	Wet	West		South	Straight
10	4162227	6/19/2012	10:33	ST RT 5	1 20	1	0	Angle	On Roadway	Daylight	Dry	West	Turning Right	North	Straight
11	4210223	7/12/2012	9:18	HWY 5	I 20	0	0	Angle	On Roadway	Daylight	Wet	North	Straight	West	Turning Left
12	4210213	7/14/2012	22:22	HWY 5	I 20	0	0	Angle	On Roadway	Dark-Lighted	Wet	East	Turning Left	North	Straight
13	4208627	7/31/2012	6:54	ST RT 5	I 20	2	0	Angle	On Roadway	Daylight	Dry	South	Turning Left	North	Straight
14	4244247	8/5/2012	17:11	ST RD 5	I 20	1	0	Angle	On Roadway	Daylight	Dry	North	Turning Left	South	Straight
15	4244245	8/6/2012	7:27	HWY 5	I 20	0	0	Angle	On Roadway	Daylight	Dry	North	Turning Right	North	Straight
16	4296243	10/1/2012	16:38	ST RT 5	I 20	0	0	Angle	On Roadway	Daylight	Wet	East	Backing	South	Stopped
17	4295941	10/9/2012	20:05	SR 5	I 20	2	0	Angle	On Roadway	Dark-Lighted	Dry	East	Turning Left	North	Straight
18	4296217	10/15/2012	6:41	HWY 5	I 20	2	0	Angle	On Roadway	Dark-Lighted	Wet	South	Turning Left	North	Straight
19	4326298	11/4/2012	12:24	SR 5	I 20	0	0	Angle	On Roadway	Daylight	Wet	North	Making U-turn	South	Straight
20	4352848	12/7/2012	18:38	HWY 5	20 RP	0	0	Angle	On Roadway	Dark-Lighted	Dry	South	Turning Left	North	Straight
21	4352951	12/7/2012	19:35	HWY 5	20 RP	0	0	Angle	On Roadway	Dark-Lighted	Dry	South	Turning Left	North	Straight
22	4028005	1/8/2012	16:24	ST RT 5	I 20	0	0	Not A Collision	Off Roadway	Daylight	Wet	East	Turning Left		
23	4279225	9/14/2012	21:06	HWY 5	20 RP	0	0	Not A Collision	On Roadway	Dark-Lighted	Dry	South	Turning Right		
24	4295979	10/26/2012	3:18	HWY 5	I 20	0	0	Not A Collision	Off Roadway	Dark-Lighted	Dry	East	Turning Right		
25	4326301	11/26/2012	18:41	34 EBI20	HWY 5	1	0	Not A Collision	On Roadway	Dark-Not Lighte	Dry	East	Changing Lanes		
26	4028033	1/12/2012	6:53	ST RT 5	I 20	0	0	Rear End	On Roadway	Dark-Lighted	Wet	North	Straight	North	Stopped
27	4054201	2/28/2012	11:00	HWY 5	I 20	0	0	Rear End	On Roadway	Daylight	Wet	South	Stopped	South	Straight
28	4092427	3/2/2012	7:42	ST RT 5	I 20	0	0	Rear End	On Roadway	Daylight	Dry	East	Straight	East	Stopped
29	4092081	3/15/2012	16:31	HWY 5	I 20	0	0	Rear End	On Roadway	Daylight	Wet	North	Straight	North	Stopped
30	4092443	3/30/2012	20:37	34 WBI20	HWY 5	0	0	Rear End	On Roadway	Dark-Lighted	Wet	West	Straight	West	Stopped
31	4150265	5/15/2012	12:27	ST RT 5	I 20	0	0	Rear End	On Roadway	Daylight	Dry	South	Straight	South	Stopped
32	4149860	5/23/2012	16:41	34 OFF RP	HWY 5	0	0	Rear End	On Roadway	Daylight	Dry	West	Straight	West	Stopped
33	4161801	6/5/2012	17:32	SR 5	I 20	0	0	Rear End	On Roadway	Daylight	Dry	South	Straight	South	Stopped
34	4161843	6/14/2012	17:56	ST RT 5	I 20	1	0	Rear End	On Roadway	Daylight	Dry	South	Straight	South	Stopped
35	4120182	6/18/2012	9:18	20 EXIT 34 RP	SR 5	0	0	Rear End	On Roadway	Daylight	Dry	East	Straight	East	Stopped
36	4210237	7/7/2012	17:25	SR 5	I 20	0	0	Rear End	On Roadway	Daylight	Dry	North	Straight	North	Stopped
37	4244255	8/3/2012	17:21	HWY 5	I 20	0	0	Rear End	On Roadway	Daylight	Dry	South	Straight	South	Straight
38	4244871	8/27/2012	6:58	ST RY 5	I 20	0	0	Rear End	On Roadway	Daylight	Dry	East	Straight	East	Stopped
39	4279234	9/13/2012	13:10	SR 5	I 20	0	0	Rear End	On Roadway	Daylight	Dry	South	Turning Right	South	Stopped
40	4325753	11/30/2012	7:13	ST RT 5	I 20	0	0	Rear End	On Roadway	Daylight	Dry	South	Straight	South	Stopped
41	4353519	12/15/2012	12:30	ST RT 5	I 20	0	0	Rear End	On Roadway	Daylight	Dry	South	Straight	South	Stopped
42	4353518	12/16/2012	10:30	ST RT 5	I 20	0	0	Rear End	On Roadway	Daylight	Dry	South	Straight	South	Straight
43	4353200	12/20/2012	18:14	EXIT RP	ST RT 5	0	0	Rear End	On Roadway	Dark-Not Lighte	Wet	North	Turning Right	North	Stopped
44	4352890	12/22/2012	14:27	HWY 5	I 20	0	0	Rear End	On Roadway	Daylight	Dry	North	Straight	North	Turning Left
45	4054154	2/15/2012	9:59	ST RT 5	I 20	1	0	Sideswipe-Sam	On Roadway	Daylight	Dry	South	Straight	South	Straight
46	4114445	4/16/2012	13:49	STRT 5	I 20	0	0	Sideswipe-Sam	On Roadway	Daylight	Dry	North	Turning Right	North	Straight

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	ACC #	DATE	TIME	STREET A	STREET B	INJURIES	FATALITIES	TP COLLISION	IMPACT	LIGHT	SURFACE	DIR VEH 1	MNVR VEH 1	DIR VEH 2	MNVR VEH 2
47	4150273	5/13/2012	10:53	SR 5	I 20	0	0	Sideswipe-Sam	On Roadway	Daylight	Wet	South	Passing	South	Straight
48	4295958	10/2/2012	8:24	ST RT 5	I 20	0	0	Sideswipe-Sam	On Roadway	Daylight	Dry	South	Changing Lanes	South	Straight
1	4372875	1/7/2013	7:07	HWY 5	I 20	1	0	Angle	On Roadway	Dawn	Dry	South	Turning Left	North	Straight
2	4465904	4/26/2013	17:47	ST RT 5	I 20	0	0	Angle	On Roadway	Daylight	Dry	South	Straight	South	Changing Lanes
3	4519729	5/1/2013	21:47	HWY 5	I 20	0	0	Angle	On Roadway	Dark-Lighted	Dry	North	Turning Left	South	Straight
4	4519543	5/9/2013	19:34	ST RT 5	I 20	1	0	Angle	On Roadway	Daylight	Dry	East	Turning Left	North	Straight
5	4560548	7/7/2013	14:11	ST RT 5	I 20	0	0	Angle	On Roadway	Daylight	Wet	West	Turning Left	South	Straight
6	4606626	8/16/2013	17:35	ST RT 5	I 20	0	0	Angle	On Roadway	Daylight	Dry	South	Turning Left	North	Straight
7	4657963	10/12/2013	15:11	ST RT 5	I 20	0	0	Angle	On Roadway	Daylight	Dry	East	Turning Left	North	
8	4682889	11/1/2013	12:51	EXIT 34 OFF RP	HWY 5	1	0	Angle	On Roadway	Daylight	Dry	South	Straight	East	Turning Left
9	4683185	11/8/2013	11:23	SR 5	I 20	0	0	Angle	On Roadway	Daylight	Dry	West	Turning Right	North	Straight
10	4683228	11/18/2013	21:52	HWY 5	I 20	1	0	Angle	On Roadway	Dark-Lighted	Dry	South	Straight	East	Turning Left
11	4727095	12/6/2013	23:30	HWY 5	I 20	2	0	Angle	On Roadway	Dark-Lighted	Wet	North	Turning Left	South	Straight
12	4727363	12/19/2013	7:40	ST RT 5	I 20	2	0	Angle	On Roadway	Daylight	Dry	East	Turning Left	South	Straight
13	4727224	12/26/2013	13:04	HWY 5	I 20	1	0	Angle	On Roadway	Daylight	Dry	West	Turning Left	South	Straight
14	4409618	2/22/2013	0:15	HWY 5	I 20	0	0	Not A Collision	On Roadway	Dark-Lighted	Wet	North	Straight		
15	4373597	1/2/2013	5:59	HWY 5	I 20	1	0	Rear End	On Roadway	Dark-Lighted	Wet	North	Straight	North	Stopped
16	4372907	1/11/2013	6:30	SR 5	I 20	0	0	Rear End	On Roadway	Dark-Lighted	Wet	North	Straight	North	Straight
17	4373298	1/19/2013	16:01	ST RT5	I 20	0	0	Rear End	On Roadway	Daylight	Dry	South	Changing Lanes	South	Stopped
18	4446041	3/6/2013	14:51	34 EVBI20	HWY5	0	0	Rear End	Ramp	Daylight	Dry	South	Straight	South	Stopped
19	4465891	4/6/2013	19:11	HWY 5	I 20	0	0	Rear End	On Roadway	Daylight	Dry	North	Backing	South	Stopped
20	4465663	4/29/2013	10:30	HWY 5	I 20	1	0	Rear End	On Roadway	Daylight	Dry	South	Straight	South	Stopped
21	4519562	5/15/2013	11:12	HWY 5	I 20	0	0	Rear End	On Roadway	Daylight	Dry	North	Turning Left	North	Stopped
22	4523538	6/26/2013	7:00	HWY 5	I 20	0	0	Rear End	On Roadway	Daylight	Wet	North	Turning Right	North	Turning Right
23	4606407	8/6/2013	13:32	HWY 5	I 20	0	0	Rear End	On Roadway	Daylight	Dry	North	Straight	North	Stopped
24	4606405	8/8/2013	11:20	ST RT 5	I 20	0	0	Rear End	On Roadway	Daylight	Dry	South	Stopped	South	Straight
25	4639281	9/16/2013	12:37	34 WBI20	HWY 5	0	0	Rear End	Ramp	Daylight	Dry	West	Turning Right	West	Turning Right
26	4639058	9/18/2013	21:00	34 OFF RP	HWY 5	0	0	Rear End	Ramp	Daylight	Dry	West	Turning Right	West	Stopped
27	4639050	9/21/2013	11:44	HWY 5	I 20	0	0	Rear End	On Roadway	Daylight	Wet	North	Straight	North	Straight
28	4639045	9/23/2013	14:31	ST RT 5	I 20	0	0	Rear End	On Roadway	Daylight	Dry	South	Stopped	South	Stopped
29	4639037	9/30/2013	15:50	ST RT 5	I 2	0	0	Rear End	On Roadway	Daylight	Dry	North	Straight	North	Stopped
30	4657925	10/5/2013	13:17	HWY 5	I 20	1	0	Rear End	On Roadway	Daylight	Dry	South	Straight	South	Straight
31	4657703	10/19/2013	14:28	34 WBI20	HWY 5	0	0	Rear End	On Roadway	Daylight	Wet	West	Straight	West	Straight
32	4683024	11/1/2013	6:55	HWY 5	I 20	0	0	Rear End	On Roadway	Dark-Not Lighte	Wet	North	Straight	North	Straight
33	4683005	11/5/2013	7:57	ST RT 5	I 20	0	0	Rear End	On Roadway	Daylight	Dry	West	Straight	West	Stopped
34	4683221	11/25/2013	12:54	ST RT 5	I 20	0	0	Rear End	On Roadway	Daylight	Dry	North	Stopped	North	Stopped
35	4727340	12/1/2013	18:04	ST RT 5	I 20	0	0	Rear End	On Roadway	Dark-Lighted	Dry	North	Straight	North	Stopped
36	4727124	12/19/2013	12:39	ST RD 5	I 20	0	0	Rear End	On Roadway	Daylight	Dry	South	Straight	South	Stopped
37	4727180	12/19/2013	16:37	34 WBI20	S R 5	0	0	Rear End	On Roadway	Daylight	Dry	West	Straight	West	Straight
38	4727358	12/20/2013	13:28	ST RT 5	I 20	0	0	Rear End	On Roadway	Daylight	Dry	South	Straight	South	Stopped
39	4727130	12/31/2013	7:13	ST RT 5	I 20	0	0	Rear End	On Roadway	Dawn	Dry	East	Straight	East	Stopped
40	4657965	10/11/2013	17:12	HWY 5	I 20	0	0	Sideswipe-Opp	On Roadway	Daylight	Dry	East	Turning Left	North	Stopped
41	4657919	10/31/2013	19:23	HWY 5	I 20	0	0	Sideswipe-Opp	On Roadway	Dark-Lighted	Dry	South	Turning Left	North	Straight
42	4519541	5/31/2013	9:45	ST RT 5	I 20	0	0	Sideswipe-Sam	On Roadway	Daylight	Dry	South	Changing Lanes	South	Straight
43	4523591	6/5/2013	14:24	ST RT 5	I 20	0	0	Sideswipe-Sam	On Roadway	Daylight	Dry	South	Stopped	South	Straight

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	ACC #	DATE	TIME	STREET A	STREET B	INJURIES	FATALITIES	TP COLLISION	IMPACT	LIGHT	SURFACE	DIR VEH 1	MNVR VEH 1	DIR VEH 2	MNVR VEH 2
44	4523627	6/13/2013	17:01	HWY 5	I 20	0	0	Sideswipe-Sam	On Roadway	Daylight	Dry	South	Changing Lanes	South	Straight
45	4560375	7/20/2013	16:12	ST RT 5	I 20	0	0	Sideswipe-Sam	On Roadway	Daylight	Wet	South	Turning Left	South	Turning Left
1	3639249	1/4/2011	15:41	STEWART PKWY	ST RT 5	0	0	Angle	On Roadway	Daylight	Dry	East	Turning Left	West	Turning Left
2	3829379	8/1/2011	14:07	SR 5	W STEWARTS MILL RD	3	0	Angle	On Roadway	Daylight	Dry	North	Straight	East	Straight
3	3932472	9/21/2011	18:15	STEWART PKWY	HWY 5	0	0	Angle	On Shoulder	Daylight	Dry	West	Entering/Leavir	West	Changing Lanes
4	3932441	9/26/2011	12:33	STEWART PKWY	HWY 5	0	0	Angle	On Roadway	Daylight	Dry	South	Turning Left	East	Straight
5	3932650	10/14/2011	7:28	STEWART PKWY	HWY 5	0	0	Angle	On Roadway	Daylight	Dry	East	Entering/Leavir	East	Straight
6	3819741	5/5/2011	19:06	ST RT 5	STEWART PKWAY	0	0	Rear End	On Roadway	Daylight	Dry	South	Turning Right	South	Turning Right
7	3977955	8/27/2011	12:25	ST RT 5	W STEWARTS MILL RD	0	0	Rear End	On Roadway	Daylight	Dry	North	Straight	North	Straight
1	4056470	2/4/2012	14:10	STEWART PKWY	HWY 5	0	0	Angle	On Roadway	Daylight	Dry	East	Turning Left	West	Straight
2	4150264	5/16/2012	17:11	STEWART PKWY	ST RT 5	0	0	Angle	On Roadway	Daylight	Dry	East	Turning Left	East	Straight
3	4162229	6/18/2012	17:09	STEWART PKWY	ST RT 5	0	0	Angle	On Roadway	Daylight	Dry	South	Turning Left	West	Straight
4	4295954	10/2/2012	17:06	STEWART PKWY	ST RT 5	0	0	Angle	On Roadway	Daylight	Dry	South	Turning Left	East	Straight
5	4247589	11/5/2012	13:34	SR 5	W STEWARTS MILL RD	0	0	Angle	On Roadway	Daylight	Dry	East	Turning Left	West	Straight
6	4326309	11/15/2012	13:01	STEWART PKWY	HWY 5	0	0	Angle	On Roadway	Daylight	Dry	West	Changing Lanes	East	Stopped
7	4054145	2/2/2012	20:07	HWY5	STEWART PKWY	1	0	Rear End	On Roadway	Dark-Lighted	Dry	South	Straight	South	Stopped
8	4117790	5/26/2012	14:37	HWY 5	W STEWART MILL RD	0	0	Rear End	On Roadway	Daylight	Dry	North	Straight	North	Straight
9	4160989	7/24/2012	19:50	W STEWARTS MILL RD	SR 5	0	0	Rear End	On Roadway	Daylight	Dry	West	Straight	West	Stopped
10	4244234	8/7/2012	16:41	ST RT 5	STRWART PKWY	0	0	Rear End	On Roadway	Daylight	Wet	North	Straight	North	Stopped
11	4244357	8/22/2012	8:56	STEWART PKY	ST RD 5	2	0	Rear End	On Roadway	Daylight	Dry	East	Straight	East	Stopped
12	4353523	12/7/2012	15:29	STEWART PKWY	SR 5	0	0	Rear End	On Roadway	Daylight	Dry	East	Straight	East	Straight
13	4008305	2/18/2012	19:00	HWY 5 N OF W STEWARTS MILL RD		0	0	Sideswipe-Sam	On Roadway	Dark-Not Lighte	Wet	South	Straight	South	Stopped
14	4114516	4/2/2012	10:37	STEWART PKWY	SR 5	0	0	Sideswipe-Sam	On Roadway	Daylight	Dry	East	Changing Lanes	West	Straight
15	4244893	8/20/2012	15:11	STEWART PKWY	HWY 5	0	0	Sideswipe-Sam	On Roadway	Daylight	Dry	East	Changing Lanes	East	Straight
16	4295982	10/23/2012	23:21	STEWART PKWY	SR 5	0	0	Sideswipe-Sam	On Roadway	Dark-Lighted	Dry	East	Changing Lanes	East	Straight
17	4325477	11/8/2012	20:42	STEWART PKWY	HWY 5	0	0	Sideswipe-Sam	On Roadway	Dark-Lighted	Dry	East	Turning Left	East	Straight
1	4323198	1/7/2013	16:20	SR 5	W STEWARTS MILL RD	1	0	Angle	On Roadway	Daylight	Dry	North	Straight	East	Straight
2	4409044	2/7/2013	12:19	STEWART PKWY	ST RT 5	0	0	Angle	On Roadway	Daylight	Wet	West	Turning Right	West	Straight
3	4446261	3/9/2013	22:08	STEWART PKWY	HWY 5	0	0	Angle	On Roadway	Dark-Lighted	Dry	West	Entering/Leavir	West	Turning Left
4	4465901	4/29/2013	13:39	STEWART PKWY	S R 5	0	0	Angle	On Roadway	Daylight	Dry	South	Turning Left	East	Stopped
5	4519736	5/10/2013	21:35	STEWART PKWY	HWY 5	0	0	Angle	On Roadway	Dark-Lighted	Dry	South	Turning Left	East	Straight
6	4560272	7/3/2013	22:52	STEWART PKWY	HWY5	1	0	Angle	On Roadway	Dark-Lighted	Wet	North	Entering/Leavir	West	Straight
7	4606392	8/30/2013	12:22	STEWART PKWY	ST RT 5	0	0	Angle	On Roadway	Daylight	Dry	East	Entering/Leavir	East	Straight
8	4615401	10/16/2013	21:25	SR 5	W STEWARTS MILL RD	3	0	Angle	On Roadway	Dark-Not Lighte	Dry	South	Straight	West	Straight
9	4606622	8/22/2013	16:01	STEWART PKWY	SR 5	0	0	Head On	On Roadway	Daylight	Dry	West	Turning Left	None	Turning Left
10	4727098	12/22/2013	1:59	6150 STEWART PKWY	DOUGLAS BLVD	0	0	Not A Collision	On Shoulder	Dark-Not Lighte	Wet	North	Negotiating A Curve		
11	4423725	4/19/2013	10:48	SR 5	STEWART PKWY	0	0	Rear End	On Roadway	Daylight	Wet	South	Stopped	South	Stopped
12	4519758	5/13/2013	19:19	HIGHWAY 5	STEWART PKWY	0	0	Rear End	On Roadway	Daylight	Dry	South	Straight	South	Straight
13	4523604	6/20/2013	11:05	STEWART PKWY	SR 5	0	0	Rear End	On Roadway	Daylight	Dry	West	Straight	West	Stopped
14	4560281	7/16/2013	20:46	STEWART PKWY	HWY 5	0	0	Rear End	On Roadway	Dusk	Dry	East	Straight	East	Straight
15	4557260	8/30/2013	22:05	SR 5	STEWART PKWY	0	0	Rear End	On Roadway	Dark-Not Lighte	Dry	South	Stopped		
16	4657668	10/7/2013	10:44	STEWART PKWY	HIGHWAY 5	0	0	Rear End	On Roadway	Daylight	Dry	East	Straight	East	Turning Right
17	4657938	10/7/2013	19:43	STEWART PKWY	HWY 5	0	0	Rear End	On Roadway	Dark-Lighted	Dry	East	Turning Left	East	Turning Left

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	ACC #	DATE	TIME	STREET A	STREET B	INJURIES	FATALITIES	TP COLLISION	IMPACT	LIGHT	SURFACE	DIR VEH 1	MNVR VEH 1	DIR VEH 2	MNVR VEH 2
18	4630458	11/2/2013	14:41	W STEWARTS MILL RD	SR 5	0	0	Rear End	On Roadway	Daylight	Dry	West	Straight	West	Straight
19	4661068	11/25/2013	10:10	W STEWARTS MILL RD AT SR5		0	0	Rear End	On Roadway	Daylight	Dry	West	Turning Right	West	Stopped
20	4661068	11/25/2013	10:10	W STEWARTS MILL RD AT SR5		0	0	Rear End	On Roadway	Daylight	Dry	West	Turning Right	West	Stopped
21	4727319	12/14/2013	17:57	SR 5	W STRWANT MILL RD	0	0	Rear End	On Roadway	Dark-Lighted	Mud	North	Straight	North	Stopped
22	4560533	7/10/2013	13:02	STEWART PKWY	ST RT 5	1	0	Sideswipe-Sam	On Roadway	Daylight	Dry	East	Entering/Leavir	East	Straight
23	4727110	12/10/2013	15:07	STEWART PKWY	ST RT 5	0	0	Sideswipe-Sam	On Roadway	Daylight	Dry	East	Changing Lanes	East	Straight
24	4727278	12/11/2013	14:12	STEWART PKWY	HWY 5	2	0	Sideswipe-Sam	On Roadway	Daylight	Dry	East	Turning Left	East	Straight

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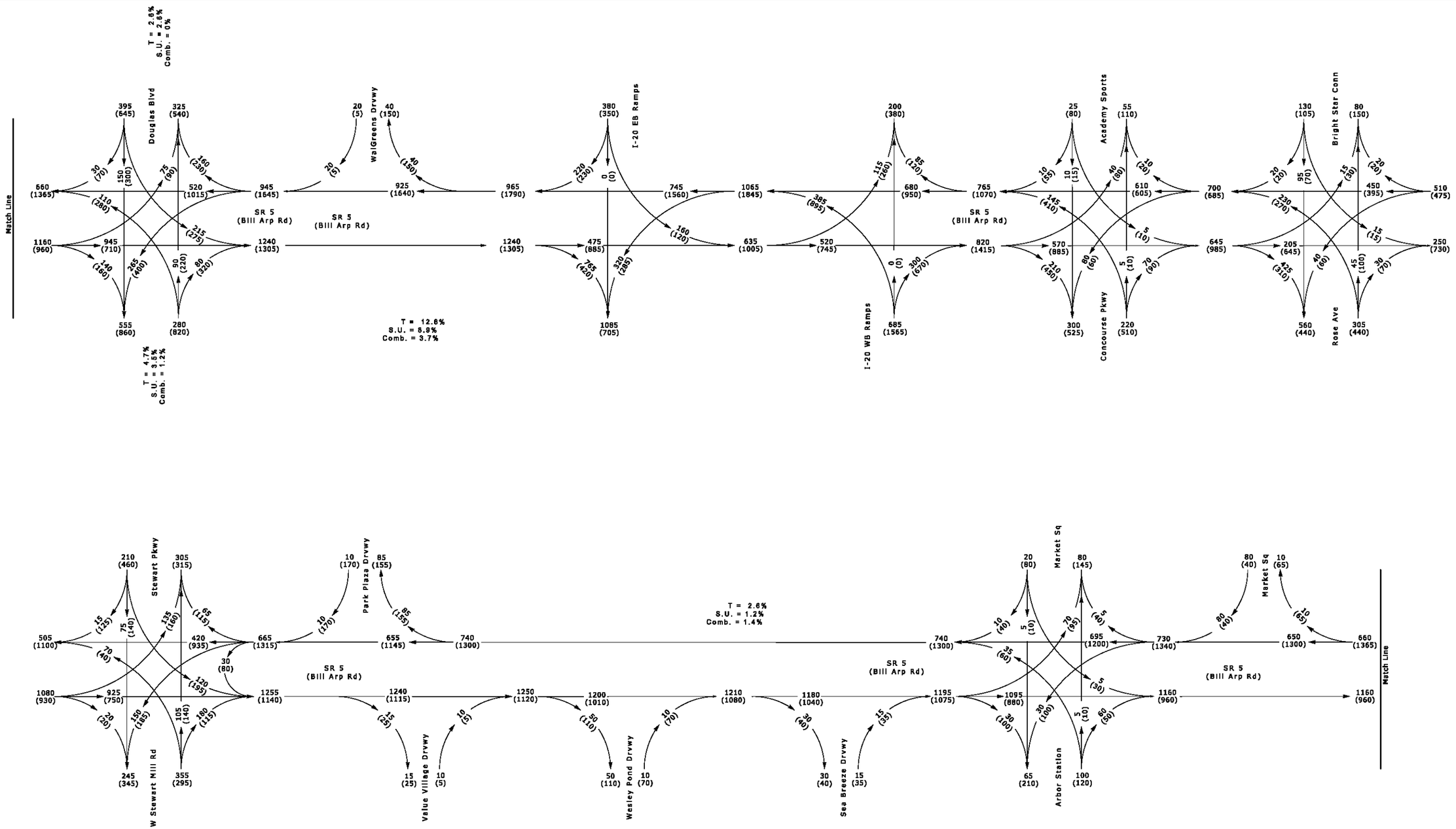
ATTACHMENT 4

TRAFFIC DIAGRAMS

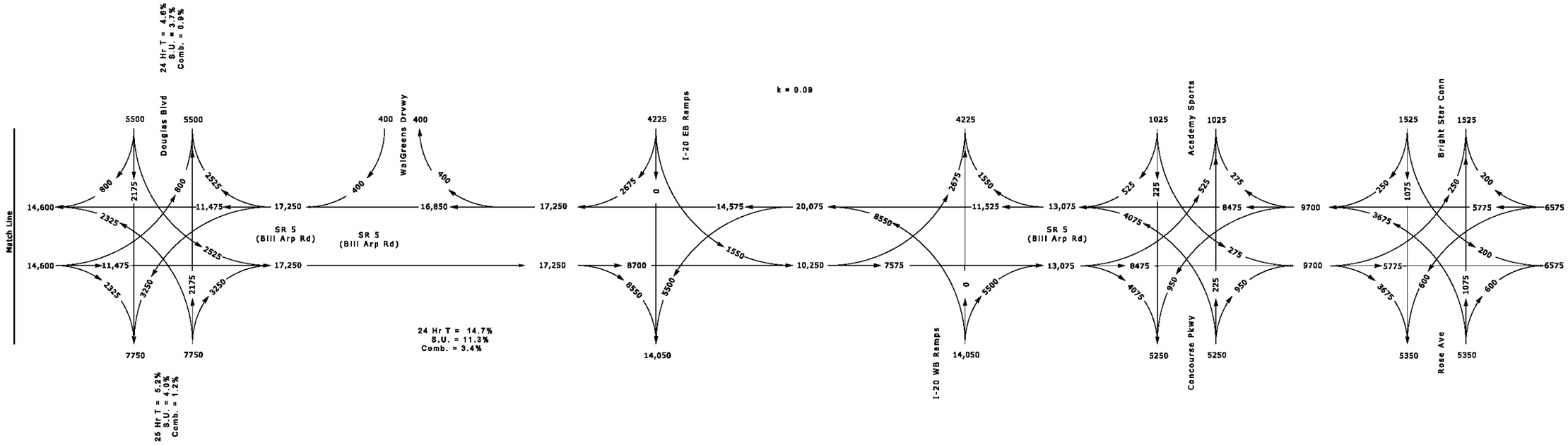
COUNTY	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
DOUGLAS	0012618	1	8

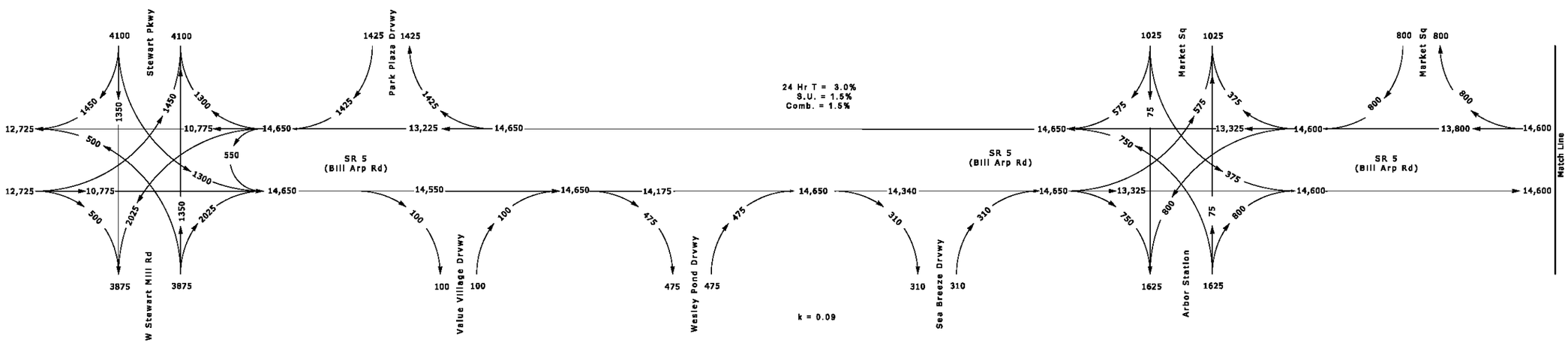


VW
04/2015

P.I. No. 0012618 DOUGLAS COUNTY SR 5 (Bill Arp Rd) CONGESTION REDUCTION AND TRAFFIC FLOW IMPROVEMENTS	2015 EXISTING DHV AM = 000 PM = (000)	Wilburn Engineering, LLC Traffic Engineering Consultants 931 L. Fayetteville Rd Suite I Newnan, GA 30263 678.423.0050 www.WilburnEngineering.com		REVISION DATES	STATE OF GEORGIA DEPARTMENT OF TRANSPORTATION OFFICE: PLANNING TRAFFIC DIAGRAMS

COUNTY	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
DOUGLAS	0012618	2	8





VW
04/2015

P.I. No. 0012618
DOUGLAS COUNTY
SR 5 (Bill Arp Rd)
CONGESTION REDUCTION AND
TRAFFIC FLOW IMPROVEMENTS

2015 EXISTING ADT

Wilburn Engineering, LLC
Traffic Engineering Consultants
931 L. Fayetteville Rd
Suite I
Newnan, GA 30263
678.423.0050
www.WilburnEngineering.com

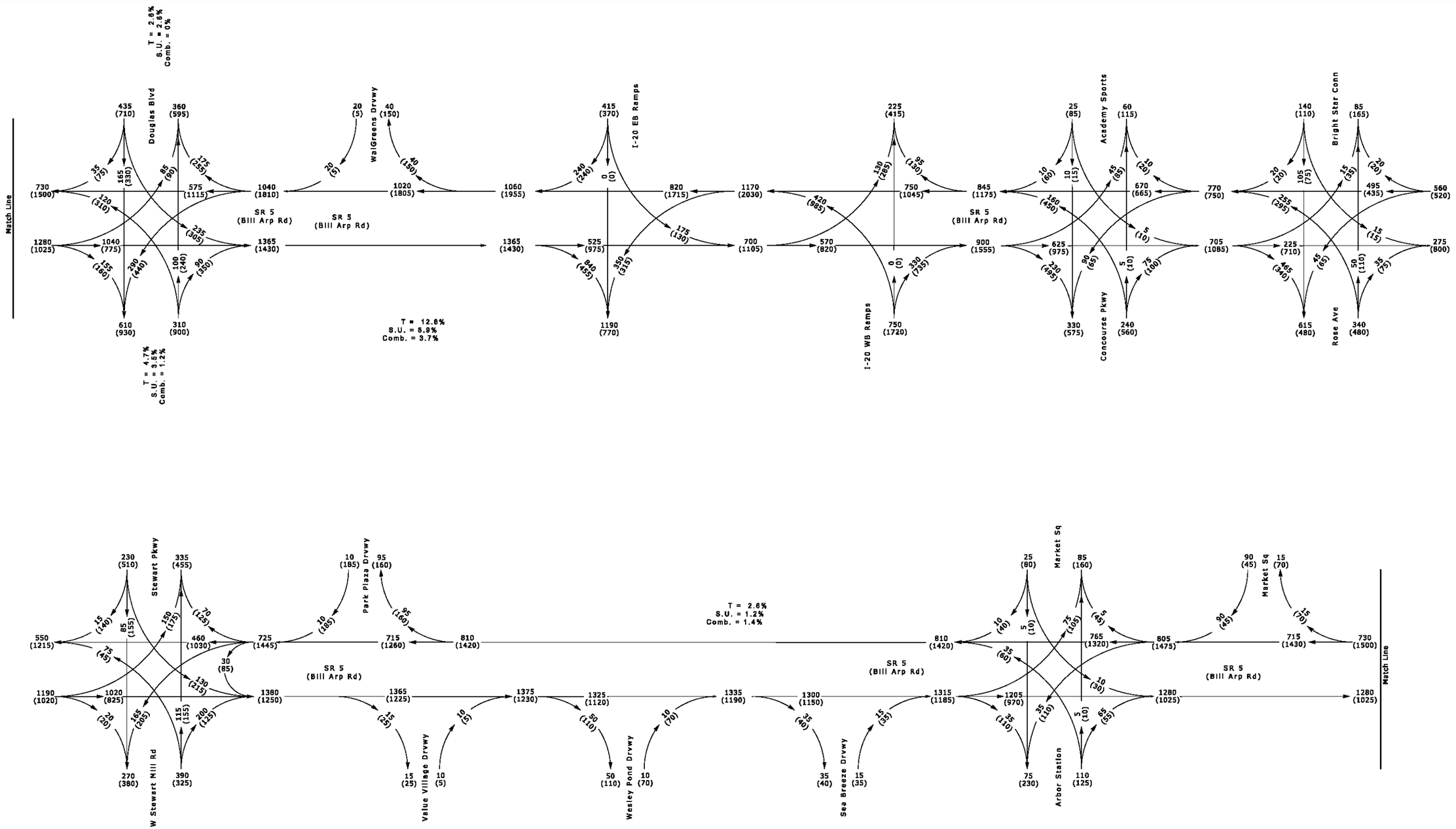
REVISION DATES

STATE OF GEORGIA
DEPARTMENT OF TRANSPORTATION

OFFICE: PLANNING

TRAFFIC DIAGRAMS

COUNTY	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
DOUGLAS	0012618	3	8



VW
04/2015

P.I. No. 0012618
DOUGLAS COUNTY
SR 5 (Bill Arp Rd)
CONGESTION REDUCTION AND
TRAFFIC FLOW IMPROVEMENTS

2020 NO-BUILD DHV, BASE YEAR (2020)
AM = 000
PM = (000)

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REVISION DATES

STATE OF GEORGIA
DEPARTMENT OF TRANSPORTATION

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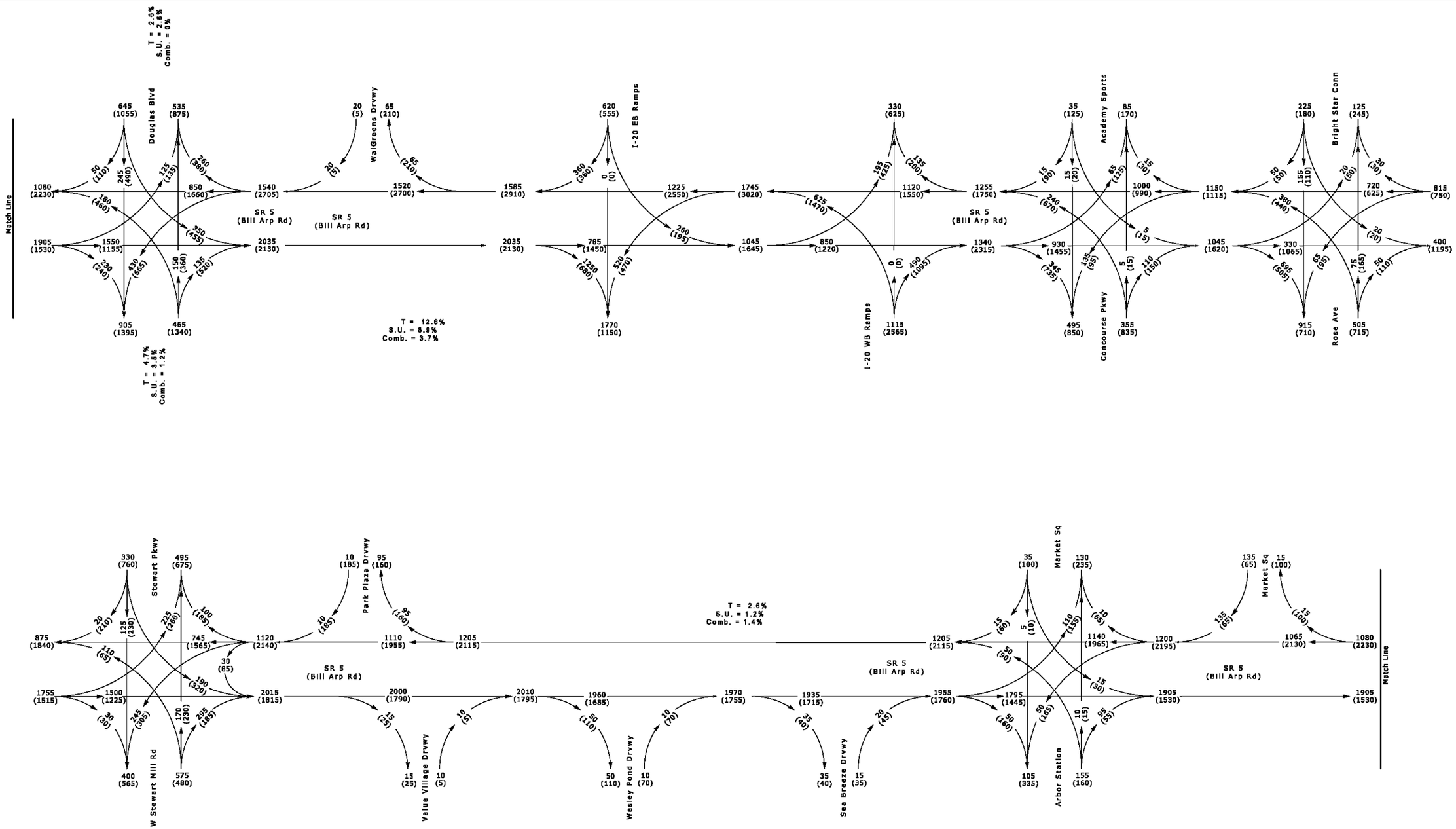
TRAFFIC DIAGRAMS

COUNTY	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
DOUGLAS	0012618	4	8



VW
04/2015

P.I. No. 0012618
DOUGLAS COUNTY
SR 5 (Bill Arp Rd)
CONGESTION REDUCTION AND
TRAFFIC FLOW IMPROVEMENTS

2040 NO-BUILD DHV, DESIGN YEAR
AM = 000
PM = (000)

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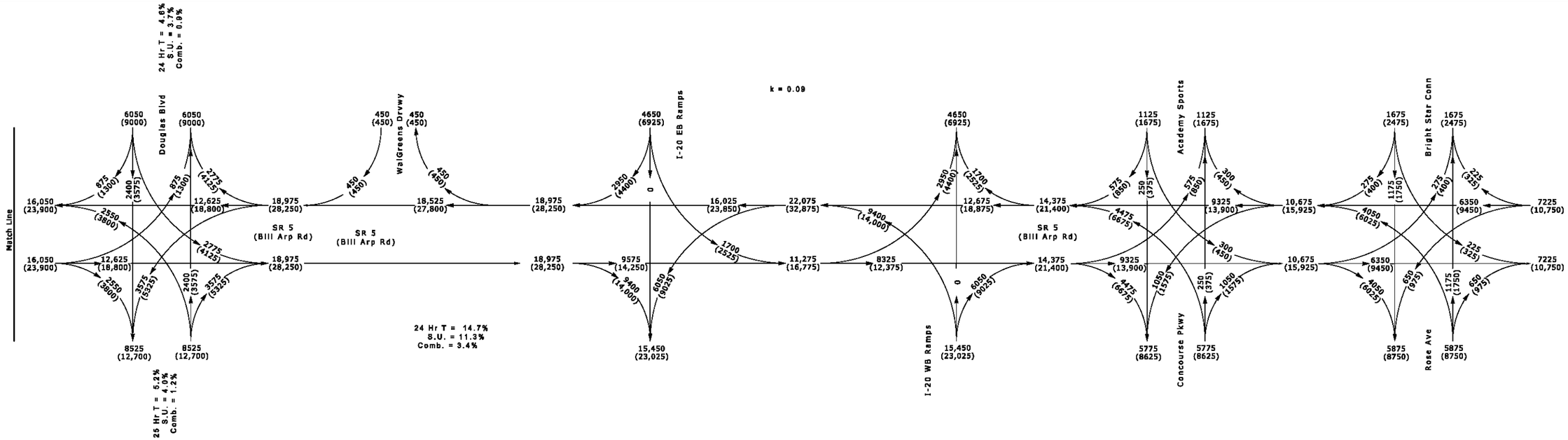
REVISION DATES

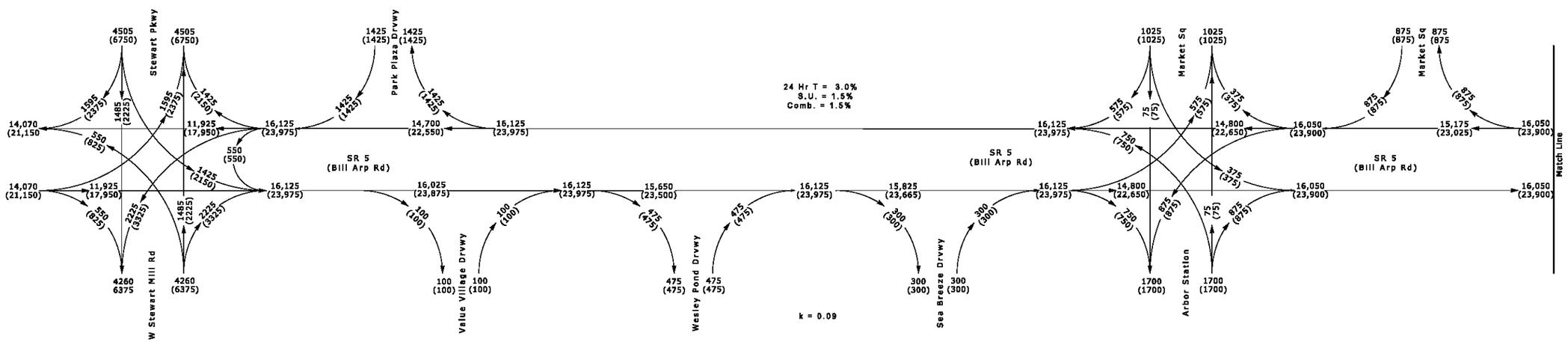
STATE OF GEORGIA
DEPARTMENT OF TRANSPORTATION

OFFICE: PLANNING

TRAFFIC DIAGRAMS

COUNTY	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
DOUGLAS	0012618	5	8





VW
04/2015

P.I. No. 0012618
DOUGLAS COUNTY
SR 5 (Bill Arp Rd)
CONGESTION REDUCTION AND
TRAFFIC FLOW IMPROVEMENTS

NO-BUILD ADT,
xx - BASE YEAR (2020)
(xx) - DESIGN YEAR (2040)

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REVISION DATES

STATE OF GEORGIA
DEPARTMENT OF TRANSPORTATION

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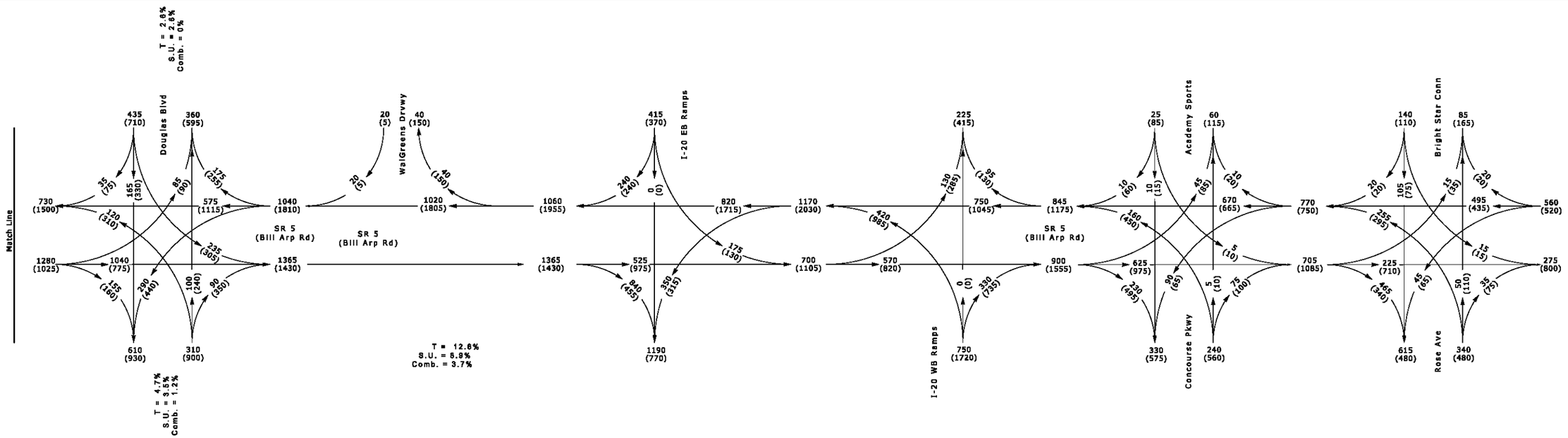
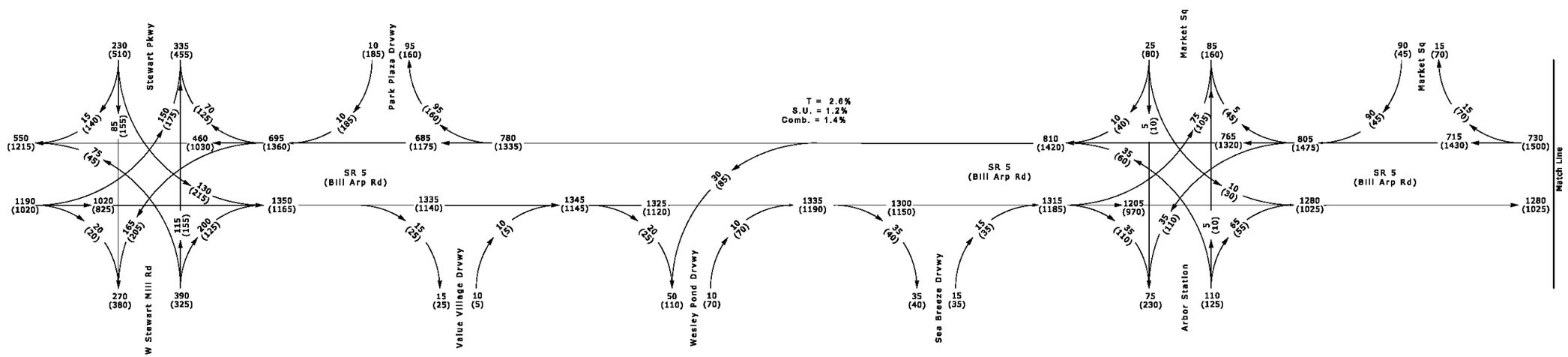
TRAFFIC DIAGRAMS

COUNTY	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
DOUGLAS	0012618	6	8





VW
04/2015

P.I. No. 0012618
DOUGLAS COUNTY
SR 5 (Bill Arp Rd)
CONGESTION REDUCTION AND
TRAFFIC FLOW IMPROVEMENTS

2020 BUILD DHV, BASE YEAR (2020)
AM = 000
PM = (000)

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REVISION DATES

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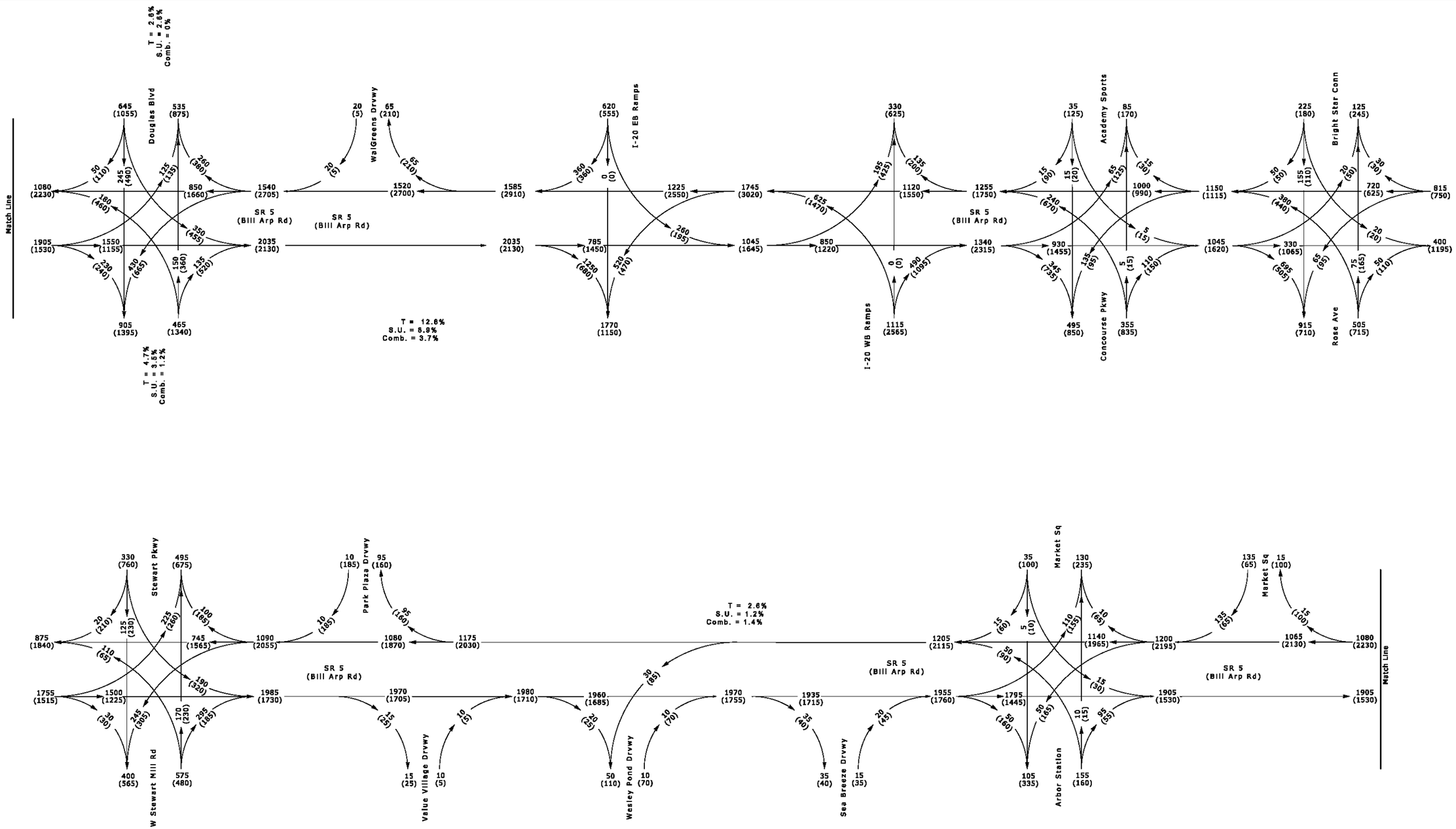
DEPARTMENT OF TRANSPORTATION

OFFICE: PLANNING

TRAFFIC DIAGRAMS

COUNTY	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
DOUGLAS	0012618	7	8



VW
04/2015

P.I. No. 0012618
DOUGLAS COUNTY
SR 5 (Bill Arp Rd)
CONGESTION REDUCTION AND
TRAFFIC FLOW IMPROVEMENTS

2040 BUILD DHV, DESIGN YEAR
AM = 000
PM = (000)

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REVISION DATES

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DEPARTMENT OF TRANSPORTATION

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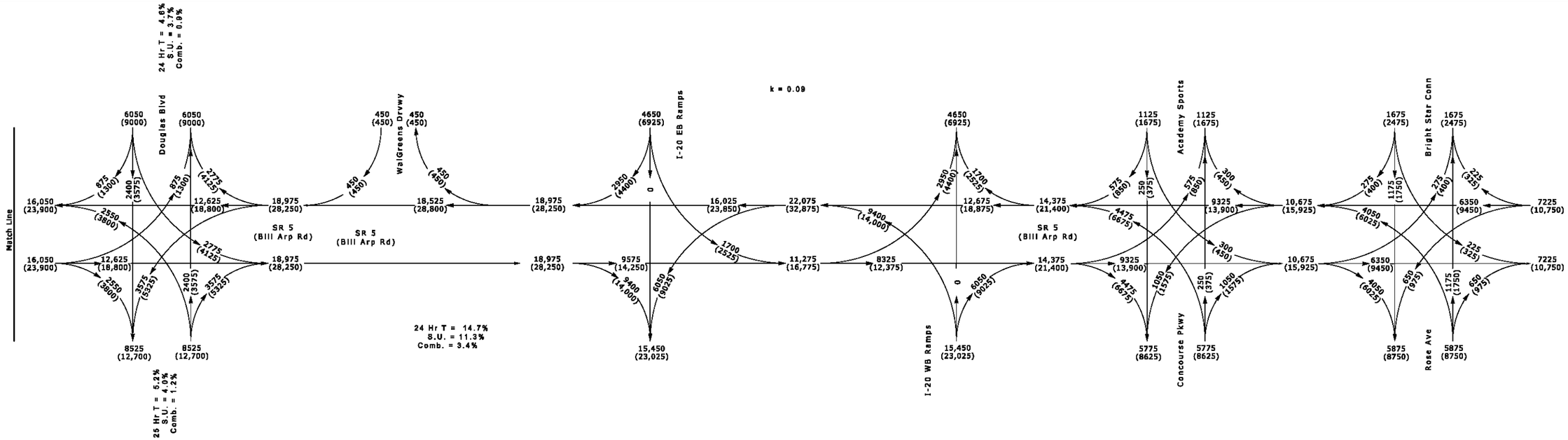
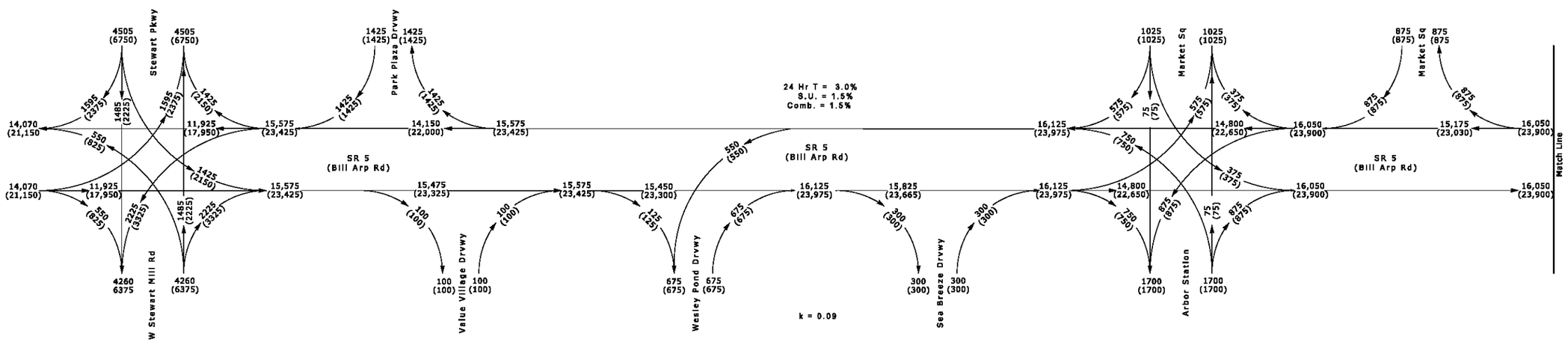
TRAFFIC DIAGRAMS

COUNTY	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
DOUGLAS	0012618		8





VW
04/2015

P.I. No. 0012618
DOUGLAS COUNTY
SR 5 (Bill Arp Rd)
CONGESTION REDUCTION AND
TRAFFIC FLOW IMPROVEMENTS

BUILD ADT,
xx - BASE YEAR (2020)
(xx) - DESIGN YEAR (2040)

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REVISION DATES

STATE OF GEORGIA
DEPARTMENT OF TRANSPORTATION

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TRAFFIC DIAGRAMS

ATTACHMENT 5

TRAFFIC STUDY

TRAFFIC STUDY

SR 5 (Bill Arp Road)

Congestion & Traffic Flow Improvements
P.I. # 0012618
Douglas County

November 2014

Prepared for:
Douglas County DOT
In Association with:

URS

Prepared by:
Wilburn
Engineering

Wilburn Engineering, LLC

Title

Traffic Study
SR 5 (Bill Arp Road)
Congestion & Traffic Flow Improvements
P.I. # 0012618
Douglas County, GA

Prepared For	*Date*
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Summary

This study contains capacity analysis to refine operational improvement needs at three locations on SR 5. The following summarizes the recommended improvements at each location.

LOCATION 1 – I-20 INTERCHANGE

1. The extended left turn lanes as originally conceived for the project are no longer appropriate. The Academy Sports development across from Concourse Parkway has used the median that was to be used for one of the extended lanes onto I-20 EB. The extended lane for the left turn onto I-20 WB was found not to be a significant benefit.
2. The WB off-ramp should have a dual right turn lane. The existing concrete island on the west side should be removed.
3. The Concourse intersection should be improved to add another lane to the west leg from Academy Sports. This will provide separate lanes for each movement.

LOCATION 2 – DOUGLAS BOULEVARD INTERSECTION

A lane should be added along the southbound shoulder to allow the southbound left turn lane to be converted to a dual turn bay.

LOCATION 3 – WESLEY POND/STEWART PARKWAY AREA

A partial median opening should be provided to allow southbound left turns into the Wesley Pond driveway. This will significantly reduce the number of U-turns at Stewart Parkway, resulting in significant operational improvement.

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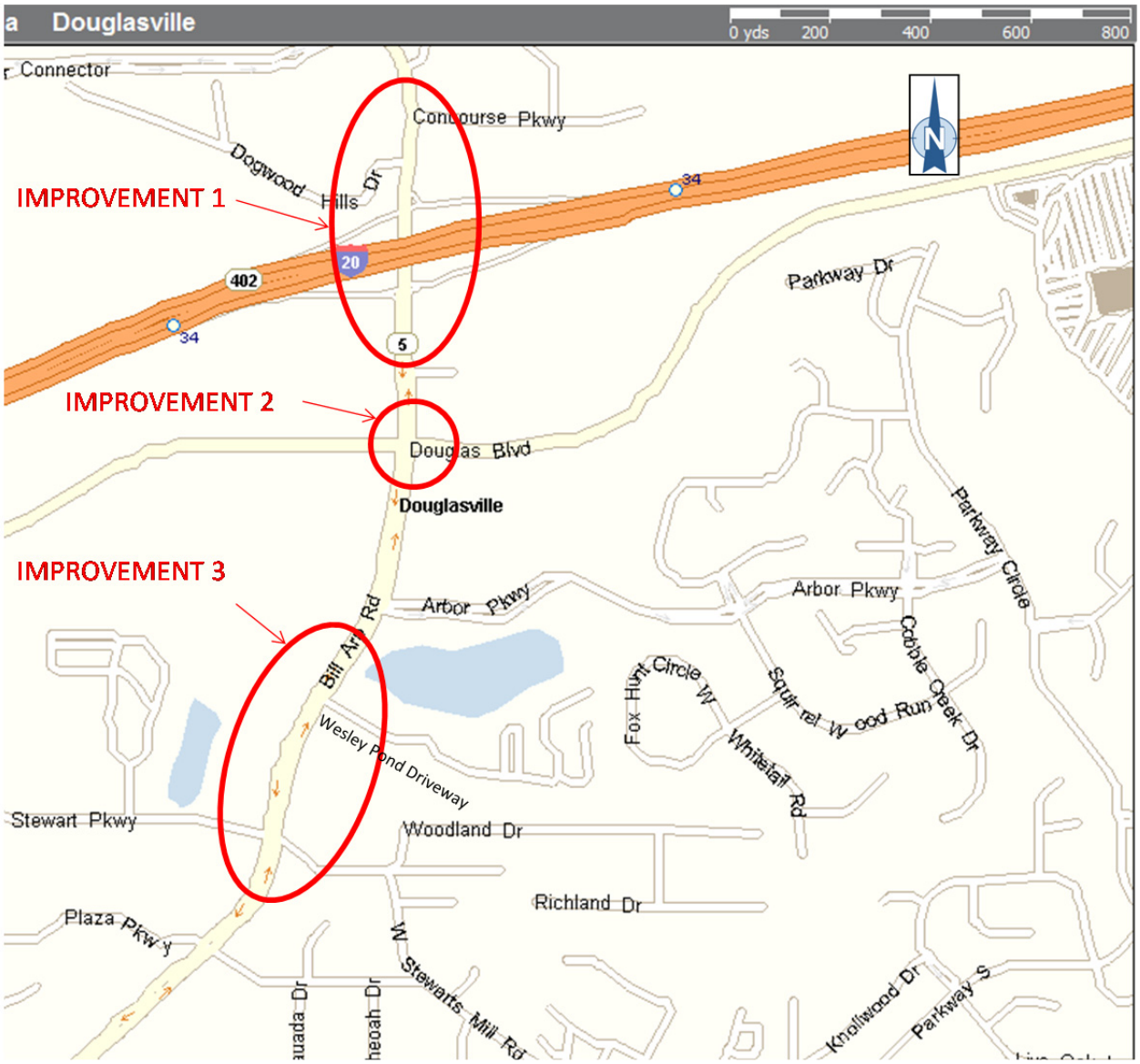
INTRODUCTION

The SR 5 (Bill Arp Road) congestion reduction and traffic flow improvements project, PI-0012618, contains three operational improvements. The locations of the three projects are illustrated in Figure 1.

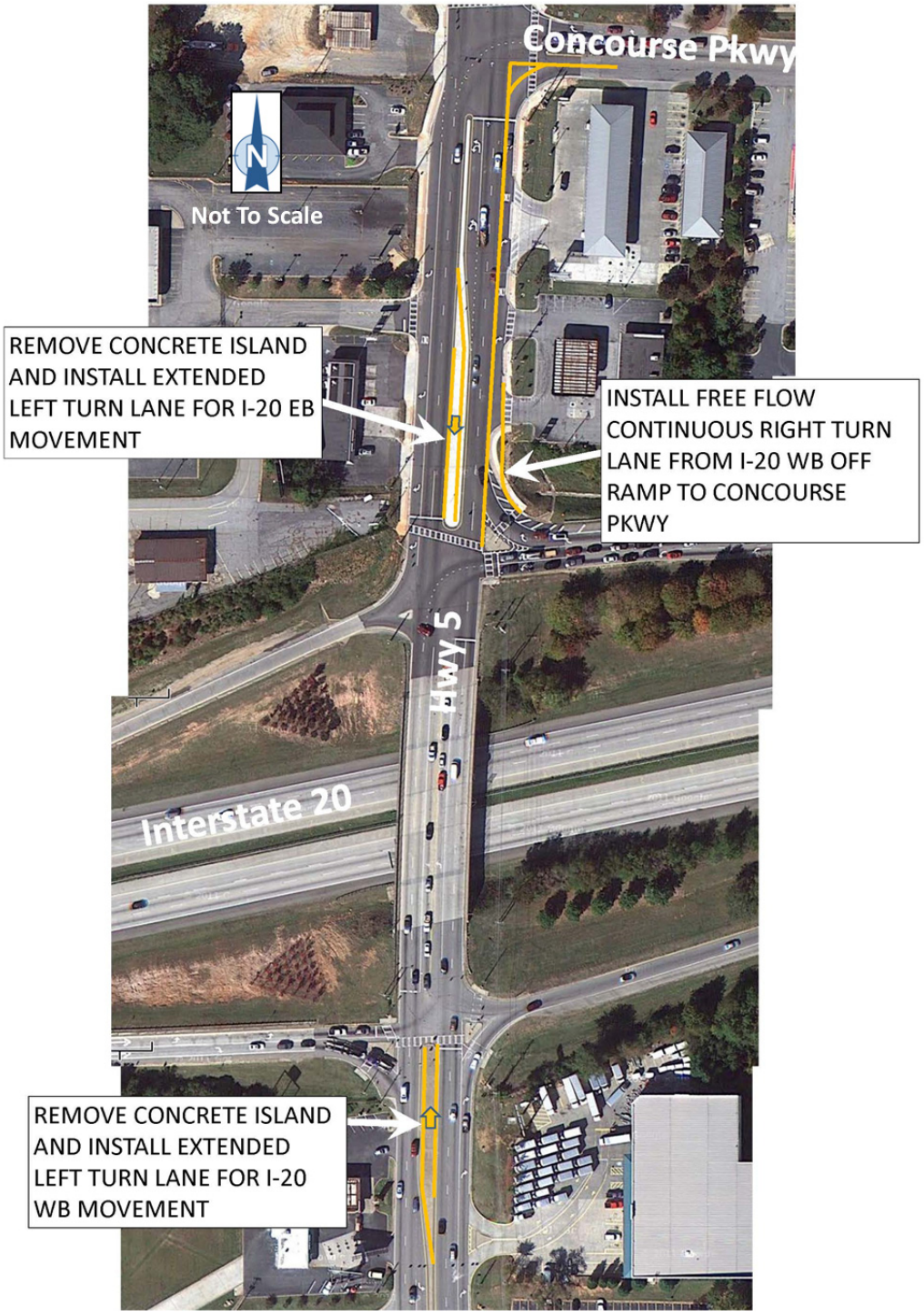
Figure 1: PROJECT LOCATION MAP



IMPROVEMENT 1 – I-20 INTERCHANGE AREA

Figure 2 schematically shows the objective of Improvement 1 as it was originally conceived. This study evaluated this improvement and recommends a revised improvement based on evaluation of current conditions.

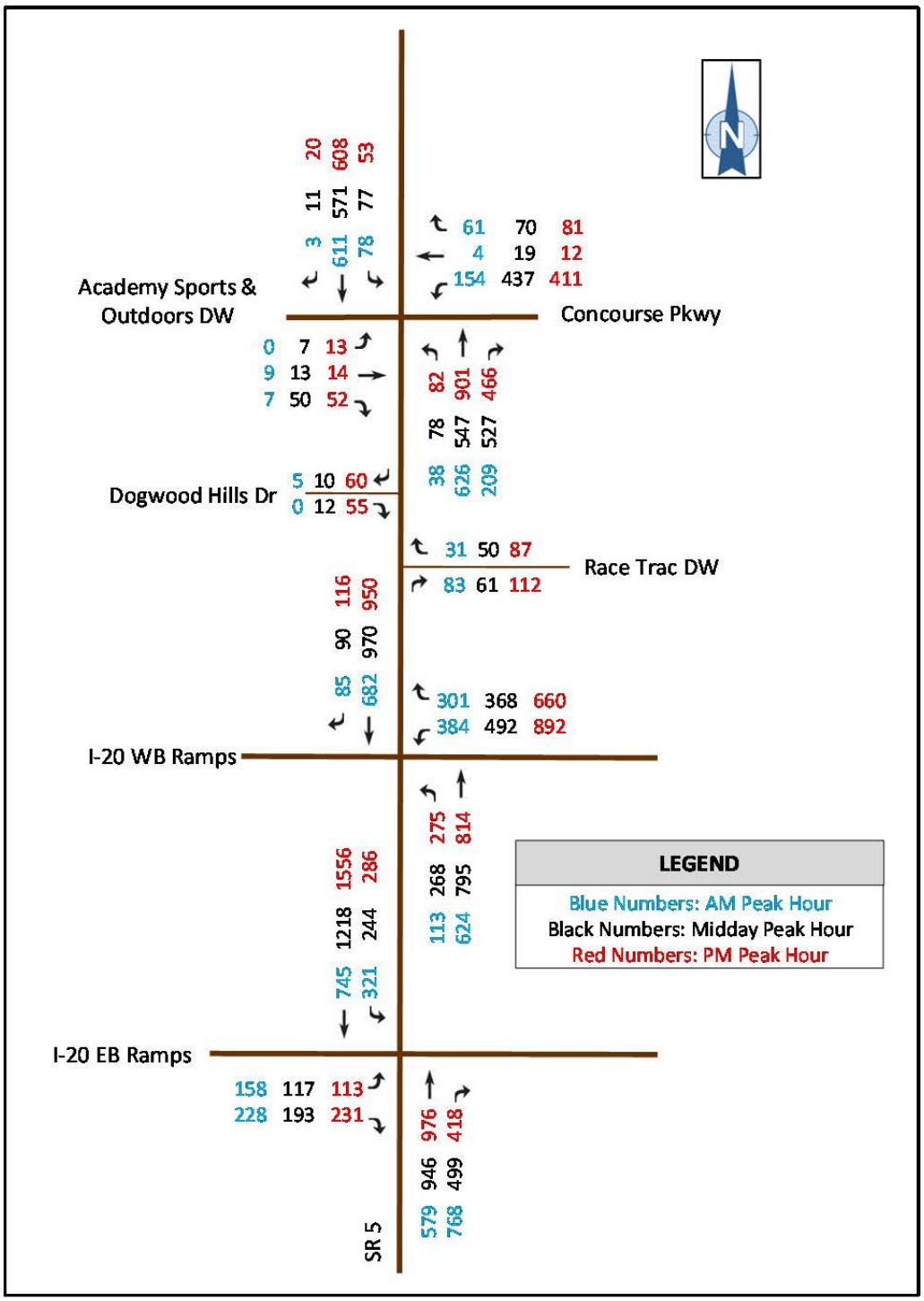
Figure 2: PROJECT 1, I-20 INTERCHANGE AREA (ORIGINAL CONCEPT)



Existing Volumes

Figure 3 shows the current peak hour volumes in the vicinity of Improvement 1. The counts were conducted May 20 and 21, 2014.

Figure 3: EXISTING VOLUMES, IMPROVEMENT 1 VICINITY

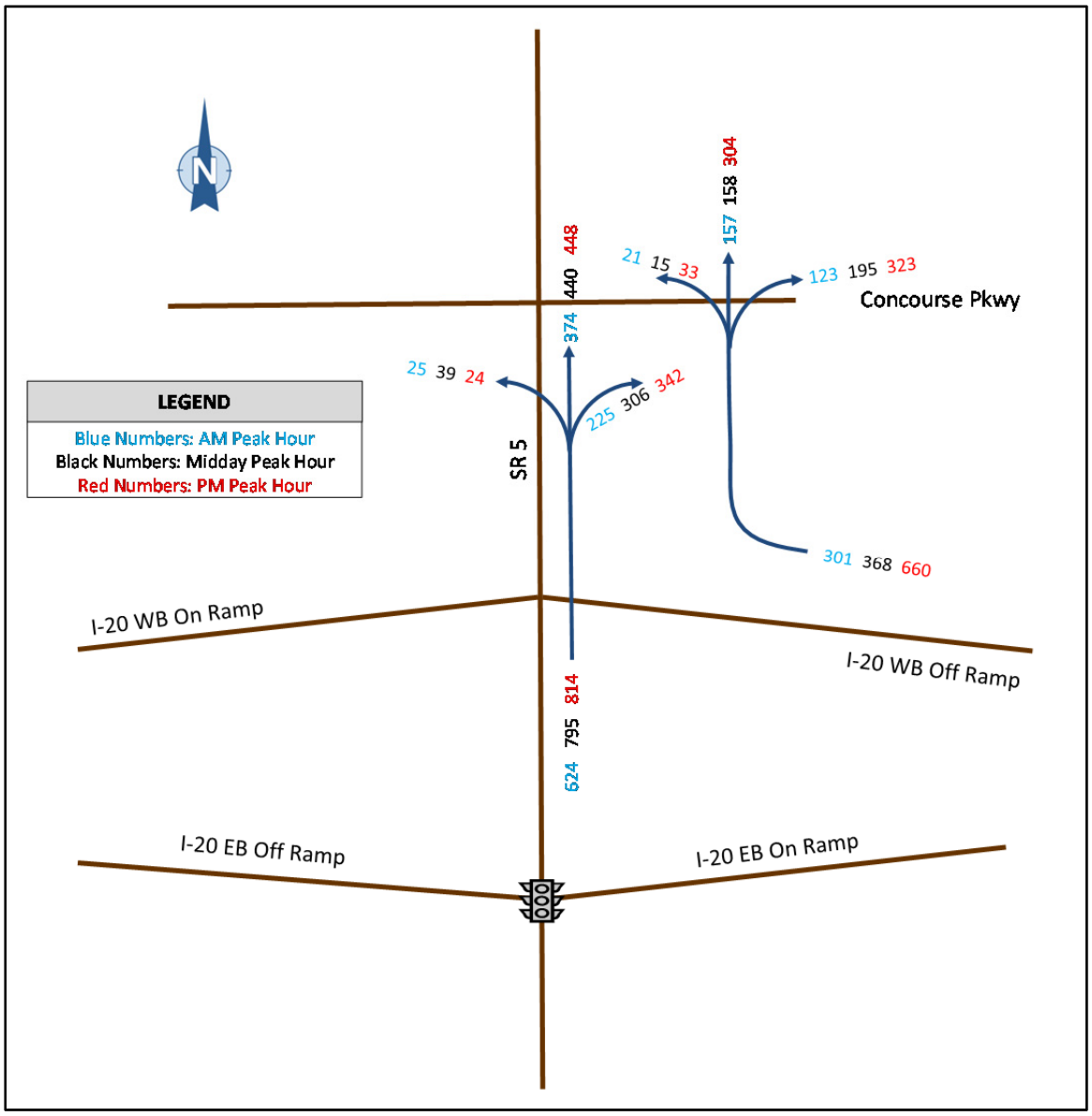


I-20 WB Intersection (WB Right Turn)

One element of Improvement 1 is to provide for a free-flow right turn from the westbound ramp. This will introduce weaving in the section of SR 5 between the WB off ramp and Concourse Parkway that does not currently occur. Since the weaving analysis included in the *2010 Highway Capacity Manual* is only applicable to freeways, there is no method for directly quantifying the effects of introducing weaving into this segment of multilane highway. However, the weaving volumes were developed for examination.

Figure 4 shows the results of an origin destination (O-D) study that was conducted to obtain the weaving volumes. The destination of northbound through traffic on SR 5 after it passes the WB ramp is shown along with the WB right turn flow.

Figure 4: O-D DATA



Since the weaving flows would be significant, an alternate improvement for the I-20 WB intersection was evaluated that could provide better operations without creating a weaving section. The alternate improvement is to create a dual right turn lane on the off ramp that is signal controlled.

Capacity Analysis of Alternate Improvements, I-20 WB Intersection (WB Right Turn)

The existing conditions and the alternate improvements were evaluated using capacity analysis. The *Synchro Program* (Version 8) was used to perform capacity analysis. The results are summarized in Table 1. The improvement to create the free-flow right turn on the westbound off ramp is designated as 'FF RT' in Table 1. The alternate to create a dual right turn lane is designated as 'DUAL RT'.

Table 1: CAPACITY ANALYSIS, I-20 WB RAMPS (WB Right Turn)

AM PEAK HOUR			MIDDAY PEAK HOUR			PM PEAK HOUR		
EXISTING	FF RT	DUAL RT	EXISTING	FF RT	DUAL RT	EXISTING	FF RT	DUAL RT
C (23.8)	B (19.0)	C (20.4)	F (96.7)	F (94.6)	F (96.1)	E (67.7)	D (52.6)	E (57.9)

Reports from the Synchro analysis for the existing conditions and the alternates for improving the westbound right turn are contained in Appendix A.

The results show either improvement for the westbound right turn would result in better operations than the existing conditions. However, neither alternative will significantly outperform the other.

Since neither alternate will outperform the other, and since the creation of a free-flow right will create a weaving section with adverse consequences, the alternate with a dual right turn lane is recommended.

I-20 WB Intersection (SB Extended Left Turn)

Another element of Improvement 1 is to provide an extended left turn lane for the southbound approach. This would be accomplished by removing the median island and installing an additional through lane. This lane would then drop into the left turn lane onto the eastbound on ramp.

Capacity Analysis of Alternate Improvements, I-20 WB Intersection (SB Extended Left Turn)

The extended left turn lane was evaluated in conjunction with the preferred alternative for the westbound off-ramp. Table 2 shows the cumulative effects of adding the extended turn lane and also providing for a dual left turn lane on the westbound off ramp.

Table 2: CAPACITY ANALYSIS, I-20 WB RAMPS (SB Extended Left Turn)

AM PEAK HOUR			MIDDAY PEAK HOUR			PM PEAK HOUR		
EXISTING	DUAL RT	DUAL RT + EXTENDED LEFT TURN	EXISTING	DUAL RT	DUAL RT + EXTENDED LEFT TURN	EXISTING	DUAL RT	DUAL RT + EXTENDED LEFT TURN
C (23.8)	C (20.4)	B (20.0)	F (96.7)	F (96.1)	E (73.0)	E (67.7)	E (57.9)	D (46.6)

The results indicate the extended left turn lane is a significant improvement to what can be achieved by only creating the dual right turn. By combining these improvements the LOS will improve from LOS F to LOS E during the Midday Peak Hour and from LOS E to LOS D in the PM Peak Hour.

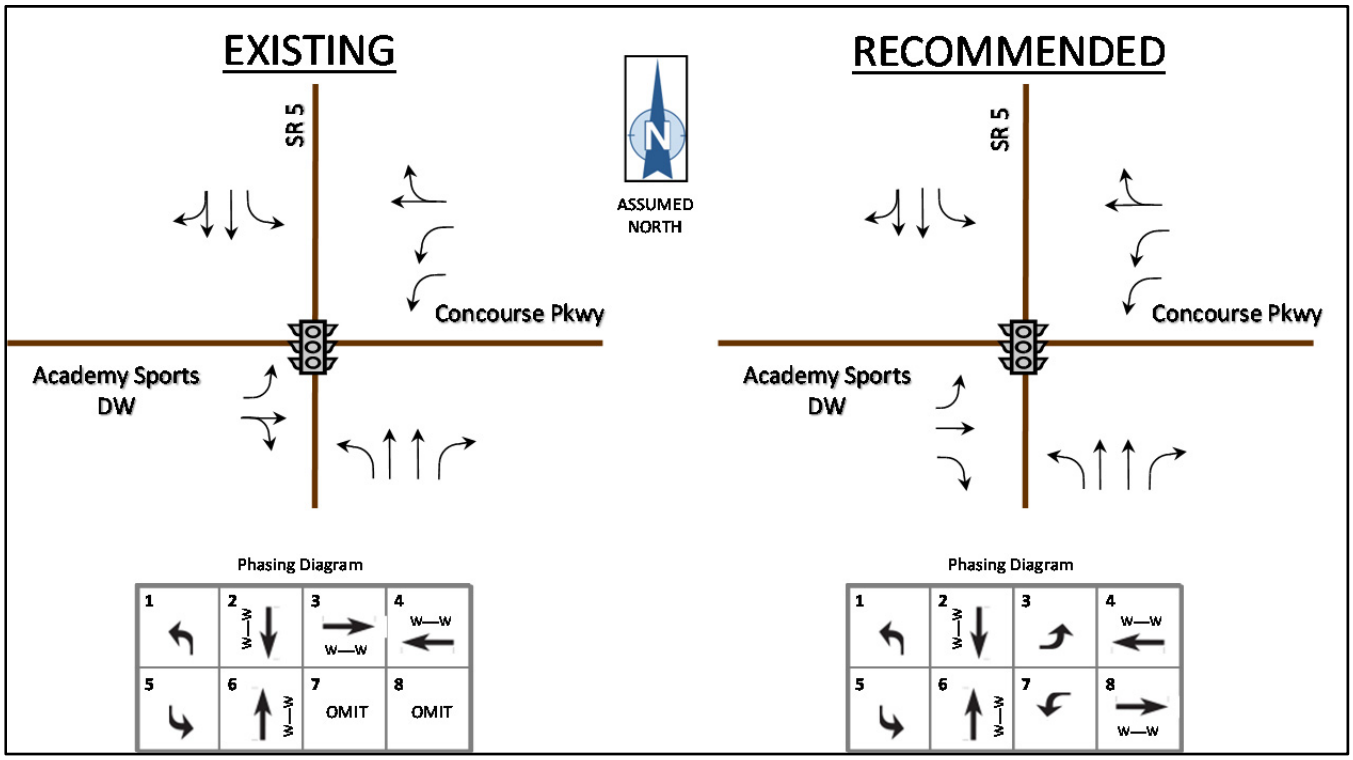
The Synchro reports for the WB ramp intersection reflecting both the dual right turn lane and the extended SB left turn lane are included in Appendix B.

Concourse Parkway Intersection

Since this project was conceived, a large retail development on the west side of the intersection was completed resulting in the construction of the fourth leg to this intersection. This development also resulted in the extension of the northbound left turn lane on SR 5 into the new west leg of the Concourse intersection. Therefore, it is not practical to implement the extended left turn lane for I-20 EB as shown in Figure 2.

This section will evaluate an alternate improvement for the Concourse intersection. Figure 5 schematically shows the recommended configuration of the west leg (Academy Sports Driveway). It is also recommended that split phased operation be removed.

Figure 5: RECOMMENDED CONFIGURATION OF CONCOURSE INTERSECTION



The results of the capacity analysis for the existing and recommended conditions at the Concourse intersection are provided in Table 3. The capacity analysis reports are contained in Appendix C.

Table 3: CAPACITY ANALYSIS RESULTS, CONCOURSE INTERSECTION

AM PEAK HOUR		MIDDAY PEAK HOUR		PM PEAK HOUR	
EXISTING	RECOMMENDED	EXISTING	RECOMMENDED	EXISTING	RECOMMENDED
B (14.7)	B (14.4)	C (22.7)	B (18.3)	C (21.8)	B (16.6)

I-20 EB Intersection (NB Extended Left Turn)

The final element of Improvement 1 is to provide an extended left turn lane for the northbound approach at the EB ramps. This would be accomplished by removing the median island and installing an additional through lane. This lane would then drop into the left turn lane onto the westbound on-ramp.

Capacity Analysis of Alternate Improvements, I-20 EB Intersection (NB Extended Left Turn)

Table 4: CAPACITY ANALYSIS, I-20 EB RAMPS (NB Extended Left Turn)

AM PEAK HOUR		MIDDAY PEAK HOUR		PM PEAK HOUR	
EXISTING	EXTENDED LEFT TURN	EXISTING	EXTENDED LEFT TURN	EXISTING	EXTENDED LEFT TURN
B (13.3)	B (12.9)	C (21.9)	B (18.8)	B (19.4)	B (17.7)

The Synchro reports for the EB ramp intersection for both the existing condition and the condition with the addition of another northbound lane for the extended left turn lane are included in Appendix D.

The results indicate that the extended left turn lane will improve conditions but only slightly. The results for the Midday Peak Hour show the most significant improvement, when the extended left turn lane will decrease average delay by 3.1 seconds per vehicle.

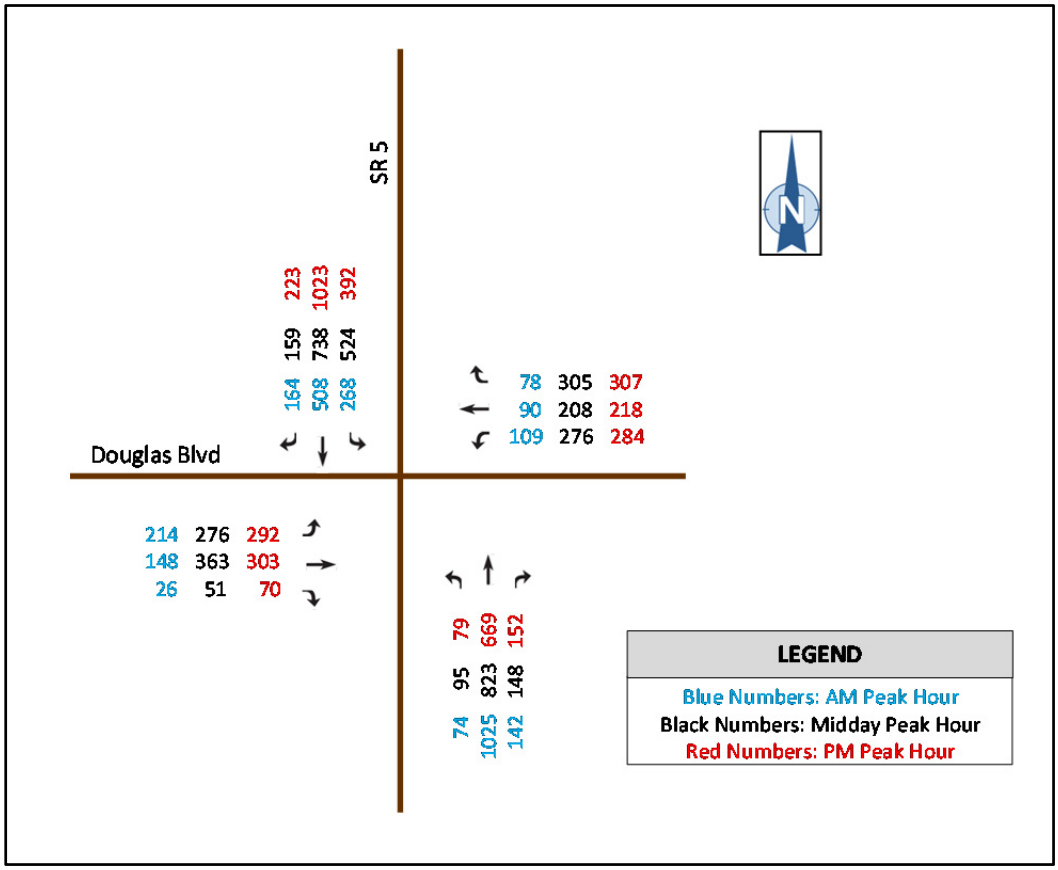
It should be noted that the capacity models are limited in their ability to predict the benefit of the extended left turn lanes. At both the WB Ramps intersection as well as at the EB Ramp intersection, the length of the lane that can be added by removing the median island is limited. It is difficult to correctly model the lane utilization. The actual benefits of the extended left turn lanes may be less than what is shown in the tables above.

Since the benefits of adding the extended left turn lane are insignificant, it may be better to use the available median to extend the left turn storage lane for the opposite direction. Instead of adding the extended left turn lane at the EB Ramp intersection in the northbound direction, it may be better to extend the southbound left turn lane onto Douglas Boulevard. That intersection is evaluated in the following section.

IMPROVEMENT 2 – DOUGLAS BLVD INTERSECTION

Figure 6 illustrates the existing peak hour volumes at the Douglas Boulevard intersection.

Figure 6: EXISTING VOLUMES, DOUGLAS BLVD INTERSECTION



Three improvement alternatives for the Douglas Boulevard intersection were evaluated including the following:

- SB Dual Left Turn Lane
- NB Separate Right Turn Lane
- WB Separate Right Turn Lane

Capacity Analysis of Alternate Improvements, Douglas Blvd Intersection

Table 5 shows the results of the capacity analysis for the existing conditions and the improvement alternatives for Douglas Boulevard.

Table 5: CAPACITY ANALYSIS, DOUGLAS BLVD

AM PEAK HOUR				MIDDAY PEAK HOUR				PM PEAK HOUR			
EXISTING	SB DUAL LFT	WB RT LANE	NB RT LANE	EXISTING	SB DUAL LFT	WB RT LANE	NB RT LANE	EXISTING	SB DUAL LFT	WB RT LANE	NB RT LANE
D (52.0)	D (42.5)	D (51.5)	D (45.7)	F (95.4)	E (62.7)	F (84.9)	F (80.2)	E (70.1)	E (59.3)	E (67.2)	E (62.4)

The improvement to create a dual left turn for the southbound approach to Douglas Boulevard would provide far greater improvement than any of the alternatives evaluated for this intersection. This would decrease the delay by 9.5 seconds per vehicle during the AM Peak Hour, 33 seconds during the Midday, and 10.8 during the PM Peak Hour.

Reports from the Synchro analysis for the existing conditions and the alternates for improving the Douglas Boulevard intersection are contained in Appendix E.

IMPROVEMENT 3 – WESLEY POND/STEWART PKWY AREA

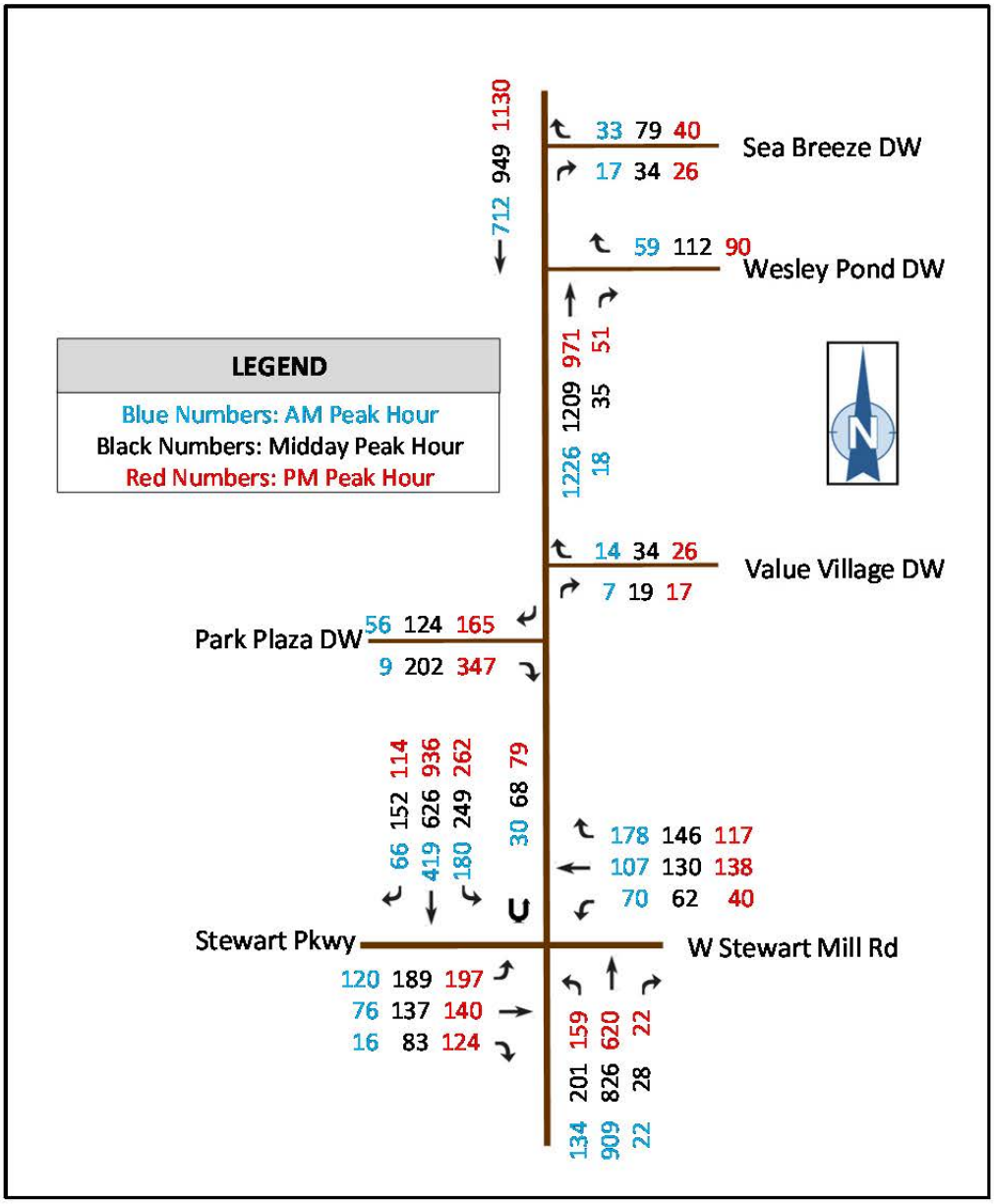
Figure 7 schematically shows the objective of Improvement 3.

Figure 7: PROJECT 3, WESLEY POND/STEWART PKWY AREA

Existing Volumes

Figure 8 shows the current peak hour volumes in the vicinity of Improvement 3. The counts were conducted May 20 and 21, 2014.

Figure 8: EXISTING VOLUMES, IMPROVEMENT 3 VICINITY

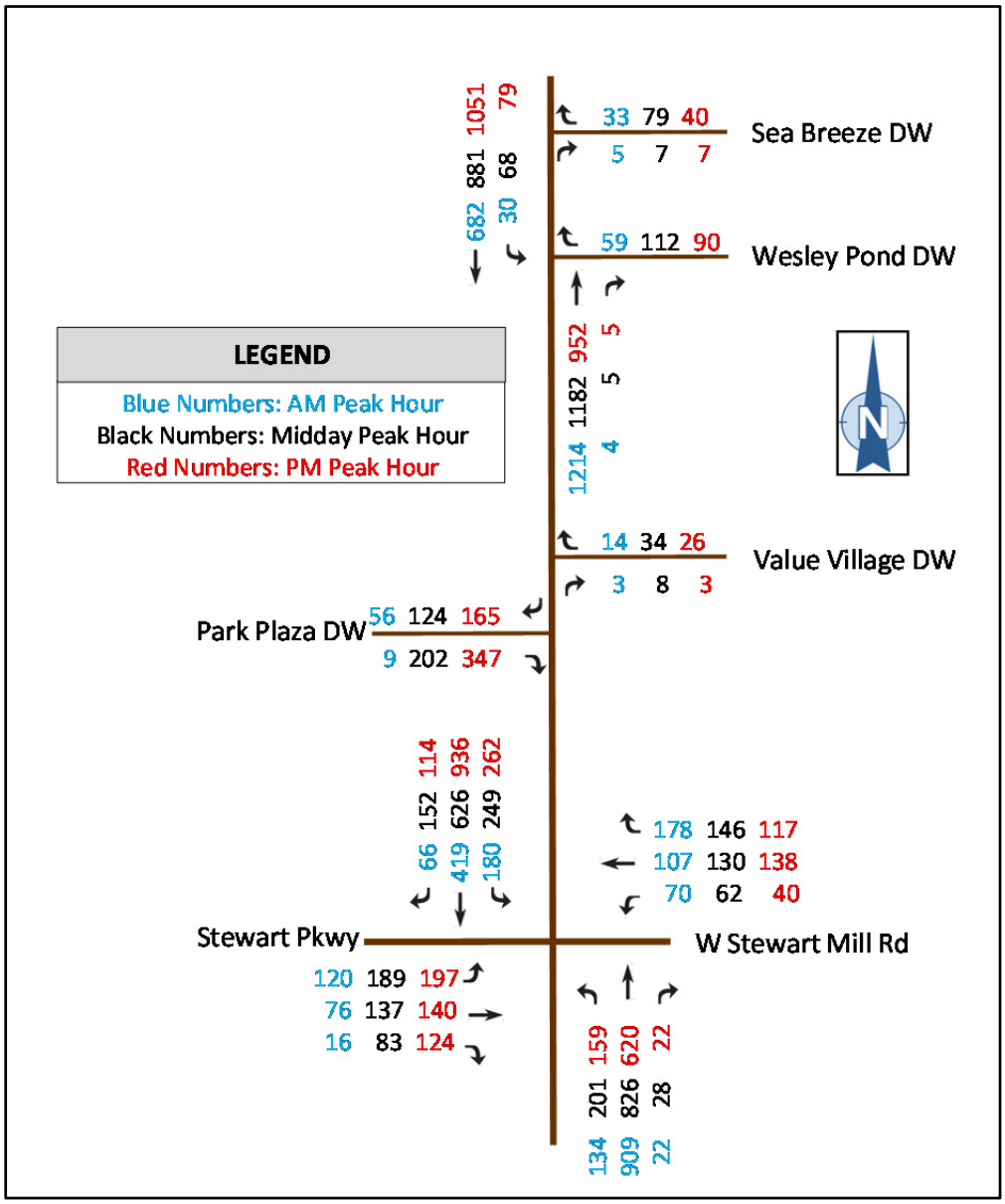


Projected Volumes

After the median opening is constructed at the Wesley Pond driveway to allow southbound left turns, it is expected that all the U-turns southbound at Stewart Parkway will be eliminated. The U-Turns that eventually turn right into the Wesley Pond Driveway as well as the two adjacent driveways will be served by the new median opening. The Wesley Pond Driveway has inter-parcel connections to the two adjacent driveways.

The projected volumes after Improvement 3 are shown in Figure 9.

Figure 9: PROJECTED VOLUMES AFTER IMPROVEMENT 3



Capacity Analysis

The existing conditions and the projected conditions after Improvement 3 were evaluated using capacity analysis. The Synchro Program was used to perform capacity analysis at both the signalized intersection at Stewart Parkway as well as the unsignalized intersection at the Wesley Pond Driveway.

The results of capacity analyses are summarized in Table 6. For the signalized intersection, the overall level of service is shown. For the unsignalized intersection at Wesley Pond, levels of service are given for the minor movements that are not free-flow. The levels of service are shown followed by the average delay per vehicle (in seconds) shown in parenthesis.

Table 6: CAPACITY ANALYSIS, IMPROVEMENT 3 VICINITY

Stewart Pkwy Intersection (Signalized)

AM PEAK HOUR		MIDDAY PEAK HOUR		PM PEAK HOUR	
EXISTING	AFTER IMP. 3	EXISTING	AFTER IMP. 3	EXISTING	AFTER IMP. 3
D (36.2)	C (33.6)	E (59.7)	D (42.4)	D (47.4)	D (38.4)

Wesley Pond Intersection (Unsignalized)

MOVEMENT	AM PEAK HOUR		MIDDAY PEAK HOUR		PM PEAK HOUR	
	EXISTING	AFTER IMP. 3	EXISTING	AFTER IMP. 3	EXISTING	AFTER IMP. 3
WB Right	A (9.7)	A (9.5)	B (10.5)	B (10.5)	B (10.5)	B (10.0)
SB Left	N/A	A (1.5)	N/A	A (3.2)	N/A	B (10.3)

The capacity analyses indicate that removing the U-Turns at Stewart Parkway will provide significant reductions in overall delay because the time allocated to the SB left turn phase can be reduced and reallocated to other phases. The overall average delay is expected to be reduced by 17.3 seconds per vehicle during the Midday and by 9 seconds per vehicle during the PM Peak Hour.

The capacity analyses also show that the southbound left turns that will be allowed after the improvement at Wesley Pond will operate well under a yield condition. The levels of service for this movement are expected to be LOS B or better.

Reports from the capacity analysis for Improvement 3 are provided in Appendix F.

Queuing Analysis

The effects on queuing were also evaluated using capacity analysis. Table 7 gives the estimated length of the 95th percentile queue for the existing condition and the projected conditions after the median opening is provided at Wesley Pond. The various movements are provided at both affected intersections. However, the southbound movement is the most affected and it is highlighted in Table 7 for both intersections.

Table 7: ESTIMATED QUEUE LENGTHS, IMPROVEMENT 3 VICINITY

Stewart Pkwy Intersection (Signalized)

LANE	AM PEAK HOUR		MIDDAY PEAK HOUR		PM PEAK HOUR	
	EXISTING	AFTER IMP. 3	EXISTING	AFTER IMP. 3	EXISTING	AFTER IMP. 3
EB Left Turn	183	144	280	280	284	237
EB Through	70	68	131	131	141	132
EB Right	0	0	10	10	23	22
WB Left	87	88	89	89	67	67
WB Through	114	116	150	150	183	183
WB Right	54	55	47	47	29	29
NB Left	150	146	284	209	236	236
NB Through	365	382	368	358	267	300
NB Right	0	0	0	0	0	0
SB Left	264	203	454	345	521	310
SB Through	81	86	240	287	421	450
SB Right	0	0	6	7	18	20

Wesley Pond Intersection (Unsignalized)

LANE	AM PEAK HOUR		MIDDAY PEAK HOUR		PM PEAK HOUR	
	EXISTING	AFTER IMP. 3	EXISTING	AFTER IMP. 3	EXISTING	AFTER IMP. 3
WB Right	6	6	14	14	11	10
SB Left	N/A	3	N/A	9	N/A	10

The results indicate that the length of the queue in the southbound left turn lane at Stewart Parkway would be reduced significantly. The most dramatic improvement is for the PM Peak Hour when the length of the queue is expected to decrease from 521 feet to 310 feet. The length of full turn lane is less than 300 feet. Therefore, this project will result in the queue not spilling into the through lane to any significant degree.

Benefit Analysis

This section describes a Benefit/Cost Analysis that was conducted to evaluate Improvement 3.

The primary benefit of the improvement is that the intersection delay is reduced at the Stewart Parkway intersection because of the reduced number of U-turns for the southbound movement. This reduction in demand will allow the split time for the southbound left turn phase to be reduced and the time reallocated to other phases. This will benefit all users of the intersection and not just those who are using the southbound left turn lane.

The median opening will also reduce the total travel time along the roadway section between the Wesley Pond driveway and Stewart Parkway.

Table 8 summarizes the impact of the project on the intersection delay and travel time between intersections. The expected changes for each component of travel time that are expected to be affected by the project are listed. The changes shown in Table 8 are for each affected vehicle (seconds per vehicle).

Table 8: CHANGES IN TRAVEL TIME PER AFFECTED VEHICLE

COMPONENT	AM PEAK HOUR			MIDDAY PEAK HOUR			PM PEAK HOUR		
	BEFORE	AFTER	CHANGE	BEFORE	AFTER	CHANGE	BEFORE	AFTER	CHANGE
SB Left Turn Delay at Wesley Pond Drwy. (sec/veh)	0	1.5	+1.5	0	3.2	+3.2	0	10.3	+10.3
Total Delay at Stewart Pkwy Intersection (sec/veh)	36.2	33.6	-2.6	59.7	42.4	-17.3	47.4	38.4	-9.0
Travel Time between Intersections (sec/veh)	34	0	-34	34	0	-34	34	0	-34

The delay for the southbound left turn at Wesley Pond is shown as an increase because that movement is not allowed now.

The additional travel time between intersections is based on a separation distance of 875 feet and a speed of 35 mph.

Table 9 is an estimation of the total travel time reduction during each peak period. These results were obtained by multiplying the changes per vehicle from Table 8 by the volume of vehicles making the affected movement.

Table 9: TOTAL CHANGE IN TRAVEL TIME PER PERIOD

COMPONENT	AM PEAK HOUR			MIDDAY PEAK HOUR			PM PEAK HOUR		
	VOL. (VPH)	CHANGE PER VEH.	TOTAL CHANGE (sec)	VOL. (VPH)	CHANGE PER VEH.	TOTAL CHANGE (sec)	VOL. (VPH)	CHANGE PER VEH.	TOTAL CHANGE (sec)
SB Left Turn Delay at Wesley Pond Drwy. (sec/veh)	30	+1.5	45	68	+3.2	217.6	79	+10.3	813.7
Total Delay at Stewart Pkwy Intersection (sec/veh)	2297	-2.6	-5972.2	2829	-17.3	-48941.7	2869	-9.0	-25821
Travel Time between Intersections (sec/veh)	30	-34	-1020	68	-34	-2312	79	-34	-2686
TOTAL			-6947.2			-51036.1			-27693.3

Table 10 summarizes the estimated daily savings in travel time that would result from the median opening. The conditions from the AM Peak Hour are assumed to occur for a two hour period between 7 and 9 AM, The PM Peak Hour conditions are assumed to prevail between 4 and 6 PM. The Midday conditions were applied to the 7 hour period between 9 AM and 4 PM.

Table 10: WEEKLY REDUCTION IN TRAVEL TIME

	TRAVEL TIME SAVING (sec/hr)	NO. OF HOURS IN PERIOD	TOTAL DAILY SAVING (hr)	NO. OF DAYS PER WEEK	TOTAL DAILY SAVING (hr)
AM	-6947.2	2	3.86	5	19.3
MIDDAY	-51036.1	7	99.24	5	496.2
PM	-27693.3	2	15.39	5	76.95
Saturday	-51,036.1	6	85.06	1	85.06
Sunday	-51,036.1	6	85.06	1	85.06
TOTAL WEEKLY SAVINGS					**762.57**

The volumes for a six hour period on Saturday and then again on Sunday closely resemble the conditions through the Midday period. Therefore, the savings for the midday period was applied to Saturday and Sunday.

The total annual savings were calculated as follows:

$$\boldsymbol{Annual\ Saving = 762.57\ x\ 52 = 39,653.6\ hours}$$

CRASH HISTORY

Crash data was obtained for the SR 5 study area from the Georgia DOT. The data for the last three calendar years is provided in Appendix G.

Table 11 summarizes the crash history by intersection.

Table 11: CRASH FREQUENCY

INTERSECTION	TYPE OF COLLISION	2011	2012	2013
CONCOURSE PKWY	ANGLE	14	5	9
	REAR END	7	7	11
	HEAD ON	1	0	0
	SIDESWIPE	5	6	7
	OTHER	1	2	1
	TOTAL	28	20	28
I-20 INTERCHANGE	ANGLE	20	21	13
	REAR END	25	19	25
	HEAD ON	0	0	0
	SIDESWIPE	6	4	6
	OTHER	3	4	1
	TOTAL	54	48	45
DOUGLAS BLVD	ANGLE	40	35	30
	REAR END	43	45	57
	HEAD ON	1	0	4
	SIDESWIPE	16	14	11
	OTHER	1	2	3
	TOTAL	101	96	105
ARBOR PKWY	ANGLE	3	2	6
	REAR END	14	10	9
	HEAD ON	0	2	0
	SIDESWIPE	2	3	3
	OTHER	2	0	0
	TOTAL	21	17	18

Table 11: CRASH FREQUENCY (Continued)

INTERSECTION	TYPE OF COLLISION	2011	2012	2013
STEWART PKWY	ANGLE	5	6	8
	REAR END	2	6	11
	HEAD ON	0	0	1
	SIDESWIPE	0	5	3
	OTHER	0	0	1
	TOTAL	7	17	24

APPENDICES

APPENDIX A – CAPACITY ANALYSIS REPORTS, I-20 WB INTERSECTION (WB Right Turn)

APPENDIX B – CAPACITY ANALYSIS REPORTS, I-20 WB INTERSECTION (SB Extended Left Turn)

APPENDIX C – CAPACITY ANALYSIS REPORTS, CONCOURSE PKWY INTERSECTION

APPENDIX D – CAPACITY ANALYSIS REPORTS, I-20 EB INTERSECTION (NB Extended Left Turn)

APPENDIX E – CAPACITY ANALYSIS REPORTS, DOUGLAS BLVD INTERSECTION

APPENDIX F – CAPACITY ANALYSIS REPORTS, WESLEY POND/STEWART PKWY AREA

APPENDIX G – CRASH DATA

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	0	0	384	0	301	113	624	0	0	682	85
Satd. Flow (prot)	0	0	0	3273	0	1509	1719	3471	0	0	3406	1495
Flt Permitted				0.950			0.311					
Satd. Flow (perm)	0	0	0	3273	0	1509	563	3471	0	0	3406	1495
Satd. Flow (RTOR)						350						112
Lane Group Flow (vph)	0	0	0	457	0	350	143	752	0	0	775	112
Turn Type				Perm		Free	pm+pt	NA			NA	Perm
Protected Phases							1	6			2	
Permitted Phases				8		Free	6					2
Total Split (s)				51.0			24.0	99.0			75.0	75.0
Total Lost Time (s)				5.7			4.4	6.0			6.0	6.0
Act Effct Green (s)				26.5		150.0	113.4	111.8			98.5	98.5
Actuated g/C Ratio				0.18		1.00	0.76	0.75			0.66	0.66
v/c Ratio				0.79		0.23	0.29	0.29			0.35	0.11
Control Delay				69.4		0.4	7.6	7.7			12.7	2.2
Queue Delay				0.0		0.0	0.0	0.1			0.5	0.0
Total Delay				69.4		0.4	7.6	7.8			13.2	2.2
LOS				E		A	A	A			B	A
Approach Delay								7.8			11.8	
Approach LOS								A			B	
Queue Length 50th (ft)				223		0	42	122			166	0
Queue Length 95th (ft)				251		0	55	131			235	15
Internal Link Dist (ft)		644			369			388			182	
Turn Bay Length (ft)						500						370
Base Capacity (vph)				988		1509	576	2588			2235	1019
Starvation Cap Reductn				0		0	0	824			953	0
Spillback Cap Reductn				0		0	0	0			0	0
Storage Cap Reductn				0		0	0	0			0	0
Reduced v/c Ratio				0.46		0.23	0.25	0.43			0.60	0.11

Intersection Summary

Cycle Length: 150
Actuated Cycle Length: 150
Offset: 0 (0%), Referenced to phase 2:SBT and 6:NBTL, Start of 1st Green
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.79
Intersection Signal Delay: 19.0 — Intersection LOS: B
Intersection Capacity Utilization 87.2% — ICU Level of Service E
Analysis Period (min) 15

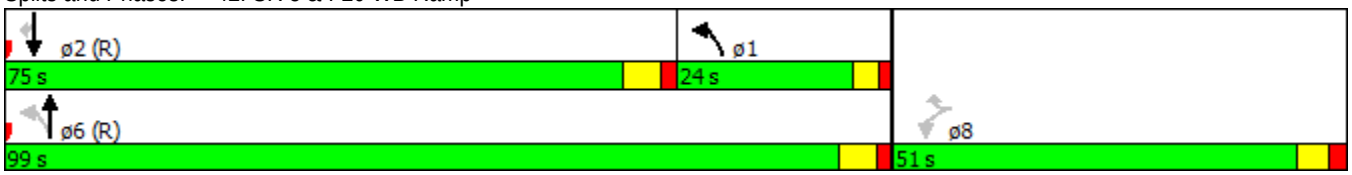
Splits and Phases: 42: SR 5 & I-20 WB Ramp

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	0	0	384	0	301	113	624	0	0	682	85
Satd. Flow (prot)	0	0	0	3273	0	2656	1719	3471	0	0	3406	1495
Flt Permitted				0.950			0.310					
Satd. Flow (perm)	0	0	0	3273	0	2656	561	3471	0	0	3406	1495
Satd. Flow (RTOR)						350						112
Lane Group Flow (vph)	0	0	0	457	0	350	143	752	0	0	775	112
Turn Type				Perm		Perm	pm+pt	NA			NA	Perm
Protected Phases							1	6			2	
Permitted Phases				8		8	6					2
Total Split (s)				51.0		51.0	24.0	99.0			75.0	75.0
Total Lost Time (s)				5.7		5.7	4.4	6.0			6.0	6.0
Act Effct Green (s)				27.1		27.1	112.8	111.2			87.2	87.2
Actuated g/C Ratio				0.18		0.18	0.75	0.74			0.58	0.58
v/c Ratio				0.77		0.46	0.25	0.29			0.39	0.12
Control Delay				67.4		6.5	6.3	4.6			18.4	3.0
Queue Delay				0.0		0.0	0.0	0.4			0.6	0.0
Total Delay				67.4		6.5	6.3	5.0			19.0	3.0
LOS				E		A	A	A			B	A
Approach Delay								5.2			17.0	
Approach LOS								A			B	
Queue Length 50th (ft)				222		0	28	77			208	0
Queue Length 95th (ft)				247		36	43	118			276	17
Internal Link Dist (ft)		644			369			388			182	
Turn Bay Length (ft)						500						370
Base Capacity (vph)				988		1046	573	2572			1979	915
Starvation Cap Reductn				0		0	0	1173			765	0
Spillback Cap Reductn				0		0	0	0			0	0
Storage Cap Reductn				0		0	0	0			0	0
Reduced v/c Ratio				0.46		0.33	0.25	0.54			0.64	0.12

Intersection Summary

Cycle Length: 150
Actuated Cycle Length: 150
Offset: 53 (35%), Referenced to phase 2:SBT and 6:NBTL, Start of 1st Green
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.77
Intersection Signal Delay: 20.4 — Intersection LOS: C
Intersection Capacity Utilization 87.2% — ICU Level of Service E
Analysis Period (min) 15

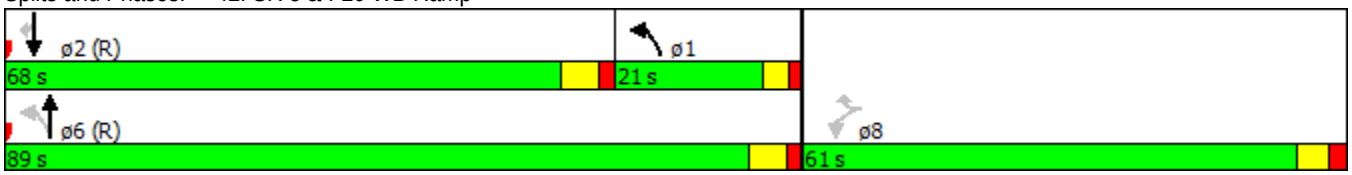
Splits and Phases: 42: SR 5 & I-20 WB Ramp



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	0	0	384	0	301	113	624	0	0	682	85
Satd. Flow (prot)	0	0	0	3273	0	1509	1719	3471	0	0	3406	1495
Flt Permitted				0.950			0.313					
Satd. Flow (perm)	0	0	0	3273	0	1509	566	3471	0	0	3406	1495
Satd. Flow (RTOR)						184						112
Lane Group Flow (vph)	0	0	0	457	0	350	143	752	0	0	775	112
Turn Type				Perm		Perm	pm+pt	NA			NA	Perm
Protected Phases							1	6			2	
Permitted Phases				8		8	6					2
Total Split (s)				61.0		61.0	21.0	89.0			68.0	68.0
Total Lost Time (s)				5.7		5.7	4.4	6.0			6.0	6.0
Act Effct Green (s)				28.6		28.6	111.3	109.7			88.7	88.7
Actuated g/C Ratio				0.19		0.19	0.74	0.73			0.59	0.59
v/c Ratio				0.73		0.80	0.26	0.30			0.38	0.12
Control Delay				63.8		40.7	4.9	3.8			17.8	3.1
Queue Delay				0.0		0.0	0.0	0.3			0.6	0.0
Total Delay				63.8		40.7	4.9	4.0			18.4	3.1
LOS				E		D	A	A			B	A
Approach Delay								4.2			16.4	
Approach LOS								A			B	
Queue Length 50th (ft)				221		165	27	75			198	0
Queue Length 95th (ft)				235		240	39	94			287	18
Internal Link Dist (ft)		644			369			388			182	
Turn Bay Length (ft)						500						370
Base Capacity (vph)				1206		672	547	2539			2015	930
Starvation Cap Reductn				0		0	0	1030			783	0
Spillback Cap Reductn				0		0	0	0			0	0
Storage Cap Reductn				0		0	0	0			0	0
Reduced v/c Ratio				0.38		0.52	0.26	0.50			0.63	0.12

Intersection Summary	
Cycle Length: 150	
Actuated Cycle Length: 150	
Offset: 53 (35%), Referenced to phase 2:SBT and 6:NBTL, Start of 1st Green	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.80	
Intersection Signal Delay: 23.8	Intersection LOS: C
Intersection Capacity Utilization 87.2%	ICU Level of Service E
Analysis Period (min) 15	

Splits and Phases: 42: SR 5 & I-20 WB Ramp

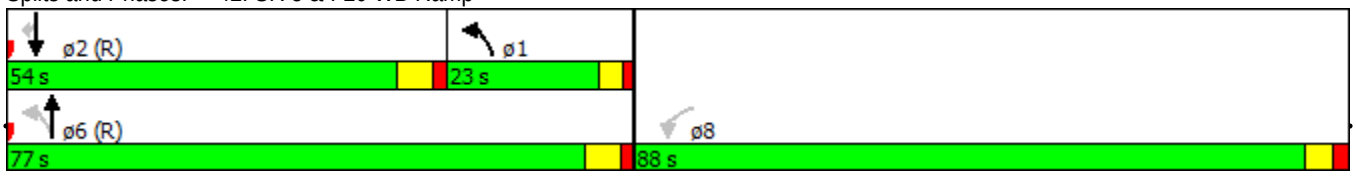


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	0	0	492	0	368	268	795	0	0	970	90
Satd. Flow (prot)	0	0	0	3335	0	1524	1656	3438	0	0	3438	1509
Flt Permitted				0.950			0.074					
Satd. Flow (perm)	0	0	0	3335	0	1524	129	3438	0	0	3438	1509
Satd. Flow (RTOR)						179						59
Lane Group Flow (vph)	0	0	0	1968	0	396	291	946	0	0	1090	100
Turn Type				Perm		Free	pm+pt	NA			NA	Perm
Protected Phases							1	6			2	
Permitted Phases				8		Free	6					2
Total Split (s)				88.0			23.0	77.0			54.0	54.0
Total Lost Time (s)				5.7			4.4	6.0			6.0	6.0
Act Effct Green (s)				82.3		165.0	72.6	71.0			48.0	48.0
Actuated g/C Ratio				0.50		1.00	0.44	0.43			0.29	0.29
v/c Ratio				1.18		0.26	1.28	0.64			1.09	0.21
Control Delay				126.4		0.4	189.1	22.3			109.6	20.6
Queue Delay				0.0		0.0	0.0	1.7			4.7	0.0
Total Delay				126.4		0.4	189.1	24.0			114.3	20.6
LOS				F		A	F	C			F	C
Approach Delay								62.8			106.4	
Approach LOS								E			F	
Queue Length 50th (ft)				~1310		0	~356	320			~694	33
Queue Length 95th (ft)				191		0	#560	170			#819	83
Internal Link Dist (ft)		644			369			388			182	
Turn Bay Length (ft)						500						370
Base Capacity (vph)				1663		1524	228	1479			1000	480
Starvation Cap Reductn				0		0	0	347			112	0
Spillback Cap Reductn				24		0	0	0			0	0
Storage Cap Reductn				0		0	0	0			0	0
Reduced v/c Ratio				1.20		0.26	1.28	0.84			1.23	0.21

Intersection Summary

Cycle Length: 165
Actuated Cycle Length: 165
Offset: 50 (30%), Referenced to phase 2:SBT and 6:NBTL, Start of 1st Green
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 1.28
Intersection Signal Delay: 94.6 Intersection LOS: F
Intersection Capacity Utilization 69.1% ICU Level of Service C
Analysis Period (min) 15
~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 42: SR 5 & I-20 WB Ramp



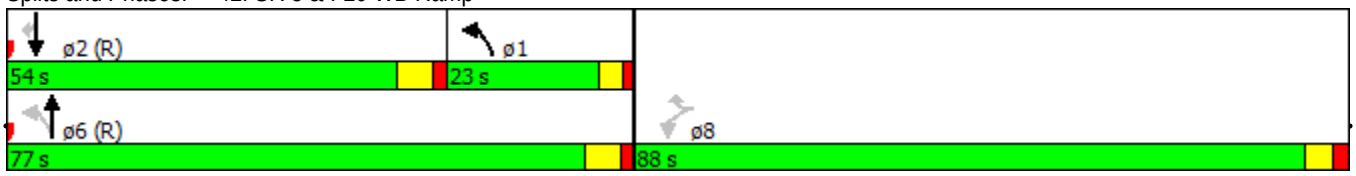
Wilburn Engineering

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	0	0	492	0	368	268	795	0	0	970	90
Satd. Flow (prot)	0	0	0	3335	0	2682	1656	3438	0	0	3438	1509
Flt Permitted				0.950			0.074					
Satd. Flow (perm)	0	0	0	3335	0	2682	129	3438	0	0	3438	1509
Satd. Flow (RTOR)						101						59
Lane Group Flow (vph)	0	0	0	1968	0	396	291	946	0	0	1090	100
Turn Type				Perm		Perm	pm+pt	NA			NA	Perm
Protected Phases							1	6			2	
Permitted Phases				8		8	6					2
Total Split (s)				88.0		88.0	23.0	77.0			54.0	54.0
Total Lost Time (s)				5.7		5.7	4.4	6.0			6.0	6.0
Act Effct Green (s)				82.3		82.3	72.6	71.0			48.0	48.0
Actuated g/C Ratio				0.50		0.50	0.44	0.43			0.29	0.29
v/c Ratio				1.18		0.29	1.28	0.64			1.09	0.21
Control Delay				126.4		18.1	189.1	22.3			109.6	20.6
Queue Delay				0.0		0.0	0.0	1.7			4.7	0.0
Total Delay				126.4		18.1	189.1	24.0			114.3	20.6
LOS				F		B	F	C			F	C
Approach Delay								62.8			106.4	
Approach LOS								E			F	
Queue Length 50th (ft)				~1310		101	~356	320			~694	33
Queue Length 95th (ft)				191		143	#560	170			#819	83
Internal Link Dist (ft)		644			369			388			182	
Turn Bay Length (ft)						500						370
Base Capacity (vph)				1663		1388	228	1479			1000	480
Starvation Cap Reductn				0		0	0	347			112	0
Spillback Cap Reductn				24		0	0	0			0	0
Storage Cap Reductn				0		0	0	0			0	0
Reduced v/c Ratio				1.20		0.29	1.28	0.84			1.23	0.21

Intersection Summary

Cycle Length: 165
Actuated Cycle Length: 165
Offset: 50 (30%), Referenced to phase 2:SBT and 6:NBTL, Start of 1st Green
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 1.28
Intersection Signal Delay: 96.1 Intersection LOS: F
Intersection Capacity Utilization 69.1% ICU Level of Service C
Analysis Period (min) 15
~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 42: SR 5 & I-20 WB Ramp

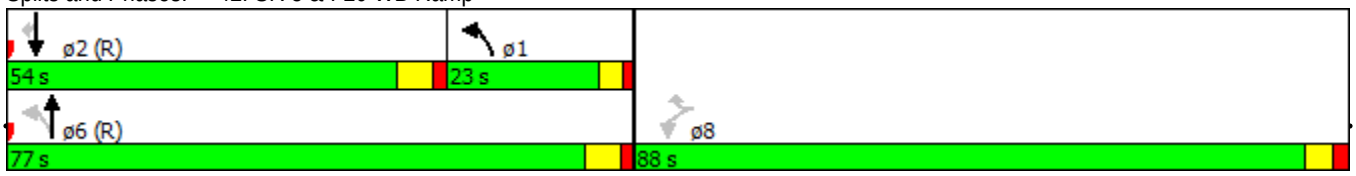


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	0	0	492	0	368	268	795	0	0	970	90
Satd. Flow (prot)	0	0	0	3335	0	1524	1656	3438	0	0	3438	1509
Flt Permitted				0.950			0.074					
Satd. Flow (perm)	0	0	0	3335	0	1524	129	3438	0	0	3438	1509
Satd. Flow (RTOR)						60						59
Lane Group Flow (vph)	0	0	0	1968	0	396	291	946	0	0	1090	100
Turn Type				Perm		Perm	pm+pt	NA			NA	Perm
Protected Phases							1	6			2	
Permitted Phases				8		8	6					2
Total Split (s)				88.0		88.0	23.0	77.0			54.0	54.0
Total Lost Time (s)				5.7		5.7	4.4	6.0			6.0	6.0
Act Effct Green (s)				82.3		82.3	72.6	71.0			48.0	48.0
Actuated g/C Ratio				0.50		0.50	0.44	0.43			0.29	0.29
v/c Ratio				1.18		0.50	1.28	0.64			1.09	0.21
Control Delay				126.4		25.6	189.1	22.3			109.6	20.6
Queue Delay				0.0		0.0	0.0	1.7			4.7	0.0
Total Delay				126.4		25.6	189.1	24.0			114.3	20.6
LOS				F		C	F	C			F	C
Approach Delay								62.8			106.4	
Approach LOS								E			F	
Queue Length 50th (ft)				~1310		239	~356	320			~694	33
Queue Length 95th (ft)				191		338	#560	170			#819	83
Internal Link Dist (ft)		644			369			388			182	
Turn Bay Length (ft)						500						370
Base Capacity (vph)				1663		790	228	1479			1000	480
Starvation Cap Reductn				0		0	0	347			112	0
Spillback Cap Reductn				24		0	0	0			0	0
Storage Cap Reductn				0		0	0	0			0	0
Reduced v/c Ratio				1.20		0.50	1.28	0.84			1.23	0.21

Intersection Summary

Cycle Length: 165
Actuated Cycle Length: 165
Offset: 50 (30%), Referenced to phase 2:SBT and 6:NBTL, Start of 1st Green
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 1.28
Intersection Signal Delay: 96.7 Intersection LOS: F
Intersection Capacity Utilization 69.1% ICU Level of Service C
Analysis Period (min) 15
~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 42: SR 5 & I-20 WB Ramp

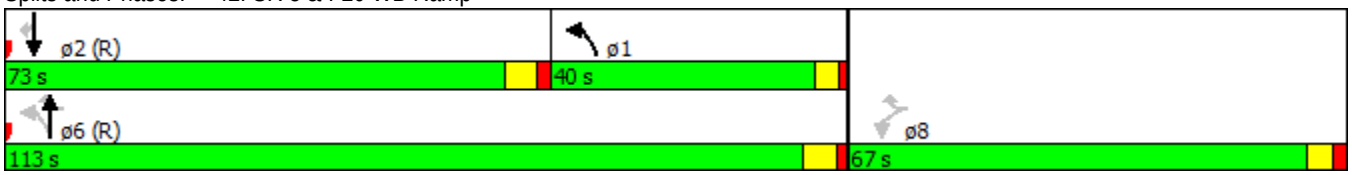


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	0	0	892	0	660	275	814	0	0	950	116
Satd. Flow (prot)	0	0	0	3400	0	1553	1736	3574	0	0	3539	1568
Flt Permitted				0.950			0.100					
Satd. Flow (perm)	0	0	0	3400	0	1553	183	3574	0	0	3539	1568
Satd. Flow (RTOR)												72
Lane Group Flow (vph)	0	0	0	991	0	702	335	857	0	0	1105	120
Turn Type				Perm		Perm	pm+pt	NA			NA	Perm
Protected Phases							1	6			2	
Permitted Phases				8		6 8	6					2
Total Split (s)				67.0			40.0	113.0			73.0	73.0
Total Lost Time (s)				5.7			4.4	6.0			6.0	6.0
Act Effct Green (s)				58.3		180.0	111.6	110.0			70.0	70.0
Actuated g/C Ratio				0.32		1.00	0.62	0.61			0.39	0.39
v/c Ratio				0.90		0.45	0.80	0.39			0.80	0.18
Control Delay				69.6		1.0	62.6	9.9			55.0	16.4
Queue Delay				0.1		0.0	0.0	0.4			48.7	0.0
Total Delay				69.6		1.0	62.6	10.3			103.7	16.4
LOS				E		A	E	B			F	B
Approach Delay								25.0			95.2	
Approach LOS								C			F	
Queue Length 50th (ft)				566		0	311	234			626	37
Queue Length 95th (ft)				657		0	374	77			675	88
Internal Link Dist (ft)		644			369			388			182	
Turn Bay Length (ft)						500						370
Base Capacity (vph)				1157		1540	420	2183			1375	653
Starvation Cap Reductn				0		0	0	765			376	0
Spillback Cap Reductn				3		0	0	0			0	0
Storage Cap Reductn				0		0	0	0			0	0
Reduced v/c Ratio				0.86		0.46	0.80	0.60			1.11	0.18

Intersection Summary

Cycle Length: 180
Actuated Cycle Length: 180
Offset: 56 (31%), Referenced to phase 2:SBT and 6:NBTL, Start of 1st Green
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.90
Intersection Signal Delay: 52.6 Intersection LOS: D
Intersection Capacity Utilization 112.7% ICU Level of Service H
Analysis Period (min) 15

Splits and Phases: 42: SR 5 & I-20 WB Ramp

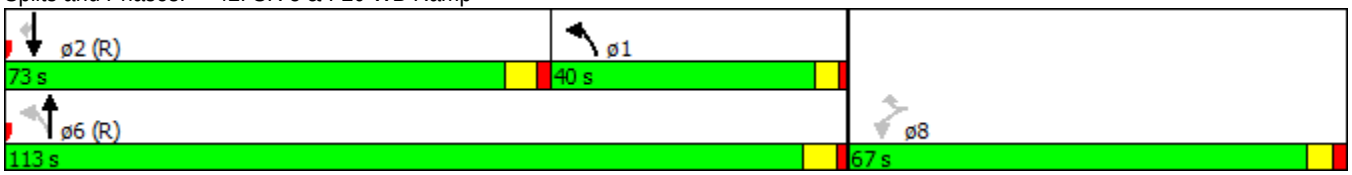


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	0	0	892	0	660	275	814	0	0	950	116
Satd. Flow (prot)	0	0	0	3400	0	2733	1736	3574	0	0	3539	1568
Flt Permitted				0.950			0.100					
Satd. Flow (perm)	0	0	0	3400	0	2733	183	3574	0	0	3539	1568
Satd. Flow (RTOR)						289						72
Lane Group Flow (vph)	0	0	0	991	0	702	335	857	0	0	1105	120
Turn Type				Perm		Perm	pm+pt	NA			NA	Perm
Protected Phases							1	6			2	
Permitted Phases				8		8	6					2
Total Split (s)				67.0		67.0	40.0	113.0			73.0	73.0
Total Lost Time (s)				5.7		5.7	4.4	6.0			6.0	6.0
Act Effct Green (s)				58.3		58.3	111.6	110.0			70.0	70.0
Actuated g/C Ratio				0.32		0.32	0.62	0.61			0.39	0.39
v/c Ratio				0.90		0.65	0.80	0.39			0.80	0.18
Control Delay				69.6		32.1	62.6	9.9			55.0	16.4
Queue Delay				0.1		0.0	0.0	0.4			48.7	0.0
Total Delay				69.6		32.1	62.6	10.3			103.7	16.4
LOS				E		C	E	B			F	B
Approach Delay								25.0			95.2	
Approach LOS								C			F	
Queue Length 50th (ft)				566		239	311	234			626	37
Queue Length 95th (ft)				657		317	374	77			675	88
Internal Link Dist (ft)		644			369			388			182	
Turn Bay Length (ft)						500						370
Base Capacity (vph)				1157		1121	420	2183			1375	653
Starvation Cap Reductn				0		0	0	765			376	0
Spillback Cap Reductn				3		0	0	0			0	0
Storage Cap Reductn				0		0	0	0			0	0
Reduced v/c Ratio				0.86		0.63	0.80	0.60			1.11	0.18

Intersection Summary

Cycle Length: 180
Actuated Cycle Length: 180
Offset: 56 (31%), Referenced to phase 2:SBT and 6:NBTL, Start of 1st Green
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.90
Intersection Signal Delay: 57.9 Intersection LOS: E
Intersection Capacity Utilization 97.1% ICU Level of Service F
Analysis Period (min) 15

Splits and Phases: 42: SR 5 & I-20 WB Ramp

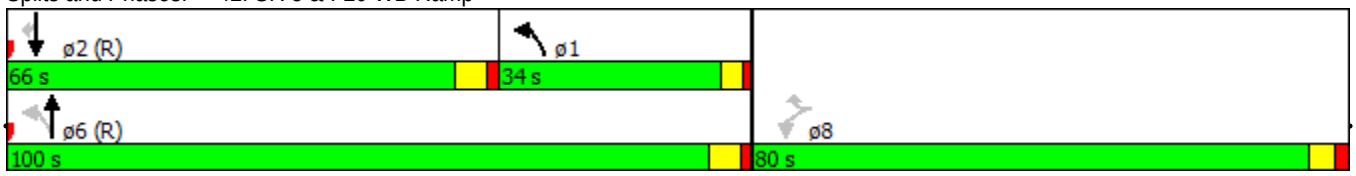


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	0	0	892	0	660	275	814	0	0	950	116
Satd. Flow (prot)	0	0	0	3400	0	1553	1736	3574	0	0	3539	1568
Flt Permitted				0.950			0.060					
Satd. Flow (perm)	0	0	0	3400	0	1553	110	3574	0	0	3539	1568
Satd. Flow (RTOR)						125						68
Lane Group Flow (vph)	0	0	0	991	0	702	335	857	0	0	1105	120
Turn Type				Perm		Perm	pm+pt	NA			NA	Perm
Protected Phases							1	6			2	
Permitted Phases				8		8	6					2
Total Split (s)				80.0		80.0	34.0	100.0			66.0	66.0
Total Lost Time (s)				5.7		5.7	4.4	6.0			6.0	6.0
Act Effct Green (s)				74.1		74.1	95.8	94.2			60.2	60.2
Actuated g/C Ratio				0.41		0.41	0.53	0.52			0.33	0.33
v/c Ratio				0.71		0.98	1.03	0.46			0.93	0.21
Control Delay				47.3		72.3	106.5	14.0			72.4	20.0
Queue Delay				0.1		0.0	0.0	0.6			45.3	0.0
Total Delay				47.4		72.3	106.5	14.6			117.7	20.0
LOS				D		E	F	B			F	B
Approach Delay								40.4			108.1	
Approach LOS								D			F	
Queue Length 50th (ft)				499		720	~368	248			669	43
Queue Length 95th (ft)				581		#1011	#495	172			720	98
Internal Link Dist (ft)		644			369			388			182	
Turn Bay Length (ft)						500						370
Base Capacity (vph)				1403		714	325	1869			1182	569
Starvation Cap Reductn				0		0	0	585			280	0
Spillback Cap Reductn				33		0	0	0			0	0
Storage Cap Reductn				0		0	0	0			0	0
Reduced v/c Ratio				0.72		0.98	1.03	0.67			1.23	0.21

Intersection Summary

Cycle Length: 180
Actuated Cycle Length: 180
Offset: 56 (31%), Referenced to phase 2:SBT and 6:NBTL, Start of 1st Green
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 1.03
Intersection Signal Delay: 67.7 Intersection LOS: E
Intersection Capacity Utilization 112.5% ICU Level of Service H
Analysis Period (min) 15
~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 42: SR 5 & I-20 WB Ramp

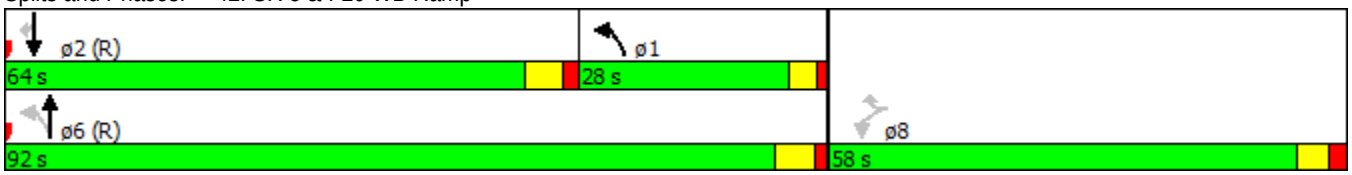


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	0	0	384	0	301	113	624	0	0	682	85
Satd. Flow (prot)	0	0	0	3273	0	2656	1719	3471	0	0	4893	1495
Flt Permitted				0.950			0.321					
Satd. Flow (perm)	0	0	0	3273	0	2656	581	3471	0	0	4893	1495
Satd. Flow (RTOR)						345						112
Lane Group Flow (vph)	0	0	0	457	0	350	143	752	0	0	775	112
Turn Type				Perm		Perm	pm+pt	NA			NA	Perm
Protected Phases							1	6			2	
Permitted Phases				8		8	6					2
Total Split (s)				58.0		58.0	28.0	92.0			64.0	64.0
Total Lost Time (s)				5.7		5.7	4.4	6.0			6.0	6.0
Act Effct Green (s)				27.3		27.3	112.6	111.0			83.0	83.0
Actuated g/C Ratio				0.18		0.18	0.75	0.74			0.55	0.55
v/c Ratio				0.77		0.46	0.23	0.29			0.29	0.13
Control Delay				66.9		6.9	4.6	3.9			18.7	3.4
Queue Delay				0.0		0.0	0.0	0.3			0.0	0.0
Total Delay				66.9		6.9	4.6	4.2			18.7	3.4
LOS				E		A	A	A			B	A
Approach Delay								4.3			16.8	
Approach LOS								A			B	
Queue Length 50th (ft)				221		2	27	75			143	0
Queue Length 95th (ft)				246		38	33	87			186	18
Internal Link Dist (ft)		644			369			388			182	
Turn Bay Length (ft)						500						370
Base Capacity (vph)				1141		1150	614	2567			2706	876
Starvation Cap Reductn				0		0	0	1079			0	0
Spillback Cap Reductn				0		0	0	0			0	0
Storage Cap Reductn				0		0	0	0			0	0
Reduced v/c Ratio				0.40		0.30	0.23	0.51			0.29	0.13

Intersection Summary

Cycle Length: 150
Actuated Cycle Length: 150
Offset: 53 (35%), Referenced to phase 2:SBT and 6:NBTL, Start of 1st Green
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.77
Intersection Signal Delay: 20.0 — Intersection LOS: B
Intersection Capacity Utilization 87.2% — ICU Level of Service E
Analysis Period (min) 15

Splits and Phases: 42: SR 5 & I-20 WB Ramp

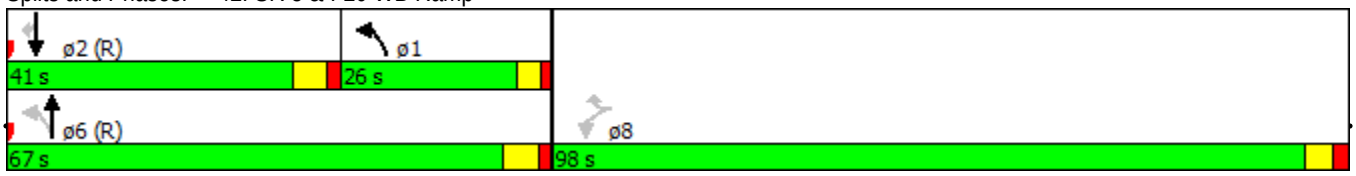


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	0	0	492	0	368	268	795	0	0	970	90
Satd. Flow (prot)	0	0	0	3335	0	2682	1656	3438	0	0	4940	1509
Flt Permitted				0.950			0.098					
Satd. Flow (perm)	0	0	0	3335	0	2682	171	3438	0	0	4940	1509
Satd. Flow (RTOR)						61						76
Lane Group Flow (vph)	0	0	0	1968	0	396	291	946	0	0	1090	100
Turn Type				Perm		Perm	pm+pt	NA			NA	Perm
Protected Phases							1	6			2	
Permitted Phases				8		8	6					2
Total Split (s)				98.0		98.0	26.0	67.0			41.0	41.0
Total Lost Time (s)				5.7		5.7	4.4	6.0			6.0	6.0
Act Effct Green (s)				92.3		92.3	62.6	61.0			35.0	35.0
Actuated g/C Ratio				0.56		0.56	0.38	0.37			0.21	0.21
v/c Ratio				1.06		0.26	1.12	0.74			1.04	0.26
Control Delay				72.5		16.1	129.4	30.0			100.6	18.5
Queue Delay				10.4		0.0	0.0	2.8			0.0	0.0
Total Delay				83.0		16.1	129.4	32.7			100.6	18.5
LOS				F		B	F	C			F	B
Approach Delay								55.5			93.7	
Approach LOS								E			F	
Queue Length 50th (ft)				~1193		101	~309	364			~463	21
Queue Length 95th (ft)				167		138	#504	260			#550	76
Internal Link Dist (ft)		644			369			388			182	
Turn Bay Length (ft)						500						370
Base Capacity (vph)				1865		1527	259	1271			1047	379
Starvation Cap Reductn				0		0	0	213			0	0
Spillback Cap Reductn				44		0	0	0			0	0
Storage Cap Reductn				0		0	0	0			0	0
Reduced v/c Ratio				1.08		0.26	1.12	0.89			1.04	0.26

Intersection Summary

Cycle Length: 165
Actuated Cycle Length: 165
Offset: 50 (30%), Referenced to phase 2:SBT and 6:NBTL, Start of 1st Green
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 1.12
Intersection Signal Delay: 73.0 Intersection LOS: E
Intersection Capacity Utilization 64.0% ICU Level of Service B
Analysis Period (min) 15
~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 42: SR 5 & I-20 WB Ramp



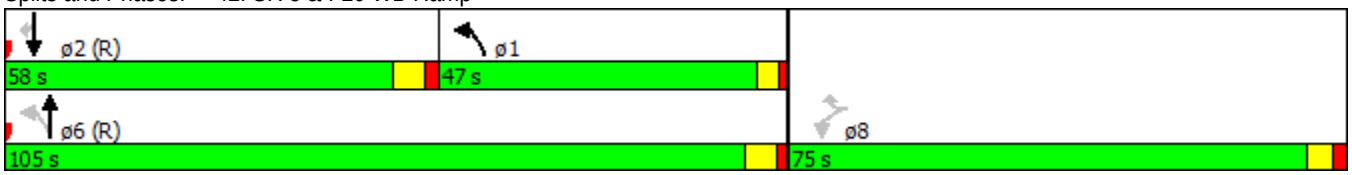
Wilburn Engineering

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	0	0	892	0	660	275	814	0	0	950	116
Satd. Flow (prot)	0	0	0	3400	0	2733	1736	3574	0	0	5085	1568
Flt Permitted				0.950			0.138					
Satd. Flow (perm)	0	0	0	3400	0	2733	252	3574	0	0	5085	1568
Satd. Flow (RTOR)						246						92
Lane Group Flow (vph)	0	0	0	991	0	702	335	857	0	0	1105	120
Turn Type				Perm		Perm	pm+pt	NA			NA	Perm
Protected Phases							1	6			2	
Permitted Phases				8		8	6					2
Total Split (s)				75.0		75.0	47.0	105.0			58.0	58.0
Total Lost Time (s)				5.7		5.7	4.4	6.0			6.0	6.0
Act Effct Green (s)				61.4		61.4	108.5	106.9			59.9	59.9
Actuated g/C Ratio				0.34		0.34	0.60	0.59			0.33	0.33
v/c Ratio				0.85		0.64	0.67	0.40			0.65	0.21
Control Delay				62.9		33.6	41.7	9.0			54.3	14.2
Queue Delay				0.0		0.0	61.3	0.4			1.3	0.0
Total Delay				62.9		33.6	103.0	9.4			55.6	14.2
LOS				E		C	F	A			E	B
Approach Delay								35.7			51.6	
Approach LOS								D			D	
Queue Length 50th (ft)				560		263	244	231			412	23
Queue Length 95th (ft)				610		320	319	118			467	81
Internal Link Dist (ft)		644			369			388			182	
Turn Bay Length (ft)						500						370
Base Capacity (vph)				1309		1203	503	2122			1691	583
Starvation Cap Reductn				0		0	274	684			358	0
Spillback Cap Reductn				0		0	0	0			0	0
Storage Cap Reductn				0		0	0	0			0	0
Reduced v/c Ratio				0.76		0.58	1.46	0.60			0.83	0.21

Intersection Summary

Cycle Length: 180
Actuated Cycle Length: 180
Offset: 56 (31%), Referenced to phase 2:SBT and 6:NBTL, Start of 1st Green
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.85
Intersection Signal Delay: 46.6 — Intersection LOS: D
Intersection Capacity Utilization 89.2% — ICU Level of Service E
Analysis Period (min) 15

Splits and Phases: 42: SR 5 & I-20 WB Ramp



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	9	7	154	4	61	38	626	209	78	611	3
Satd. Flow (prot)	1900	1794	0	3303	1573	0	1752	3471	1568	1752	3466	0
Flt Permitted				0.950			0.388			0.287		
Satd. Flow (perm)	1900	1794	0	3303	1573	0	716	3471	1568	529	3466	0
Satd. Flow (RTOR)		12			72				261		1	
Lane Group Flow (vph)	0	32	0	175	80	0	48	813	261	84	651	0
Turn Type	Split	NA		Split	NA		pm+pt	NA	Perm	pm+pt	NA	
Protected Phases	3	3		4	4		1	6		5	2	
Permitted Phases							6		6	2		
Total Split (s)	15.0	15.0		24.0	24.0		15.0	46.0	46.0	15.0	46.0	
Total Lost Time (s)	6.0	6.0		6.6	6.6		4.7	6.1	6.1	4.7	6.1	
Act Effct Green (s)		6.8		10.6	10.6		65.4	58.6	58.6	67.7	61.4	
Actuated g/C Ratio		0.07		0.11	0.11		0.65	0.59	0.59	0.68	0.61	
v/c Ratio		0.24		0.50	0.35		0.09	0.40	0.25	0.19	0.31	
Control Delay		35.6		46.8	16.0		7.3	13.8	2.1	7.7	12.4	
Queue Delay		0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Delay		35.6		46.8	16.0		7.3	13.8	2.1	7.7	12.4	
LOS		D		D	B		A	B	A	A	B	
Approach Delay		35.6			37.1			10.8			11.9	
Approach LOS		D			D			B			B	
Queue Length 50th (ft)		12		55	5		8	133	0	17	119	
Queue Length 95th (ft)		17		84	7		16	136	6	41	185	
Internal Link Dist (ft)		475			733			119			201	
Turn Bay Length (ft)							125		195	150		
Base Capacity (vph)		172		574	333		595	2034	1027	490	2129	
Starvation Cap Reductn		0		0	0		0	0	0	0	0	
Spillback Cap Reductn		0		0	0		0	0	0	0	0	
Storage Cap Reductn		0		0	0		0	0	0	0	0	
Reduced v/c Ratio		0.19		0.30	0.24		0.08	0.40	0.25	0.17	0.31	

Intersection Summary

Cycle Length: 100
Actuated Cycle Length: 100
Offset: 96 (96%), Referenced to phase 2:SBTL and 6:NBTL, Start of 1st Green
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.50
Intersection Signal Delay: 14.7 — Intersection LOS: B
Intersection Capacity Utilization 47.2% — ICU Level of Service A
Analysis Period (min) 15

Splits and Phases: 40: SR 5 & Concourse Pkwy

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	9	7	154	4	61	38	626	209	78	611	3
Satd. Flow (prot)	1900	1900	1615	3303	1573	0	1752	3471	1568	1752	3466	0
Flt Permitted				0.950			0.390			0.287		
Satd. Flow (perm)	1900	1900	1615	3303	1573	0	719	3471	1568	529	3466	0
Satd. Flow (RTOR)			157		72				261		1	
Lane Group Flow (vph)	0	20	12	175	80	0	48	813	261	84	651	0
Turn Type	Split	NA	Perm	Split	NA		pm+pt	NA	Perm	pm+pt	NA	
Protected Phases	3	3		4	4		1	6		5	2	
Permitted Phases			3				6		6	2		
Total Split (s)	15.0	15.0	15.0	24.0	24.0		15.0	46.0	46.0	15.0	46.0	
Total Lost Time (s)	6.0	6.0	6.0	6.6	6.6		4.7	6.1	6.1	4.7	6.1	
Act Effct Green (s)		6.6	6.6	10.6	10.6		65.6	58.8	58.8	67.9	61.6	
Actuated g/C Ratio		0.07	0.07	0.11	0.11		0.66	0.59	0.59	0.68	0.62	
v/c Ratio		0.16	0.05	0.50	0.35		0.09	0.40	0.25	0.19	0.30	
Control Delay		46.3	0.3	46.8	16.0		7.2	13.6	2.0	7.6	12.2	
Queue Delay		0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Delay		46.3	0.3	46.8	16.0		7.2	13.6	2.0	7.6	12.2	
LOS		D	A	D	B		A	B	A	A	B	
Approach Delay		29.1			37.1			10.7			11.7	
Approach LOS		C			D			B			B	
Queue Length 50th (ft)		12	0	55	5		8	133	0	17	119	
Queue Length 95th (ft)		18	0	84	7		16	134	6	40	182	
Internal Link Dist (ft)		475			733			119			201	
Turn Bay Length (ft)							125		195	150		
Base Capacity (vph)		171	288	574	333		598	2042	1029	492	2136	
Starvation Cap Reductn		0	0	0	0		0	0	0	0	0	
Spillback Cap Reductn		0	0	0	0		0	0	0	0	0	
Storage Cap Reductn		0	0	0	0		0	0	0	0	0	
Reduced v/c Ratio		0.12	0.04	0.30	0.24		0.08	0.40	0.25	0.17	0.30	

Intersection Summary

Cycle Length: 100
Actuated Cycle Length: 100
Offset: 96 (96%), Referenced to phase 2:SBTL and 6:NBTL, Start of 1st Green
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.50
Intersection Signal Delay: 14.4 — Intersection LOS: B
Intersection Capacity Utilization 47.2% — ICU Level of Service A
Analysis Period (min) 15

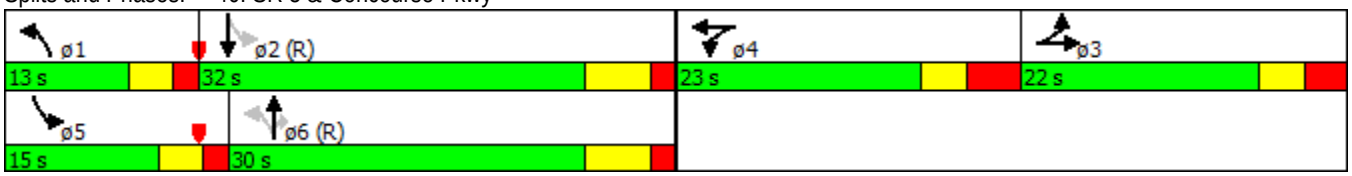
Splits and Phases: 40: SR 5 & Concourse Pkwy

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	7	13	50	437	19	70	78	547	527	77	571	11
Satd. Flow (prot)	1805	1643	0	3273	1648	0	1736	2542	1553	1770	2802	0
Flt Permitted	0.950			0.950			0.324			0.378		
Satd. Flow (perm)	1805	1643	0	3273	1648	0	592	2542	1553	704	2802	0
Satd. Flow (RTOR)		68			84				606		3	
Lane Group Flow (vph)	12	84	0	486	112	0	92	582	606	104	680	0
Turn Type	Split	NA		Split	NA		pm+pt	NA	Perm	pm+pt	NA	
Protected Phases	3	3		4	4		1	6		5	2	
Permitted Phases							6		6	2		
Total Split (s)	22.0	22.0		23.0	23.0		13.0	30.0	30.0	15.0	32.0	
Total Lost Time (s)	6.0	6.0		6.6	6.6		4.7	6.1	6.1	4.7	6.1	
Act Effct Green (s)	7.1	7.1		15.9	15.9		47.9	39.8	39.8	48.4	40.1	
Actuated g/C Ratio	0.08	0.08		0.18	0.18		0.53	0.44	0.44	0.54	0.45	
v/c Ratio	0.08	0.44		0.84	0.31		0.22	0.52	0.59	0.22	0.54	
Control Delay	38.3	20.7		50.1	13.9		11.8	23.2	4.8	11.5	23.1	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Delay	38.3	20.7		50.1	13.9		11.8	23.2	4.8	11.5	23.1	
LOS	D	C		D	B		B	C	A	B	C	
Approach Delay		22.9			43.3			13.7			21.6	
Approach LOS		C			D			B			C	
Queue Length 50th (ft)	7	9		138	13		23	132	0	26	156	
Queue Length 95th (ft)	15	41		#212	33		48	213	61	45	228	
Internal Link Dist (ft)		183			340			119			201	
Turn Bay Length (ft)							125		195	150		
Base Capacity (vph)	320	348		596	368		429	1124	1025	512	1248	
Starvation Cap Reductn	0	0		0	0		0	0	0	0	0	
Spillback Cap Reductn	0	0		0	0		0	0	0	0	0	
Storage Cap Reductn	0	0		0	0		0	0	0	0	0	
Reduced v/c Ratio	0.04	0.24		0.82	0.30		0.21	0.52	0.59	0.20	0.54	

Intersection Summary

Cycle Length: 90
Actuated Cycle Length: 90
Offset: 0 (0%), Referenced to phase 2:SBTL and 6:NBTL, Start of 1st Green
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.84
Intersection Signal Delay: 22.7 — Intersection LOS: C
Intersection Capacity Utilization 54.7% — ICU Level of Service A
Analysis Period (min) 15
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 40: SR 5 & Concourse Pkwy

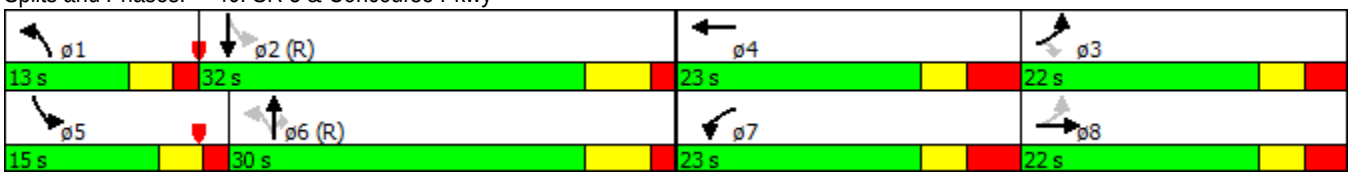


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	7	13	50	437	19	70	78	547	527	77	571	11
Satd. Flow (prot)	1805	1900	1583	3273	1648	0	1736	2542	1553	1770	2802	0
Flt Permitted	0.000			0.950			0.337			0.389		
Satd. Flow (perm)	0	1900	1583	3273	1648	0	616	2542	1553	725	2802	0
Satd. Flow (RTOR)			175		84				606		3	
Lane Group Flow (vph)	12	16	68	486	112	0	92	582	606	104	680	0
Turn Type	pm+pt	NA	custom	Prot	NA		pm+pt	NA	Perm	pm+pt	NA	
Protected Phases	3	8		7	4		1	6		5	2	
Permitted Phases	8		3				6		6	2		
Total Split (s)	22.0	22.0	22.0	23.0	23.0		13.0	30.0	30.0	15.0	32.0	
Total Lost Time (s)	6.0	6.0	6.0	6.6	6.6		4.7	6.1	6.1	4.7	6.1	
Act Effct Green (s)	9.0	6.4	9.0	17.6	7.8		54.4	46.7	46.7	54.8	46.9	
Actuated g/C Ratio	0.10	0.07	0.10	0.20	0.09		0.60	0.52	0.52	0.61	0.52	
v/c Ratio	0.07	0.12	0.22	0.76	0.51		0.20	0.44	0.55	0.20	0.47	
Control Delay	37.3	40.7	1.6	42.9	22.0		8.5	17.4	3.9	8.4	17.3	
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Delay	37.3	40.7	1.6	42.9	22.0		8.5	17.4	4.0	8.4	17.3	
LOS	D	D	A	D	C		A	B	A	A	B	
Approach Delay		12.5			39.0			10.4			16.1	
Approach LOS		B			D			B			B	
Queue Length 50th (ft)	7	9	0	132	15		16	103	0	19	122	
Queue Length 95th (ft)	14	26	0	#212	35		44	201	57	42	216	
Internal Link Dist (ft)		183			340			119			201	
Turn Bay Length (ft)							125		195	150		
Base Capacity (vph)	320	337	425	657	368		484	1318	1097	574	1461	
Starvation Cap Reductn	0	0	0	0	0		0	0	16	0	0	
Spillback Cap Reductn	0	0	0	0	0		0	0	0	0	0	
Storage Cap Reductn	0	0	0	0	0		0	0	0	0	0	
Reduced v/c Ratio	0.04	0.05	0.16	0.74	0.30		0.19	0.44	0.56	0.18	0.47	

Intersection Summary

Cycle Length: 90
Actuated Cycle Length: 90
Offset: 0 (0%), Referenced to phase 2:SBTL and 6:NBTL, Start of 1st Green
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.76
Intersection Signal Delay: 18.3 — Intersection LOS: B
Intersection Capacity Utilization 54.2% — ICU Level of Service A
Analysis Period (min) 15
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 40: SR 5 & Concourse Pkwy

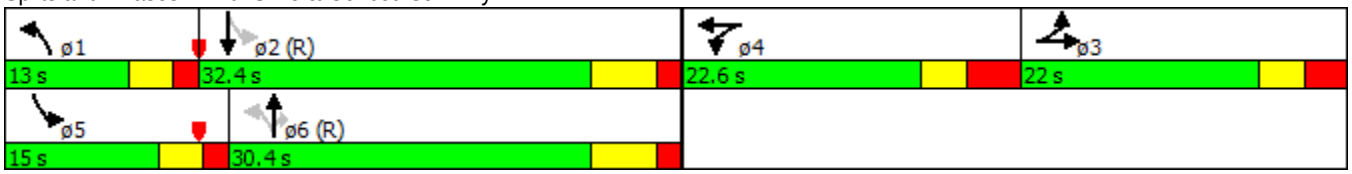


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	13	14	52	411	12	81	82	901	466	53	608	20
Satd. Flow (prot)	1805	1631	0	3467	1670	0	1805	3539	1599	1770	3534	0
Flt Permitted	0.950			0.950			0.323			0.198		
Satd. Flow (perm)	1805	1631	0	3467	1670	0	614	3539	1599	369	3534	0
Satd. Flow (RTOR)		80			100				524		6	
Lane Group Flow (vph)	24	104	0	452	124	0	96	939	524	68	665	0
Turn Type	Split	NA		Split	NA		pm+pt	NA	Perm	pm+pt	NA	
Protected Phases	3	3		4	4		1	6		5	2	
Permitted Phases							6		6	2		
Total Split (s)	22.0	22.0		22.6	22.6		13.0	30.4	30.4	15.0	32.4	
Total Lost Time (s)	6.0	6.0		6.6	6.6		4.7	6.1	6.1	4.7	6.1	
Act Effct Green (s)	7.7	7.7		16.0	16.0		48.2	40.1	40.1	46.9	39.5	
Actuated g/C Ratio	0.09	0.09		0.18	0.18		0.54	0.45	0.45	0.52	0.44	
v/c Ratio	0.16	0.49		0.73	0.33		0.22	0.60	0.52	0.22	0.43	
Control Delay	39.1	21.6		43.0	12.6		9.4	21.9	3.4	12.5	20.9	
Queue Delay	0.0	0.9		6.9	0.0		0.0	0.0	0.0	0.0	0.0	
Total Delay	39.1	22.5		49.9	12.6		9.4	21.9	3.4	12.5	20.9	
LOS	D	C		D	B		A	C	A	B	C	
Approach Delay		25.6			41.9			14.9			20.1	
Approach LOS		C			D			B			C	
Queue Length 50th (ft)	13	13		126	12		22	306	50	17	142	
Queue Length 95th (ft)	21	22		178	10		m32	m385	m107	35	220	
Internal Link Dist (ft)		183			340			119			201	
Turn Bay Length (ft)							125		195	150		
Base Capacity (vph)	320	355		616	379		447	1576	1003	361	1552	
Starvation Cap Reductn	0	0		0	0		0	0	0	0	0	
Spillback Cap Reductn	0	104		121	0		0	0	0	0	28	
Storage Cap Reductn	0	0		0	0		0	0	0	0	0	
Reduced v/c Ratio	0.07	0.41		0.91	0.33		0.21	0.60	0.52	0.19	0.44	

Intersection Summary

Cycle Length: 90
Actuated Cycle Length: 90
Offset: 0 (0%), Referenced to phase 2:SBTL and 6:NBTL, Start of 1st Green
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.73
Intersection Signal Delay: 21.8 Intersection LOS: C
Intersection Capacity Utilization 61.1% ICU Level of Service B
Analysis Period (min) 15
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 40: SR 5 & Concourse Pkwy

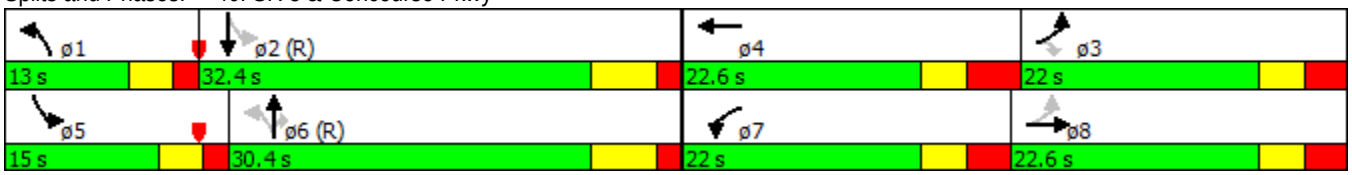


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	13	14	52	411	12	81	82	901	466	53	608	20
Satd. Flow (prot)	1805	1900	1553	3467	1670	0	1805	3539	1599	1770	3534	0
Flt Permitted	0.000			0.950			0.318			0.192		
Satd. Flow (perm)	0	1900	1553	3467	1670	0	604	3539	1599	358	3534	0
Satd. Flow (RTOR)			167		100				524		6	
Lane Group Flow (vph)	24	24	80	452	124	0	96	939	524	68	665	0
Turn Type	pm+pt	NA	custom	Prot	NA		pm+pt	NA	Perm	pm+pt	NA	
Protected Phases	3	8		7	4		1	6		5	2	
Permitted Phases	8		3				6		6	2		
Total Split (s)	22.0	22.6	22.0	22.0	22.6		13.0	30.4	30.4	15.0	32.4	
Total Lost Time (s)	6.0	6.0	6.0	6.0	6.6		4.7	6.1	6.1	4.7	6.1	
Act Effct Green (s)	6.5	6.7	6.5	21.2	16.0		49.4	41.4	41.4	48.1	40.8	
Actuated g/C Ratio	0.07	0.07	0.07	0.24	0.18		0.55	0.46	0.46	0.53	0.45	
v/c Ratio	0.18	0.17	0.30	0.55	0.33		0.22	0.58	0.51	0.23	0.41	
Control Delay	42.2	41.2	2.9	34.0	12.6		6.3	15.2	3.6	11.5	19.5	
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Delay	42.2	41.2	2.9	34.0	12.6		6.3	15.2	3.6	11.5	19.5	
LOS	D	D	A	C	B		A	B	A	B	B	
Approach Delay		17.4			29.4			10.8			18.7	
Approach LOS		B			C			B			B	
Queue Length 50th (ft)	13	13	0	102	12		14	257	109	17	141	
Queue Length 95th (ft)	22	24	0	178	10		22	308	90	31	204	
Internal Link Dist (ft)		183			340			119			201	
Turn Bay Length (ft)							125		195	150		
Base Capacity (vph)	320	350	413	818	379		449	1626	1018	362	1603	
Starvation Cap Reductn	0	0	0	0	0		0	0	0	0	0	
Spillback Cap Reductn	0	0	0	0	0		0	0	0	0	0	
Storage Cap Reductn	0	0	0	0	0		0	0	0	0	0	
Reduced v/c Ratio	0.07	0.07	0.19	0.55	0.33		0.21	0.58	0.51	0.19	0.41	

Intersection Summary

Cycle Length: 90
Actuated Cycle Length: 90
Offset: 0 (0%), Referenced to phase 2:SBTL and 6:NBTL, Start of 1st Green
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.58
Intersection Signal Delay: 16.6 — Intersection LOS: B
Intersection Capacity Utilization 61.1% — ICU Level of Service B
Analysis Period (min) 15

Splits and Phases: 40: SR 5 & Concourse Pkwy



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	158	0	228	0	0	0	0	579	768	321	745	0
Satd. Flow (prot)	1687	0	1538	0	0	0	0	3215	1553	1656	3406	0
Flt Permitted	0.950									0.326		
Satd. Flow (perm)	1687	0	1538	0	0	0	0	3215	1553	568	3406	0
Satd. Flow (RTOR)			217						745			
Lane Group Flow (vph)	247	0	251	0	0	0	0	658	883	357	876	0
Turn Type	Perm		Perm					NA	Perm	pm+pt	NA	
Protected Phases								6		5	2	
Permitted Phases	4		4						6	2		
Total Split (s)	38.0		38.0					83.0	83.0	29.0	112.0	
Total Lost Time (s)	5.8		5.8					5.6	5.6	4.3	5.6	
Act Effct Green (s)	26.4		26.4					91.8	91.8	113.5	112.2	
Actuated g/C Ratio	0.18		0.18					0.61	0.61	0.76	0.75	
v/c Ratio	0.83		0.56					0.33	0.71	0.65	0.34	
Control Delay	82.2		14.9					8.8	5.2	14.9	2.3	
Queue Delay	0.0		0.0					0.0	1.8	0.2	0.2	
Total Delay	82.2		14.9					8.8	7.0	15.1	2.5	
LOS	F		B					A	A	B	A	
Approach Delay								7.7			6.1	
Approach LOS								A			A	
Queue Length 50th (ft)	235		28					77	54	76	27	
Queue Length 95th (ft)	216		112					m88	m59	123	30	
Internal Link Dist (ft)		524			1295			242			388	
Turn Bay Length (ft)			250						275			
Base Capacity (vph)	362		500					1968	1239	608	2547	
Starvation Cap Reductn	0		0					0	202	21	776	
Spillback Cap Reductn	0		0					0	0	0	0	
Storage Cap Reductn	0		0					0	0	0	0	
Reduced v/c Ratio	0.68		0.50					0.33	0.85	0.61	0.49	

Intersection Summary

Cycle Length: 150
Actuated Cycle Length: 150
Offset: 0 (0%), Referenced to phase 2:SBTL and 6:NBT, Start of 1st Green, Master Intersection
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.83
Intersection Signal Delay: 13.3 Intersection LOS: B
Intersection Capacity Utilization 87.2% ICU Level of Service E
Analysis Period (min) 15
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 46: SR 5 & I-20 EB Ramp

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	158	0	228	0	0	0	0	579	768	321	745	0
Satd. Flow (prot)	1687	0	1538	0	0	0	0	4823	1553	1656	3406	0
Flt Permitted	0.950									0.349		
Satd. Flow (perm)	1687	0	1538	0	0	0	0	4823	1553	608	3406	0
Satd. Flow (RTOR)			214						756			
Lane Group Flow (vph)	247	0	251	0	0	0	0	658	883	357	876	0
Turn Type	Perm		Perm					NA	Perm	pm+pt	NA	
Protected Phases								6		5	2	
Permitted Phases	4		4						6	2		
Total Split (s)	39.0		39.0					82.0	82.0	29.0	111.0	
Total Lost Time (s)	5.8		5.8					5.6	5.6	4.3	5.6	
Act Effct Green (s)	26.6		26.6					91.5	91.5	113.3	112.0	
Actuated g/C Ratio	0.18		0.18					0.61	0.61	0.76	0.75	
v/c Ratio	0.83		0.56					0.22	0.71	0.62	0.34	
Control Delay	81.0		15.2					8.3	5.2	12.9	2.4	
Queue Delay	0.0		0.0					0.0	1.8	0.1	0.2	
Total Delay	81.0		15.2					8.3	7.0	13.0	2.6	
LOS	F		B					A	A	B	A	
Approach Delay								7.5			5.6	
Approach LOS								A			A	
Queue Length 50th (ft)	235		31					51	54	71	30	
Queue Length 95th (ft)	214		114					m58	m59	117	32	
Internal Link Dist (ft)		524			1295			242			388	
Turn Bay Length (ft)			250						275			
Base Capacity (vph)	373		507					2942	1242	631	2542	
Starvation Cap Reductn	0		0					0	204	23	771	
Spillback Cap Reductn	0		0					0	0	0	0	
Storage Cap Reductn	0		0					0	0	0	0	
Reduced v/c Ratio	0.66		0.50					0.22	0.85	0.59	0.49	

Intersection Summary

Cycle Length: 150
Actuated Cycle Length: 150
Offset: 0 (0%), Referenced to phase 2:SBTL and 6:NBT, Start of 1st Green, Master Intersection
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.83
Intersection Signal Delay: 12.9 Intersection LOS: B
Intersection Capacity Utilization 87.2% ICU Level of Service E
Analysis Period (min) 15
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 46: SR 5 & I-20 EB Ramp

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	117	0	193	0	0	0	0	946	499	244	1218	0
Satd. Flow (prot)	1736	0	1568	0	0	0	0	4823	1524	1656	3505	0
Flt Permitted	0.950									0.148		
Satd. Flow (perm)	1736	0	1568	0	0	0	0	4823	1524	258	3505	0
Satd. Flow (RTOR)			46						511			
Lane Group Flow (vph)	175	0	251	0	0	0	0	1296	587	298	1582	0
Turn Type	Perm		Perm					NA	Perm	pm+pt	NA	
Protected Phases								6		5	2	
Permitted Phases	4		4						6	2		
Total Split (s)	52.0		52.0					78.0	78.0	35.0	113.0	
Total Lost Time (s)	5.8		5.8					5.6	5.6	4.3	5.6	
Act Effct Green (s)	27.7		27.7					99.0	99.0	127.2	125.9	
Actuated g/C Ratio	0.17		0.17					0.60	0.60	0.77	0.76	
v/c Ratio	0.60		0.83					0.45	0.53	0.76	0.59	
Control Delay	71.1		76.0					18.1	4.8	21.2	4.0	
Queue Delay	0.0		0.0					0.0	0.1	0.8	5.0	
Total Delay	71.1		76.0					18.2	4.9	22.0	9.1	
LOS	E		E					B	A	C	A	
Approach Delay								14.0			11.1	
Approach LOS								B			B	
Queue Length 50th (ft)	177		220					226	57	90	200	
Queue Length 95th (ft)	175		246					m249	m64	m100	288	
Internal Link Dist (ft)		524			1295			242			388	
Turn Bay Length (ft)			250						275			
Base Capacity (vph)	486		472					2894	1118	466	2674	
Starvation Cap Reductn	0		0					0	81	37	1015	
Spillback Cap Reductn	0		0					146	0	0	0	
Storage Cap Reductn	0		0					0	0	0	0	
Reduced v/c Ratio	0.36		0.53					0.47	0.57	0.69	0.95	

Intersection Summary

Cycle Length: 165
Actuated Cycle Length: 165
Offset: 0 (0%), Referenced to phase 2:SBTL and 6:NBT, Start of 1st Green, Master Intersection
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.83
Intersection Signal Delay: 18.8 — Intersection LOS: B
Intersection Capacity Utilization 64.0% — ICU Level of Service B
Analysis Period (min) 15
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 46: SR 5 & I-20 EB Ramp

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	117	0	193	0	0	0	0	946	499	244	1218	0
Satd. Flow (prot)	1736	0	1568	0	0	0	0	3471	1524	1656	3505	0
Flt Permitted	0.950									0.119		
Satd. Flow (perm)	1736	0	1568	0	0	0	0	3471	1524	207	3505	0
Satd. Flow (RTOR)			46						368			
Lane Group Flow (vph)	175	0	251	0	0	0	0	1296	587	298	1582	0
Turn Type	Perm		Perm					NA	Perm	pm+pt	NA	
Protected Phases								6		5	2	
Permitted Phases	4		4						6	2		
Total Split (s)	52.0		52.0					78.0	78.0	35.0	113.0	
Total Lost Time (s)	5.8		5.8					5.6	5.6	4.3	5.6	
Act Effct Green (s)	27.7		27.7					92.6	92.6	127.2	125.9	
Actuated g/C Ratio	0.17		0.17					0.56	0.56	0.77	0.76	
v/c Ratio	0.60		0.83					0.67	0.58	0.72	0.59	
Control Delay	71.1		76.0					24.4	9.1	27.8	4.0	
Queue Delay	0.0		0.0					0.1	0.1	1.1	5.0	
Total Delay	71.1		76.0					24.5	9.2	29.0	9.1	
LOS	E		E					C	A	C	A	
Approach Delay								19.7			12.2	
Approach LOS								B			B	
Queue Length 50th (ft)	177		220					345	79	117	200	
Queue Length 95th (ft)	175		246					m365	m143	m126	288	
Internal Link Dist (ft)		524			1295			242			388	
Turn Bay Length (ft)			250						275			
Base Capacity (vph)	486		472					1948	1016	449	2674	
Starvation Cap Reductn	0		0					105	44	41	1015	
Spillback Cap Reductn	0		0					48	0	0	0	
Storage Cap Reductn	0		0					0	0	0	0	
Reduced v/c Ratio	0.36		0.53					0.70	0.60	0.73	0.95	

Intersection Summary

Cycle Length: 165
Actuated Cycle Length: 165
Offset: 0 (0%), Referenced to phase 2:SBTL and 6:NBT, Start of 1st Green, Master Intersection
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.83
Intersection Signal Delay: 21.9 Intersection LOS: C
Intersection Capacity Utilization 64.0% ICU Level of Service B
Analysis Period (min) 15
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 46: SR 5 & I-20 EB Ramp

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	113	0	231	0	0	0	0	976	418	286	1556	0
Satd. Flow (prot)	1770	0	1583	0	0	0	0	5029	1568	1736	3574	0
Flt Permitted	0.950									0.218		
Satd. Flow (perm)	1770	0	1583	0	0	0	0	5029	1568	398	3574	0
Satd. Flow (RTOR)			42						445			
Lane Group Flow (vph)	192	0	296	0	0	0	0	1038	445	353	1691	0
Turn Type	Perm		Perm					NA	Perm	pm+pt	NA	
Protected Phases								6		5	2	
Permitted Phases	4		4						6	2		
Total Split (s)	55.0		55.0					86.0	86.0	39.0	125.0	
Total Lost Time (s)	5.8		5.8					5.6	5.6	4.3	5.6	
Act Effct Green (s)	35.1		35.1					108.3	108.3	134.8	133.5	
Actuated g/C Ratio	0.20		0.20					0.60	0.60	0.75	0.74	
v/c Ratio	0.56		0.87					0.34	0.40	0.78	0.64	
Control Delay	70.5		83.3					16.0	3.8	29.1	2.2	
Queue Delay	0.1		0.0					0.0	0.0	0.4	0.3	
Total Delay	70.5		83.3					16.0	3.8	29.4	2.4	
LOS	E		F					B	A	C	A	
Approach Delay								12.3			7.1	
Approach LOS								B			A	
Queue Length 50th (ft)	208		299					193	38	115	63	
Queue Length 95th (ft)	170		320					m245	m59	138	31	
Internal Link Dist (ft)		524			1295			242			388	
Turn Bay Length (ft)			250						275			
Base Capacity (vph)	483		463					3024	1120	556	2651	
Starvation Cap Reductn	0		0					0	0	29	324	
Spillback Cap Reductn	12		0					2	0	0	0	
Storage Cap Reductn	0		0					0	0	0	0	
Reduced v/c Ratio	0.41		0.64					0.34	0.40	0.67	0.73	

Intersection Summary	
Cycle Length: 180	
Actuated Cycle Length: 180	
Offset: 0 (0%), Referenced to phase 2:SBTL and 6:NBT, Start of 1st Green, Master Intersection	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.87	
Intersection Signal Delay: 17.7	Intersection LOS: B
Intersection Capacity Utilization 88.1%	ICU Level of Service E
Analysis Period (min) 15	
m Volume for 95th percentile queue is metered by upstream signal.	

Splits and Phases: 46: SR 5 & I-20 EB Ramp

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	113	0	231	0	0	0	0	976	418	286	1556	0
Satd. Flow (prot)	1770	0	1583	0	0	0	0	3539	1568	1736	3574	0
Flt Permitted	0.950									0.195		
Satd. Flow (perm)	1770	0	1583	0	0	0	0	3539	1568	356	3574	0
Satd. Flow (RTOR)			42						324			
Lane Group Flow (vph)	192	0	296	0	0	0	0	1038	445	353	1691	0
Turn Type	Perm		Perm					NA	Perm	pm+pt	NA	
Protected Phases								6		5	2	
Permitted Phases	4		4						6	2		
Total Split (s)	55.0		55.0					86.0	86.0	39.0	125.0	
Total Lost Time (s)	5.8		5.8					5.6	5.6	4.3	5.6	
Act Effct Green (s)	35.1		35.1					104.3	104.3	134.8	133.5	
Actuated g/C Ratio	0.20		0.20					0.58	0.58	0.75	0.74	
v/c Ratio	0.56		0.87					0.51	0.43	0.77	0.64	
Control Delay	70.5		83.3					19.9	6.6	33.2	2.2	
Queue Delay	0.1		0.0					0.0	0.0	0.5	0.3	
Total Delay	70.5		83.3					19.9	6.6	33.7	2.4	
LOS	E		F					B	A	C	A	
Approach Delay								15.9			7.8	
Approach LOS								B			A	
Queue Length 50th (ft)	208		299					296	81	132	63	
Queue Length 95th (ft)	170		320					m365	m111	152	31	
Internal Link Dist (ft)		524			1295			242			388	
Turn Bay Length (ft)			250						275			
Base Capacity (vph)	483		463					2051	1045	537	2651	
Starvation Cap Reductn	0		0					0	0	31	324	
Spillback Cap Reductn	12		0					1	0	0	0	
Storage Cap Reductn	0		0					0	0	0	0	
Reduced v/c Ratio	0.41		0.64					0.51	0.43	0.70	0.73	

Intersection Summary	
Cycle Length: 180	
Actuated Cycle Length: 180	
Offset: 0 (0%), Referenced to phase 2:SBTL and 6:NBT, Start of 1st Green, Master Intersection	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.87	
Intersection Signal Delay: 19.4	Intersection LOS: B
Intersection Capacity Utilization 89.2%	ICU Level of Service E
Analysis Period (min) 15	
m Volume for 95th percentile queue is metered by upstream signal.	

Splits and Phases: 46: SR 5 & I-20 EB Ramp

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	214	148	26	109	90	78	74	1025	142	268	508	164
Satd. Flow (prot)	1687	3391	0	1736	1863	1524	1687	3413	0	1719	3201	0
Flt Permitted	0.528			0.491			0.950			0.950		
Satd. Flow (perm)	938	3391	0	897	1863	1524	1687	3413	0	1719	3201	0
Satd. Flow (RTOR)		11				112		13			46	
Lane Group Flow (vph)	243	236	0	128	100	104	109	1428	0	305	728	0
Turn Type	pm+pt	NA		pm+pt	NA	custom	Prot	NA		Prot	NA	
Protected Phases	7	4		3	8	5	1	6		5 9	2	
Permitted Phases	4			8		8						
Total Split (s)	19.0	23.0		18.0	22.0	24.0	24.0	72.0			85.0	
Total Lost Time (s)	5.4	6.0		6.0	6.0	4.7	4.7	6.2			6.2	
Act Effct Green (s)	29.1	14.9		24.9	13.4	39.8	14.7	67.3		28.7	86.0	
Actuated g/C Ratio	0.19	0.10		0.17	0.09	0.27	0.10	0.45		0.19	0.57	
v/c Ratio	0.97	0.68		0.60	0.60	0.21	0.66	0.93		0.93	0.39	
Control Delay	105.4	72.4		62.1	80.4	6.8	83.7	50.5		92.0	9.7	
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay	105.4	72.4		62.1	80.4	6.8	83.7	50.5		92.0	9.7	
LOS	F	E		E	F	A	F	D		F	A	
Approach Delay		89.1			50.3			52.9			34.0	
Approach LOS		F			D			D			C	
Queue Length 50th (ft)	217	113		106	95	0	104	695		254	84	
Queue Length 95th (ft)	#379	128		158	159	20	123	689		#421	118	
Internal Link Dist (ft)		829			335			192			354	
Turn Bay Length (ft)	300			300			375			625		
Base Capacity (vph)	250	394		219	198	486	217	1537		329	1854	
Starvation Cap Reductn	0	0		0	0	0	0	0		0	0	
Spillback Cap Reductn	0	0		0	0	0	0	0		0	0	
Storage Cap Reductn	0	0		0	0	0	0	0		0	0	
Reduced v/c Ratio	0.97	0.60		0.58	0.51	0.21	0.50	0.93		0.93	0.39	

Intersection Summary

Cycle Length: 150
Actuated Cycle Length: 150
Offset: 10 (7%), Referenced to phase 2:SBT and 6:NBT, Start of 1st Green
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.97
Intersection Signal Delay: 52.0 Intersection LOS: D
Intersection Capacity Utilization 82.9% ICU Level of Service E
Analysis Period (min) 15
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 20: SR 5 & Douglas Blvd

Lane Group	ø9
Lane Configurations	
Volume (vph)	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Satd. Flow (RTOR)	
Lane Group Flow (vph)	
Turn Type	
Protected Phases	9
Permitted Phases	
Total Split (s)	13.0
Total Lost Time (s)	
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay	
Queue Delay	
Total Delay	
LOS	
Approach Delay	
Approach LOS	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	

Intersection Summary

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	214	148	26	109	90	78	74	1025	142	268	508	164
Satd. Flow (prot)	1687	3391	0	1736	1863	1524	1687	3471	1583	1719	3201	0
Flt Permitted	0.457			0.586			0.950			0.950		
Satd. Flow (perm)	811	3391	0	1071	1863	1524	1687	3471	1583	1719	3201	0
Satd. Flow (RTOR)		11				112			145		45	
Lane Group Flow (vph)	243	236	0	128	100	104	109	1250	178	305	728	0
Turn Type	pm+pt	NA		pm+pt	NA	custom	Prot	NA	Perm	Prot	NA	
Protected Phases	7	4		3	8	5	1	6		5 9	2	
Permitted Phases	4			8		8			6			
Total Split (s)	21.0	25.0		18.0	22.0	27.0	24.0	67.0	67.0		83.0	
Total Lost Time (s)	5.4	6.0		6.0	6.0	4.7	4.7	6.2	6.2		6.2	
Act Effct Green (s)	32.6	16.4		24.4	12.9	40.3	14.7	64.8	64.8	29.7	84.5	
Actuated g/C Ratio	0.22	0.11		0.16	0.09	0.27	0.10	0.43	0.43	0.20	0.56	
v/c Ratio	0.91	0.62		0.57	0.62	0.21	0.66	0.83	0.23	0.90	0.40	
Control Delay	89.1	68.1		59.1	82.9	6.5	83.7	44.7	7.6	86.2	10.3	
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Delay	89.1	68.1		59.1	82.9	6.5	83.7	44.7	7.6	86.2	10.3	
LOS	F	E		E	F	A	F	D	A	F	B	
Approach Delay		78.7			49.8			43.2			32.7	
Approach LOS		E			D			D			C	
Queue Length 50th (ft)	215	112		105	96	0	104	594	20	249	87	
Queue Length 95th (ft)	#351	126		155	159	20	123	600	51	#373	122	
Internal Link Dist (ft)		829			335			192			354	
Turn Bay Length (ft)	300			300			375			625		
Base Capacity (vph)	267	439		230	198	506	217	1498	765	357	1823	
Starvation Cap Reductn	0	0		0	0	0	0	0	0	0	0	
Spillback Cap Reductn	0	0		0	0	0	0	0	0	0	0	
Storage Cap Reductn	0	0		0	0	0	0	0	0	0	0	
Reduced v/c Ratio	0.91	0.54		0.56	0.51	0.21	0.50	0.83	0.23	0.85	0.40	

Intersection Summary

Cycle Length: 150
Actuated Cycle Length: 150
Offset: 10 (7%), Referenced to phase 2:SBT and 6:NBT, Start of 1st Green
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.91
Intersection Signal Delay: 45.7 Intersection LOS: D
Intersection Capacity Utilization 78.4% ICU Level of Service D
Analysis Period (min) 15
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 20: SR 5 & Douglas Blvd

Lane Group	ø9
Lane Configurations	
Volume (vph)	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Satd. Flow (RTOR)	
Lane Group Flow (vph)	
Turn Type	
Protected Phases	9
Permitted Phases	
Total Split (s)	13.0
Total Lost Time (s)	
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay	
Queue Delay	
Total Delay	
LOS	
Approach Delay	
Approach LOS	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	

Intersection Summary

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	214	148	26	109	90	78	74	1025	142	268	508	164
Satd. Flow (prot)	1687	3391	0	1736	1863	1524	1687	3413	0	3335	3201	0
Flt Permitted	0.528			0.491			0.950			0.950		
Satd. Flow (perm)	938	3391	0	897	1863	1524	1687	3413	0	3335	3201	0
Satd. Flow (RTOR)		11				112		13			46	
Lane Group Flow (vph)	243	236	0	128	100	104	109	1428	0	305	728	0
Turn Type	pm+pt	NA		pm+pt	NA	custom	Prot	NA		Prot	NA	
Protected Phases	7	4		3	8	5	1	6		5 9	2	
Permitted Phases	4			8		8						
Total Split (s)	19.0	23.0		18.0	22.0	24.0	24.0	72.0			85.0	
Total Lost Time (s)	5.4	6.0		6.0	6.0	4.7	4.7	6.2			6.2	
Act Effct Green (s)	29.1	14.9		24.9	13.4	30.6	14.7	76.5		19.4	86.0	
Actuated g/C Ratio	0.19	0.10		0.17	0.09	0.20	0.10	0.51		0.13	0.57	
v/c Ratio	0.97	0.68		0.60	0.60	0.26	0.66	0.82		0.71	0.39	
Control Delay	105.4	72.4		62.1	80.4	7.9	83.7	36.2		53.6	9.7	
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay	105.4	72.4		62.1	80.4	7.9	83.7	36.2		53.6	9.7	
LOS	F	E		E	F	A	F	D		D	A	
Approach Delay		89.1			50.6			39.6			22.7	
Approach LOS		F			D			D			C	
Queue Length 50th (ft)	217	113		106	95	0	104	602		125	84	
Queue Length 95th (ft)	#379	128		158	159	21	123	655		156	118	
Internal Link Dist (ft)		829			335			192			354	
Turn Bay Length (ft)	300			300			375			625		
Base Capacity (vph)	250	394		219	198	476	217	1748		613	1854	
Starvation Cap Reductn	0	0		0	0	0	0	0		0	0	
Spillback Cap Reductn	0	0		0	0	0	0	0		0	0	
Storage Cap Reductn	0	0		0	0	0	0	0		0	0	
Reduced v/c Ratio	0.97	0.60		0.58	0.51	0.22	0.50	0.82		0.50	0.39	

Intersection Summary

Cycle Length: 150
Actuated Cycle Length: 150
Offset: 10 (7%), Referenced to phase 2:SBT and 6:NBT, Start of 1st Green
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.97
Intersection Signal Delay: 42.5 Intersection LOS: D
Intersection Capacity Utilization 75.7% ICU Level of Service D
Analysis Period (min) 15
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 20: SR 5 & Douglas Blvd

Lane Group	ø9
Lane Configurations	
Volume (vph)	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Satd. Flow (RTOR)	
Lane Group Flow (vph)	
Turn Type	
Protected Phases	9
Permitted Phases	
Total Split (s)	13.0
Total Lost Time (s)	
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay	
Queue Delay	
Total Delay	
LOS	
Approach Delay	
Approach LOS	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	

Intersection Summary

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	214	148	26	109	90	78	74	1025	142	268	508	164
Satd. Flow (prot)	1687	3391	0	1736	3539	1524	1687	3413	0	1719	3201	0
Flt Permitted	0.533			0.581			0.950			0.950		
Satd. Flow (perm)	946	3391	0	1061	3539	1524	1687	3413	0	1719	3201	0
Satd. Flow (RTOR)		11				112		13			45	
Lane Group Flow (vph)	243	236	0	128	100	104	109	1428	0	305	728	0
Turn Type	pm+pt	NA		pm+pt	NA	custom	Prot	NA		Prot	NA	
Protected Phases	7	4		3	8	5	1	6		5 9	2	
Permitted Phases	4			8		8						
Total Split (s)	21.0	25.0		18.0	22.0	27.0	24.0	67.0			83.0	
Total Lost Time (s)	5.4	6.0		6.0	6.0	4.7	4.7	6.2			6.2	
Act Effct Green (s)	31.6	15.4		23.5	12.0	39.7	14.7	65.4		30.0	85.5	
Actuated g/C Ratio	0.21	0.10		0.16	0.08	0.26	0.10	0.44		0.20	0.57	
v/c Ratio	0.88	0.66		0.59	0.35	0.21	0.66	0.96		0.89	0.40	
Control Delay	84.3	70.5		60.9	67.9	6.5	83.7	55.6		84.3	10.0	
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay	84.3	70.5		60.9	67.9	6.5	83.7	55.6		84.3	10.0	
LOS	F	E		E	E	A	F	E		F	B	
Approach Delay		77.5			46.0			57.6			32.0	
Approach LOS		E			D			E			C	
Queue Length 50th (ft)	217	113		106	49	0	104	~744		250	87	
Queue Length 95th (ft)	#329	126		155	80	20	123	#770		#373	122	
Internal Link Dist (ft)		829			335			192			354	
Turn Bay Length (ft)	300			300			375			625		
Base Capacity (vph)	276	439		223	377	500	217	1495		361	1843	
Starvation Cap Reductn	0	0		0	0	0	0	0		0	0	
Spillback Cap Reductn	0	0		0	0	0	0	0		0	0	
Storage Cap Reductn	0	0		0	0	0	0	0		0	0	
Reduced v/c Ratio	0.88	0.54		0.57	0.27	0.21	0.50	0.96		0.84	0.40	

Intersection Summary

Cycle Length: 150
Actuated Cycle Length: 150
Offset: 10 (7%), Referenced to phase 2:SBT and 6:NBT, Start of 1st Green
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.96
Intersection Signal Delay: 51.5 Intersection LOS: D
Intersection Capacity Utilization 81.5% ICU Level of Service D
Analysis Period (min) 15
~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 20: SR 5 & Douglas Blvd

Wilburn Engineering

Lane Group	ø9
Lane Configurations	
Volume (vph)	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Satd. Flow (RTOR)	
Lane Group Flow (vph)	
Turn Type	
Protected Phases	9
Permitted Phases	
Total Split (s)	13.0
Total Lost Time (s)	
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay	
Queue Delay	
Total Delay	
LOS	
Approach Delay	
Approach LOS	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	

Intersection Summary

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	276	363	51	276	208	305	95	823	148	514	738	149
Satd. Flow (prot)	1736	3384	0	1787	1845	1553	1736	3290	0	1770	3368	0
Flt Permitted	0.190			0.211			0.950			0.950		
Satd. Flow (perm)	347	3384	0	397	1845	1553	1736	3290	0	1770	3368	0
Satd. Flow (RTOR)		14				343		15			20	
Lane Group Flow (vph)	337	499	0	297	245	343	112	1020	0	591	923	0
Turn Type	pm+pt	NA		pm+pt	NA	Perm	Prot	NA		Prot	NA	
Protected Phases	7	4		3	8		1	6		5 9	2	
Permitted Phases	4			8		8						
Total Split (s)	27.0	27.0		25.0	25.0	25.0	24.0	56.0			89.0	
Total Lost Time (s)	5.4	6.0		6.0	6.0	6.0	4.7	6.2			6.2	
Act Effct Green (s)	43.2	21.0		38.0	19.0	19.0	15.4	49.8		47.6	86.7	
Actuated g/C Ratio	0.26	0.13		0.23	0.12	0.12	0.09	0.30		0.29	0.53	
v/c Ratio	1.24	1.13		1.18	1.16	0.71	0.69	1.02		1.16	0.52	
Control Delay	177.3	143.2		159.7	170.8	15.0	93.6	87.7		130.1	15.4	
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay	177.3	143.2		159.7	170.8	15.0	93.6	87.7		130.1	15.4	
LOS	F	F		F	F	B	F	F		F	B	
Approach Delay		156.9			106.7			88.3			60.1	
Approach LOS		F			F			F			E	
Queue Length 50th (ft)	~396	~320		~330	~310	0	119	~604		~652	279	
Queue Length 95th (ft)	#523	#445		#528	#456	100	176	#745		#835	339	
Internal Link Dist (ft)		829			335			192			354	
Turn Bay Length (ft)	300			300			375			625		
Base Capacity (vph)	272	442		251	212	482	203	1003		510	1779	
Starvation Cap Reductn	0	0		0	0	0	0	0		0	0	
Spillback Cap Reductn	0	0		0	0	0	0	0		0	0	
Storage Cap Reductn	0	0		0	0	0	0	0		0	0	
Reduced v/c Ratio	1.24	1.13		1.18	1.16	0.71	0.55	1.02		1.16	0.52	

Intersection Summary

Cycle Length: 165
Actuated Cycle Length: 165
Offset: 30 (18%), Referenced to phase 2:SBT and 6:NBT, Start of 1st Green
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 1.24
Intersection Signal Delay: 95.4 Intersection LOS: F
Intersection Capacity Utilization 102.0% ICU Level of Service G
Analysis Period (min) 15
~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 20: SR 5 & Douglas Blvd

Wilburn Engineering

Lane Group	ø5	ø9
Lane Configurations		
Volume (vph)		
Satd. Flow (prot)		
Flt Permitted		
Satd. Flow (perm)		
Satd. Flow (RTOR)		
Lane Group Flow (vph)		
Turn Type		
Protected Phases	5	9
Permitted Phases		
Total Split (s)	44.0	13.0
Total Lost Time (s)		
Act Effct Green (s)		
Actuated g/C Ratio		
v/c Ratio		
Control Delay		
Queue Delay		
Total Delay		
LOS		
Approach Delay		
Approach LOS		
Queue Length 50th (ft)		
Queue Length 95th (ft)		
Internal Link Dist (ft)		
Turn Bay Length (ft)		
Base Capacity (vph)		
Starvation Cap Reductn		
Spillback Cap Reductn		
Storage Cap Reductn		
Reduced v/c Ratio		

Intersection Summary

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	276	363	51	276	208	305	95	823	148	514	738	149
Satd. Flow (prot)	1736	3384	0	1787	1845	1553	1736	3343	1583	1770	3368	0
Flt Permitted	0.182			0.200			0.950			0.950		
Satd. Flow (perm)	332	3384	0	376	1845	1553	1736	3343	1583	1770	3368	0
Satd. Flow (RTOR)		14				343			163		20	
Lane Group Flow (vph)	337	499	0	297	245	343	112	848	172	591	923	0
Turn Type	pm+pt	NA		pm+pt	NA	Perm	Prot	NA	Perm	Prot	NA	
Protected Phases	7	4		3	8		1	6		5 9	2	
Permitted Phases	4			8		8			6			
Total Split (s)	29.0	28.0		27.0	26.0	26.0	24.0	51.0	51.0		86.0	
Total Lost Time (s)	5.4	6.0		6.0	6.0	6.0	4.7	6.2	6.2		6.2	
Act Effct Green (s)	46.2	22.0		41.0	20.0	20.0	15.4	44.8	44.8	49.6	83.7	
Actuated g/C Ratio	0.28	0.13		0.25	0.12	0.12	0.09	0.27	0.27	0.30	0.51	
v/c Ratio	1.15	1.08		1.09	1.10	0.70	0.69	0.93	0.31	1.11	0.54	
Control Delay	143.5	127.1		126.1	152.8	14.4	93.6	76.1	8.9	111.5	17.6	
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Delay	143.5	127.1		126.1	152.8	14.4	93.6	76.1	8.9	111.5	17.6	
LOS	F	F		F	F	B	F	E	A	F	B	
Approach Delay		133.7			90.2			67.6			54.2	
Approach LOS		F			F			E			D	
Queue Length 50th (ft)	~374	~307		~306	~298	0	119	474	7	~627	298	
Queue Length 95th (ft)	#499	#433		#509	#443	99	176	#601	60	#810	371	
Internal Link Dist (ft)		829			335			192			354	
Turn Bay Length (ft)	300			300			375			625		
Base Capacity (vph)	293	463		273	223	489	203	907	548	532	1718	
Starvation Cap Reductn	0	0		0	0	0	0	0	0	0	0	
Spillback Cap Reductn	0	0		0	0	0	0	0	0	0	0	
Storage Cap Reductn	0	0		0	0	0	0	0	0	0	0	
Reduced v/c Ratio	1.15	1.08		1.09	1.10	0.70	0.55	0.93	0.31	1.11	0.54	

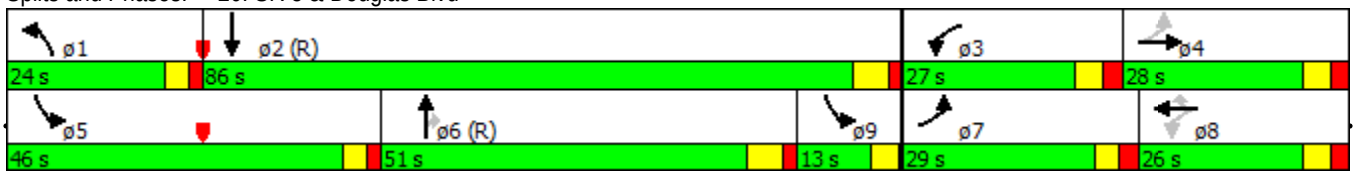
Intersection Summary

Cycle Length: 165
Actuated Cycle Length: 165
Offset: 30 (18%), Referenced to phase 2:SBT and 6:NBT, Start of 1st Green
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 1.15
Intersection Signal Delay: 80.2 Intersection LOS: F
Intersection Capacity Utilization 97.3% ICU Level of Service F
Analysis Period (min) 15

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 20: SR 5 & Douglas Blvd



Wilburn Engineering

Lane Group	ø5	ø9
Lane Configurations		
Volume (vph)		
Satd. Flow (prot)		
Flt Permitted		
Satd. Flow (perm)		
Satd. Flow (RTOR)		
Lane Group Flow (vph)		
Turn Type		
Protected Phases	5	9
Permitted Phases		
Total Split (s)	46.0	13.0
Total Lost Time (s)		
Act Effct Green (s)		
Actuated g/C Ratio		
v/c Ratio		
Control Delay		
Queue Delay		
Total Delay		
LOS		
Approach Delay		
Approach LOS		
Queue Length 50th (ft)		
Queue Length 95th (ft)		
Internal Link Dist (ft)		
Turn Bay Length (ft)		
Base Capacity (vph)		
Starvation Cap Reductn		
Spillback Cap Reductn		
Storage Cap Reductn		
Reduced v/c Ratio		

Intersection Summary

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	276	363	51	276	208	305	95	823	148	514	738	149
Satd. Flow (prot)	1736	3384	0	1787	3505	1553	1736	3290	0	1770	3368	0
Flt Permitted	0.423			0.200			0.950			0.950		
Satd. Flow (perm)	773	3384	0	376	3505	1553	1736	3290	0	1770	3368	0
Satd. Flow (RTOR)		14				343		15			20	
Lane Group Flow (vph)	337	499	0	297	245	343	112	1020	0	591	923	0
Turn Type	pm+pt	NA		pm+pt	NA	Perm	Prot	NA		Prot	NA	
Protected Phases	7	4		3	8		1	6		5 9	2	
Permitted Phases	4			8		8						
Total Split (s)	27.0	27.0		26.0	26.0	26.0	24.0	55.0			88.0	
Total Lost Time (s)	5.4	6.0		6.0	6.0	6.0	4.7	6.2			6.2	
Act Effct Green (s)	43.2	21.0		40.0	20.0	20.0	15.4	48.8		47.6	85.7	
Actuated g/C Ratio	0.26	0.13		0.24	0.12	0.12	0.09	0.30		0.29	0.52	
v/c Ratio	1.03	1.13		1.13	0.58	0.70	0.69	1.04		1.16	0.53	
Control Delay	108.6	143.2		141.8	74.5	14.4	93.6	93.4		130.0	16.0	
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay	108.6	143.2		141.8	74.5	14.4	93.6	93.4		130.0	16.0	
LOS	F	F		F	E	B	F	F		F	B	
Approach Delay		129.2			73.8			93.5			60.5	
Approach LOS		F			E			F			E	
Queue Length 50th (ft)	~335	~320		~319	133	0	119	~615		~652	284	
Queue Length 95th (ft)	#394	#445		#521	172	99	176	#757		#835	348	
Internal Link Dist (ft)		829			335			192			354	
Turn Bay Length (ft)	300			300			375			625		
Base Capacity (vph)	328	442		262	424	489	203	983		510	1758	
Starvation Cap Reductn	0	0		0	0	0	0	0		0	0	
Spillback Cap Reductn	0	0		0	0	0	0	0		0	0	
Storage Cap Reductn	0	0		0	0	0	0	0		0	0	
Reduced v/c Ratio	1.03	1.13		1.13	0.58	0.70	0.55	1.04		1.16	0.53	

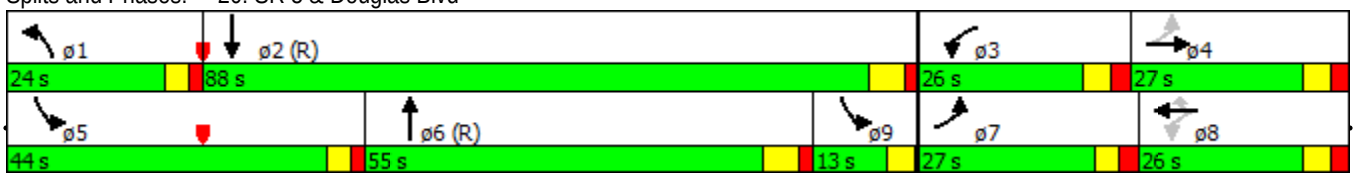
Intersection Summary

Cycle Length: 165
Actuated Cycle Length: 165
Offset: 30 (18%), Referenced to phase 2:SBT and 6:NBT, Start of 1st Green
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 1.16
Intersection Signal Delay: 84.9 Intersection LOS: F
Intersection Capacity Utilization 102.0% ICU Level of Service G
Analysis Period (min) 15

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 20: SR 5 & Douglas Blvd



Wilburn Engineering

Lane Group	ø5	ø9
Lane Configurations		
Volume (vph)		
Satd. Flow (prot)		
Flt Permitted		
Satd. Flow (perm)		
Satd. Flow (RTOR)		
Lane Group Flow (vph)		
Turn Type		
Protected Phases	5	9
Permitted Phases		
Total Split (s)	44.0	13.0
Total Lost Time (s)		
Act Effct Green (s)		
Actuated g/C Ratio		
v/c Ratio		
Control Delay		
Queue Delay		
Total Delay		
LOS		
Approach Delay		
Approach LOS		
Queue Length 50th (ft)		
Queue Length 95th (ft)		
Internal Link Dist (ft)		
Turn Bay Length (ft)		
Base Capacity (vph)		
Starvation Cap Reductn		
Spillback Cap Reductn		
Storage Cap Reductn		
Reduced v/c Ratio		

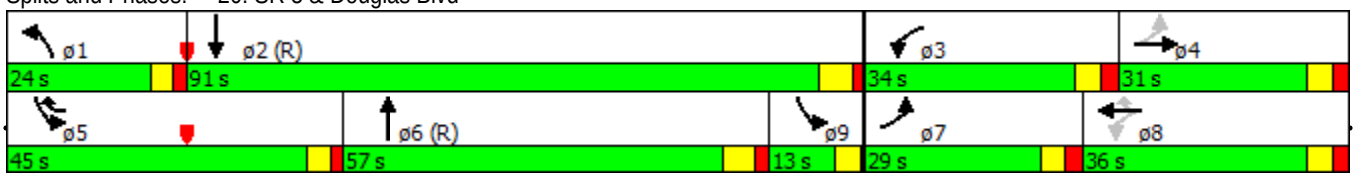
Intersection Summary

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	292	303	70	284	218	307	79	669	152	392	1023	223
Satd. Flow (prot)	1752	3406	0	1805	1845	1583	1787	3413	0	1752	3410	0
Flt Permitted	0.282			0.133			0.950			0.950		
Satd. Flow (perm)	520	3406	0	253	1845	1583	1787	3413	0	1752	3410	0
Satd. Flow (RTOR)		14				139		17			20	
Lane Group Flow (vph)	307	462	0	334	251	327	92	948	0	467	1340	0
Turn Type	pm+pt	NA		pm+pt	NA	custom	Prot	NA		Prot	NA	
Protected Phases	7	4		3	8	5	1	6		5 9	2	
Permitted Phases	4			8		8						
Total Split (s)	29.0	31.0		34.0	36.0	45.0	24.0	57.0			91.0	
Total Lost Time (s)	5.4	6.0		6.0	6.0	4.7	4.7	6.2			6.2	
Act Effct Green (s)	49.2	25.0		58.0	30.0	76.3	14.4	50.8		48.6	89.7	
Actuated g/C Ratio	0.27	0.14		0.32	0.17	0.42	0.08	0.28		0.27	0.50	
v/c Ratio	1.01	0.95		1.04	0.82	0.44	0.64	0.97		0.99	0.78	
Control Delay	105.0	103.8		113.0	93.2	22.1	99.8	84.7		87.2	28.4	
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.5	
Total Delay	105.0	103.8		113.0	93.2	22.1	99.8	84.7		87.2	28.8	
LOS	F	F		F	F	C	F	F		F	C	
Approach Delay		104.3			74.9			86.0			43.9	
Approach LOS		F			E			F			D	
Queue Length 50th (ft)	~301	282		~370	291	154	107	580		437	511	
Queue Length 95th (ft)	#494	#334		#528	#407	245	163	#695		#608	678	
Internal Link Dist (ft)		829			335			192			354	
Turn Bay Length (ft)	300			300			375			625		
Base Capacity (vph)	303	485		322	307	751	191	975		473	1708	
Starvation Cap Reductn	0	0		0	0	0	0	0		0	92	
Spillback Cap Reductn	0	0		0	0	0	0	0		0	0	
Storage Cap Reductn	0	0		0	0	0	0	0		0	0	
Reduced v/c Ratio	1.01	0.95		1.04	0.82	0.44	0.48	0.97		0.99	0.83	

Intersection Summary

Cycle Length: 180
Actuated Cycle Length: 180
Offset: 31 (17%), Referenced to phase 2:SBT and 6:NBT, Start of 1st Green
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 1.04
Intersection Signal Delay: 70.1 Intersection LOS: E
Intersection Capacity Utilization 91.3% ICU Level of Service F
Analysis Period (min) 15
~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 20: SR 5 & Douglas Blvd



Wilburn Engineering

Lane Group	ø9
Lane Configurations	
Volume (vph)	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Satd. Flow (RTOR)	
Lane Group Flow (vph)	
Turn Type	
Protected Phases	9
Permitted Phases	
Total Split (s)	13.0
Total Lost Time (s)	
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay	
Queue Delay	
Total Delay	
LOS	
Approach Delay	
Approach LOS	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	

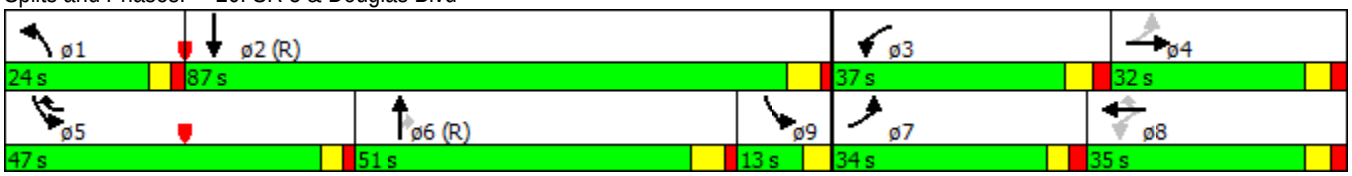
Intersection Summary

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	292	303	70	284	218	307	79	669	152	392	1023	223
Satd. Flow (prot)	1752	3406	0	1805	1845	1583	1787	3505	1599	1752	3410	0
Flt Permitted	0.248			0.138			0.950			0.950		
Satd. Flow (perm)	457	3406	0	262	1845	1583	1787	3505	1599	1752	3410	0
Satd. Flow (RTOR)		14				152			145		19	
Lane Group Flow (vph)	307	462	0	334	251	327	92	760	188	467	1340	0
Turn Type	pm+pt	NA		pm+pt	NA	custom	Prot	NA	Perm	Prot	NA	
Protected Phases	7	4		3	8	5	1	6		5 9	2	
Permitted Phases	4			8		8			6			
Total Split (s)	34.0	32.0		37.0	35.0	47.0	24.0	51.0	51.0		87.0	
Total Lost Time (s)	5.4	6.0		6.0	6.0	4.7	4.7	6.2	6.2		6.2	
Act Effct Green (s)	53.9	25.6		59.4	28.9	76.2	14.4	46.7	46.7	49.6	86.6	
Actuated g/C Ratio	0.30	0.14		0.33	0.16	0.42	0.08	0.26	0.26	0.28	0.48	
v/c Ratio	0.91	0.93		0.96	0.85	0.43	0.64	0.84	0.36	0.97	0.81	
Control Delay	78.8	99.7		93.6	97.7	20.3	99.8	72.5	16.4	81.9	32.7	
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	
Total Delay	78.8	99.7		93.6	97.7	20.3	99.8	72.5	16.4	81.9	33.1	
LOS	E	F		F	F	C	F	E	B	F	C	
Approach Delay		91.4			68.4			64.8			45.7	
Approach LOS		F			E			E			D	
Queue Length 50th (ft)	285	280		342	293	140	107	458	40	423	553	
Queue Length 95th (ft)	#451	#316		#490	#419	230	163	527	87	#583	713	
Internal Link Dist (ft)		829			335			192			354	
Turn Bay Length (ft)	300			300			375			625		
Base Capacity (vph)	344	503		352	297	766	191	909	522	492	1650	
Starvation Cap Reductn	0	0		0	0	0	0	0	0	0	69	
Spillback Cap Reductn	0	0		0	0	0	0	0	0	0	0	
Storage Cap Reductn	0	0		0	0	0	0	0	0	0	0	
Reduced v/c Ratio	0.89	0.92		0.95	0.85	0.43	0.48	0.84	0.36	0.95	0.85	

Intersection Summary

Cycle Length: 180
Actuated Cycle Length: 180
Offset: 31 (17%), Referenced to phase 2:SBT and 6:NBT, Start of 1st Green
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.97
Intersection Signal Delay: 62.4 Intersection LOS: E
Intersection Capacity Utilization 86.4% ICU Level of Service E
Analysis Period (min) 15
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 20: SR 5 & Douglas Blvd



Lane Group	ø9
Lane Configurations	
Volume (vph)	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Satd. Flow (RTOR)	
Lane Group Flow (vph)	
Turn Type	
Protected Phases	9
Permitted Phases	
Total Split (s)	13.0
Total Lost Time (s)	
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay	
Queue Delay	
Total Delay	
LOS	
Approach Delay	
Approach LOS	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	

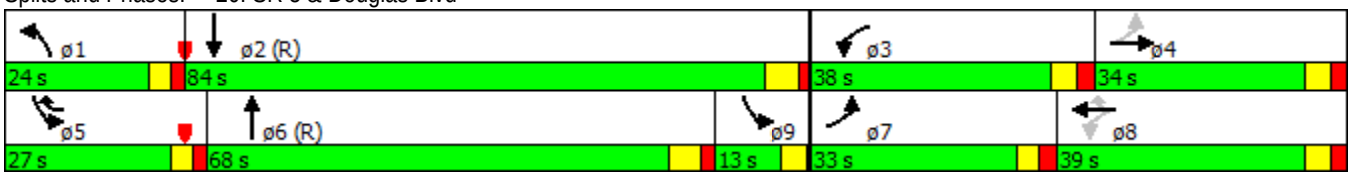
Intersection Summary

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	292	303	70	284	218	307	79	669	152	392	1023	223
Satd. Flow (prot)	1752	3406	0	1805	1845	1583	1787	3413	0	3400	3410	0
Flt Permitted	0.303			0.137			0.950			0.950		
Satd. Flow (perm)	559	3406	0	260	1845	1583	1787	3413	0	3400	3410	0
Satd. Flow (RTOR)		14				156		18			18	
Lane Group Flow (vph)	307	462	0	334	251	327	92	948	0	467	1340	0
Turn Type	pm+pt	NA		pm+pt	NA	custom	Prot	NA		Prot	NA	
Protected Phases	7	4		3	8	5	1	6		5 9	2	
Permitted Phases	4			8		8						
Total Split (s)	33.0	34.0		38.0	39.0	27.0	24.0	68.0			84.0	
Total Lost Time (s)	5.4	6.0		6.0	6.0	4.7	4.7	6.2			6.2	
Act Effct Green (s)	54.1	26.8		62.3	31.5	57.7	14.4	66.3		28.6	85.1	
Actuated g/C Ratio	0.30	0.15		0.35	0.18	0.32	0.08	0.37		0.16	0.47	
v/c Ratio	0.89	0.89		0.94	0.78	0.53	0.64	0.75		0.87	0.83	
Control Delay	73.6	92.6		88.2	87.9	27.8	99.8	54.0		73.4	35.3	
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.4	
Total Delay	73.6	92.6		88.2	87.9	27.8	99.8	54.0		73.4	35.7	
LOS	E	F		F	F	C	F	D		E	D	
Approach Delay		85.0			66.5			58.1			45.5	
Approach LOS		F			E			E			D	
Queue Length 50th (ft)	278	276		331	285	161	107	527		175	585	
Queue Length 95th (ft)	#410	309		#464	379	265	163	596		204	755	
Internal Link Dist (ft)		829			335			192			354	
Turn Bay Length (ft)	300			300			375			625		
Base Capacity (vph)	353	541		365	338	629	191	1267		578	1621	
Starvation Cap Reductn	0	0		0	0	0	0	0		0	52	
Spillback Cap Reductn	0	0		0	0	0	0	0		0	0	
Storage Cap Reductn	0	0		0	0	0	0	0		0	0	
Reduced v/c Ratio	0.87	0.85		0.92	0.74	0.52	0.48	0.75		0.81	0.85	

Intersection Summary

Cycle Length: 180
Actuated Cycle Length: 180
Offset: 31 (17%), Referenced to phase 2:SBT and 6:NBT, Start of 1st Green
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.94
Intersection Signal Delay: 59.3 Intersection LOS: E
Intersection Capacity Utilization 86.0% ICU Level of Service E
Analysis Period (min) 15
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 20: SR 5 & Douglas Blvd



Lane Group	ø9
Lane Configurations	
Volume (vph)	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Satd. Flow (RTOR)	
Lane Group Flow (vph)	
Turn Type	
Protected Phases	9
Permitted Phases	
Total Split (s)	13.0
Total Lost Time (s)	
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay	
Queue Delay	
Total Delay	
LOS	
Approach Delay	
Approach LOS	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	

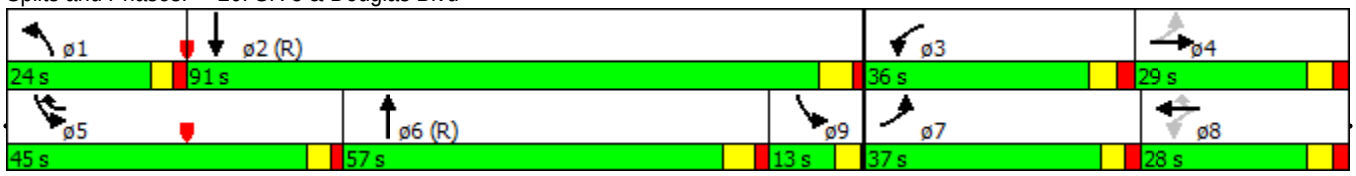
Intersection Summary

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	292	303	70	284	218	307	79	669	152	392	1023	223
Satd. Flow (prot)	1752	3406	0	1805	3505	1583	1787	3413	0	1752	3410	0
Flt Permitted	0.485			0.160			0.950			0.950		
Satd. Flow (perm)	895	3406	0	304	3505	1583	1787	3413	0	1752	3410	0
Satd. Flow (RTOR)		14				172		17			20	
Lane Group Flow (vph)	307	462	0	334	251	327	92	948	0	467	1340	0
Turn Type	pm+pt	NA		pm+pt	NA	custom	Prot	NA		Prot	NA	
Protected Phases	7	4		3	8	5	1	6		5 9	2	
Permitted Phases	4			8		8						
Total Split (s)	37.0	29.0		36.0	28.0	45.0	24.0	57.0			91.0	
Total Lost Time (s)	5.4	6.0		6.0	6.0	4.7	4.7	6.2			6.2	
Act Effct Green (s)	52.2	23.0		54.4	25.0	71.3	14.4	50.8		48.6	89.7	
Actuated g/C Ratio	0.29	0.13		0.30	0.14	0.40	0.08	0.28		0.27	0.50	
v/c Ratio	0.78	1.03		0.98	0.52	0.45	0.64	0.97		0.99	0.78	
Control Delay	63.8	122.9		99.2	77.0	20.5	99.8	84.7		87.2	28.4	
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.5	
Total Delay	63.8	122.9		99.2	77.0	20.5	99.8	84.7		87.2	28.8	
LOS	E	F		F	E	C	F	F		F	C	
Approach Delay		99.3			64.9			86.0			43.9	
Approach LOS		F			E			F			D	
Queue Length 50th (ft)	296	~298		352	149	134	107	580		437	511	
Queue Length 95th (ft)	401	#358		#515	195	231	163	#695		#608	678	
Internal Link Dist (ft)		829			335			192			354	
Turn Bay Length (ft)	300			300			375			625		
Base Capacity (vph)	424	447		341	486	730	191	975		473	1708	
Starvation Cap Reductn	0	0		0	0	0	0	0		0	92	
Spillback Cap Reductn	0	0		0	0	0	0	0		0	0	
Storage Cap Reductn	0	0		0	0	0	0	0		0	0	
Reduced v/c Ratio	0.72	1.03		0.98	0.52	0.45	0.48	0.97		0.99	0.83	

Intersection Summary

Cycle Length: 180
Actuated Cycle Length: 180
Offset: 31 (17%), Referenced to phase 2:SBT and 6:NBT, Start of 1st Green
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 1.03
Intersection Signal Delay: 67.2 Intersection LOS: E
Intersection Capacity Utilization 90.5% ICU Level of Service E
Analysis Period (min) 15
~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 20: SR 5 & Douglas Blvd



Wilburn Engineering

Lane Group	ø9
Lane Configurations	
Volume (vph)	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Satd. Flow (RTOR)	
Lane Group Flow (vph)	
Turn Type	
Protected Phases	9
Permitted Phases	
Total Split (s)	13.0
Total Lost Time (s)	
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay	
Queue Delay	
Total Delay	
LOS	
Approach Delay	
Approach LOS	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	

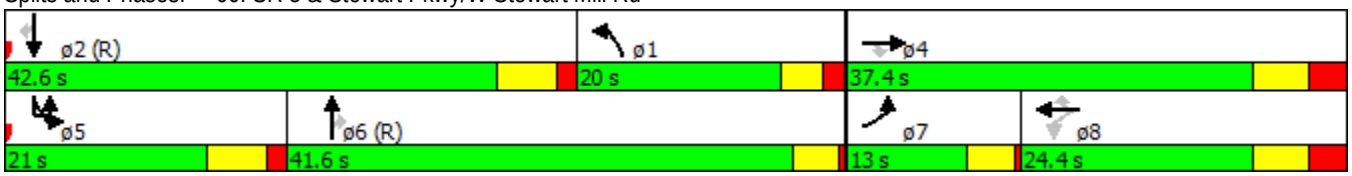
Intersection Summary

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBU	SBL	SBT
Lane Configurations												
Volume (vph)	120	76	16	70	107	178	134	909	22	30	180	419
Satd. Flow (prot)	1770	1900	1615	1805	1900	1583	1787	3539	1615	0	1770	3539
Flt Permitted	0.950			0.683			0.950				0.950	
Satd. Flow (perm)	1770	1900	1615	1298	1900	1583	1787	3539	1615	0	1770	3539
Satd. Flow (RTOR)			151			205			154			
Lane Group Flow (vph)	148	115	20	88	153	205	163	999	28	0	245	499
Turn Type	Prot	NA	Perm	Perm	NA	Perm	Prot	NA	Perm	Prot	Prot	NA
Protected Phases	7	4			8		1	6		5	5	2
Permitted Phases		4	4	8		8			6			
Total Split (s)	13.0	37.4	37.4	24.4	24.4	24.4	20.0	41.6	41.6	21.0	21.0	42.6
Total Lost Time (s)	4.0	7.1	7.1	7.1	7.1	7.1	4.8	4.0	4.0		6.0	6.0
Act Effct Green (s)	9.0	30.3	30.3	17.3	17.3	17.3	15.2	37.6	37.6		15.0	36.6
Actuated g/C Ratio	0.09	0.30	0.30	0.17	0.17	0.17	0.15	0.38	0.38		0.15	0.37
v/c Ratio	0.93	0.20	0.03	0.39	0.47	0.46	0.60	0.75	0.04		0.92	0.39
Control Delay	102.2	27.0	0.1	42.7	42.5	9.0	49.8	31.5	0.1		82.4	18.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0
Total Delay	102.2	27.0	0.1	42.7	42.5	9.0	49.8	31.5	0.1		82.4	18.4
LOS	F	C	A	D	D	A	D	C	A		F	B
Approach Delay		64.4			27.1			33.2				35.7
Approach LOS		E			C			C				D
Queue Length 50th (ft)	95	54	0	50	89	0	98	287	0		104	66
Queue Length 95th (ft)	#183	70	0	87	114	54	150	365	0		#264	81
Internal Link Dist (ft)		363			375			328				311
Turn Bay Length (ft)	130					170	200		200		285	
Base Capacity (vph)	159	575	594	224	328	443	271	1330	703		265	1295
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0		0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0		0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0		0	0
Reduced v/c Ratio	0.93	0.20	0.03	0.39	0.47	0.46	0.60	0.75	0.04		0.92	0.39

Intersection Summary

Cycle Length: 100
Actuated Cycle Length: 100
Offset: 6 (6%), Referenced to phase 2:SBT and 6:NBT, Start of 1st Green
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.93
Intersection Signal Delay: 36.2 — Intersection LOS: D
Intersection Capacity Utilization 72.0% — ICU Level of Service C
Analysis Period (min) 15
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 60: SR 5 & Stewart Pkwy/W Stewart Mill Rd



Lane Group	SBR
Lane Configurations	
Volume (vph)	66
Satd. Flow (prot)	1583
Flt Permitted	
Satd. Flow (perm)	1583
Satd. Flow (RTOR)	141
Lane Group Flow (vph)	80
Turn Type	Perm
Protected Phases	
Permitted Phases	2
Total Split (s)	42.6
Total Lost Time (s)	6.0
Act Effct Green (s)	36.6
Actuated g/C Ratio	0.37
v/c Ratio	0.12
Control Delay	0.4
Queue Delay	0.0
Total Delay	0.4
LOS	A
Approach Delay	
Approach LOS	
Queue Length 50th (ft)	0
Queue Length 95th (ft)	0
Internal Link Dist (ft)	
Turn Bay Length (ft)	285
Base Capacity (vph)	668
Starvation Cap Reductn	0
Spillback Cap Reductn	0
Storage Cap Reductn	0
Reduced v/c Ratio	0.12

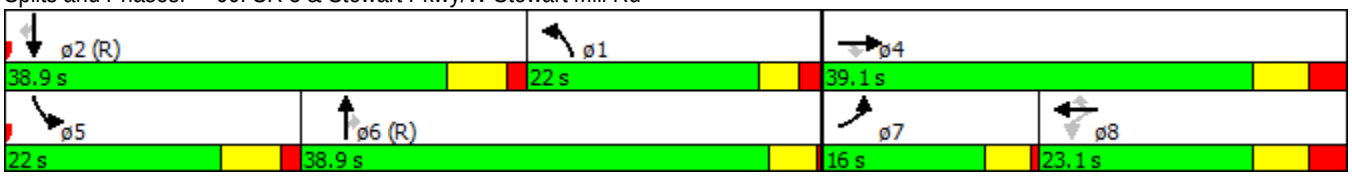
Intersection Summary

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	120	76	16	70	107	178	134	909	22	180	419	66
Satd. Flow (prot)	1770	1900	1615	1805	1900	1583	1787	3539	1615	1770	3539	1583
Flt Permitted	0.950			0.683			0.950			0.950		
Satd. Flow (perm)	1770	1900	1615	1298	1900	1583	1787	3539	1615	1770	3539	1583
Satd. Flow (RTOR)			151			205			154			141
Lane Group Flow (vph)	148	115	20	88	153	205	163	999	28	212	499	80
Turn Type	Prot	NA	Perm	Perm	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	7	4			8		1	6		5	2	
Permitted Phases		4	4	8		8			6			2
Total Split (s)	16.0	39.1	39.1	23.1	23.1	23.1	22.0	38.9	38.9	22.0	38.9	38.9
Total Lost Time (s)	4.0	7.1	7.1	7.1	7.1	7.1	4.8	4.0	4.0	6.0	6.0	6.0
Act Effct Green (s)	11.3	32.0	32.0	16.7	16.7	16.7	17.2	34.9	34.9	16.0	32.9	32.9
Actuated g/C Ratio	0.11	0.32	0.32	0.17	0.17	0.17	0.17	0.35	0.35	0.16	0.33	0.33
v/c Ratio	0.74	0.19	0.03	0.41	0.48	0.47	0.53	0.81	0.04	0.75	0.43	0.13
Control Delay	65.2	25.7	0.1	44.3	44.0	9.4	44.9	35.8	0.1	58.0	21.0	0.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	65.2	25.7	0.1	44.3	44.0	9.4	44.9	35.8	0.1	58.0	21.0	0.4
LOS	E	C	A	D	D	A	D	D	A	E	C	A
Approach Delay		44.5			28.1			36.2			28.8	
Approach LOS		D			C			D			C	
Queue Length 50th (ft)	92	53	0	51	90	0	96	301	0	81	71	0
Queue Length 95th (ft)	#144	68	0	88	116	55	146	382	0	#203	86	0
Internal Link Dist (ft)		363			375			328			311	
Turn Bay Length (ft)	130					170	200		200	285		285
Base Capacity (vph)	212	608	619	216	316	434	307	1235	663	283	1164	615
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.70	0.19	0.03	0.41	0.48	0.47	0.53	0.81	0.04	0.75	0.43	0.13

Intersection Summary

Cycle Length: 100
Actuated Cycle Length: 100
Offset: 6 (6%), Referenced to phase 2:SBT and 6:NBT, Start of 1st Green
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.81
Intersection Signal Delay: 33.6 Intersection LOS: C
Intersection Capacity Utilization 62.7% ICU Level of Service B
Analysis Period (min) 15
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 60: SR 5 & Stewart Pkwy/W Stewart Mill Rd

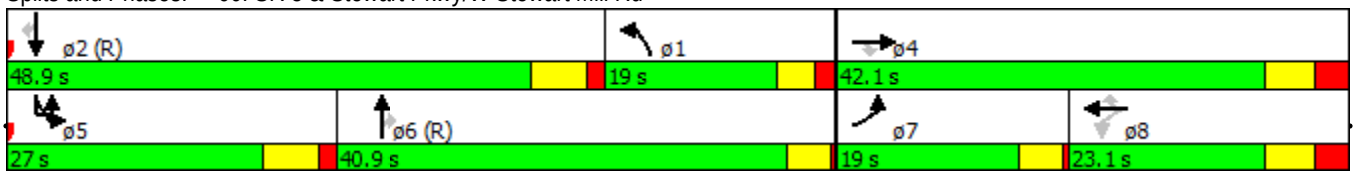


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBU	SBL	SBT
Lane Configurations												
Volume (vph)	189	137	83	62	130	146	201	826	28	68	249	626
Satd. Flow (prot)	1770	1900	1615	1805	1900	1583	1787	3539	1615	0	1770	3539
Flt Permitted	0.950			0.656			0.950				0.950	
Satd. Flow (perm)	1770	1900	1615	1246	1900	1583	1787	3539	1615	0	1770	3539
Satd. Flow (RTOR)			137			177			140			
Lane Group Flow (vph)	215	159	112	74	133	174	309	1147	31	0	351	803
Turn Type	Prot	NA	Perm	Perm	NA	Perm	Prot	NA	Perm	Prot	Prot	NA
Protected Phases	7	4			8		1	6		5	5	2
Permitted Phases		4	4	8		8			6			
Total Split (s)	19.0	42.1	42.1	23.1	23.1	23.1	19.0	40.9	40.9	27.0	27.0	48.9
Total Lost Time (s)	4.0	7.1	7.1	7.1	7.1	7.1	4.8	4.0	4.0		6.0	6.0
Act Effct Green (s)	14.8	35.0	35.0	16.2	16.2	16.2	14.2	36.9	36.9		21.0	42.9
Actuated g/C Ratio	0.13	0.32	0.32	0.15	0.15	0.15	0.13	0.34	0.34		0.19	0.39
v/c Ratio	0.90	0.26	0.18	0.40	0.48	0.45	1.34	0.97	0.05		1.04	0.58
Control Delay	85.3	29.4	3.5	50.2	49.5	10.3	218.8	55.7	0.1		97.7	23.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0
Total Delay	85.3	29.4	3.5	50.2	49.5	10.3	218.8	55.7	0.1		97.7	23.5
LOS	F	C	A	D	D	B	F	E	A		F	C
Approach Delay		48.2			31.7			88.4				40.0
Approach LOS		D			C			F				D
Queue Length 50th (ft)	151	83	0	48	87	0	~285	416	0		~270	242
Queue Length 95th (ft)	#280	131	10	89	150	47	#284	368	0		#452	240
Internal Link Dist (ft)		363			375			328				311
Turn Bay Length (ft)	130					170	200		200		285	
Base Capacity (vph)	241	604	607	183	279	383	230	1187	634		337	1380
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0		0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0		0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0		0	0
Reduced v/c Ratio	0.89	0.26	0.18	0.40	0.48	0.45	1.34	0.97	0.05		1.04	0.58

Intersection Summary

Cycle Length: 110
Actuated Cycle Length: 110
Offset: 0 (0%), Referenced to phase 2:SBT and 6:NBT, Start of 1st Green
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 1.34
Intersection Signal Delay: 59.7 Intersection LOS: E
Intersection Capacity Utilization 77.5% ICU Level of Service D
Analysis Period (min) 15
~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 60: SR 5 & Stewart Pkwy/W Stewart Mill Rd



Wilburn Engineering

Lane Group	SBR
Lane Configurations	
Volume (vph)	152
Satd. Flow (prot)	1583
Flt Permitted	
Satd. Flow (perm)	1583
Satd. Flow (RTOR)	183
Lane Group Flow (vph)	183
Turn Type	Perm
Protected Phases	
Permitted Phases	2
Total Split (s)	48.9
Total Lost Time (s)	6.0
Act Effct Green (s)	42.9
Actuated g/C Ratio	0.39
v/c Ratio	0.25
Control Delay	1.9
Queue Delay	0.0
Total Delay	1.9
LOS	A
Approach Delay	
Approach LOS	
Queue Length 50th (ft)	4
Queue Length 95th (ft)	6
Internal Link Dist (ft)	
Turn Bay Length (ft)	285
Base Capacity (vph)	729
Starvation Cap Reductn	0
Spillback Cap Reductn	0
Storage Cap Reductn	0
Reduced v/c Ratio	0.25

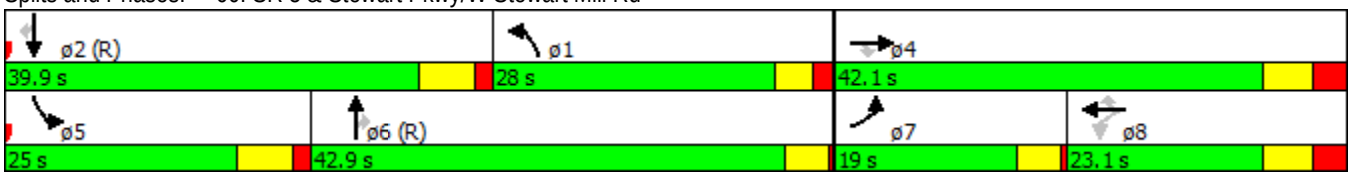
Intersection Summary

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	189	137	83	62	130	146	201	826	28	249	626	152
Satd. Flow (prot)	1770	1900	1615	1805	1900	1583	1787	3539	1615	1770	3539	1583
Flt Permitted	0.950			0.656			0.950			0.950		
Satd. Flow (perm)	1770	1900	1615	1246	1900	1583	1787	3539	1615	1770	3539	1583
Satd. Flow (RTOR)			137			177			140			183
Lane Group Flow (vph)	215	159	112	74	133	174	309	1147	31	274	803	183
Turn Type	Prot	NA	Perm	Perm	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	7	4			8		1	6		5	2	
Permitted Phases		4	4	8		8			6			2
Total Split (s)	19.0	42.1	42.1	23.1	23.1	23.1	28.0	42.9	42.9	25.0	39.9	39.9
Total Lost Time (s)	4.0	7.1	7.1	7.1	7.1	7.1	4.8	4.0	4.0	6.0	6.0	6.0
Act Effct Green (s)	14.8	35.0	35.0	16.2	16.2	16.2	23.2	38.9	38.9	19.0	33.9	33.9
Actuated g/C Ratio	0.13	0.32	0.32	0.15	0.15	0.15	0.21	0.35	0.35	0.17	0.31	0.31
v/c Ratio	0.90	0.26	0.18	0.40	0.48	0.45	0.82	0.92	0.05	0.90	0.74	0.30
Control Delay	85.3	29.4	3.5	50.2	49.5	10.3	60.4	46.6	0.1	68.7	32.7	2.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	85.3	29.4	3.5	50.2	49.5	10.3	60.4	46.6	0.1	68.7	32.7	2.7
LOS	F	C	A	D	D	B	E	D	A	E	C	A
Approach Delay		48.2			31.7			48.5			36.2	
Approach LOS		D			C			D			D	
Queue Length 50th (ft)	151	83	0	48	87	0	210	403	0	194	273	5
Queue Length 95th (ft)	#280	131	10	89	150	47	209	358	0	#345	287	7
Internal Link Dist (ft)		363			375			328			311	
Turn Bay Length (ft)	130					170	200		200	285		285
Base Capacity (vph)	241	604	607	183	279	383	376	1251	661	305	1090	614
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.89	0.26	0.18	0.40	0.48	0.45	0.82	0.92	0.05	0.90	0.74	0.30

Intersection Summary

Cycle Length: 110
Actuated Cycle Length: 110
Offset: 0 (0%), Referenced to phase 2:SBT and 6:NBT, Start of 1st Green
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.92
Intersection Signal Delay: 42.4 — Intersection LOS: D
Intersection Capacity Utilization 71.5% — ICU Level of Service C
Analysis Period (min) 15
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 60: SR 5 & Stewart Pkwy/W Stewart Mill Rd

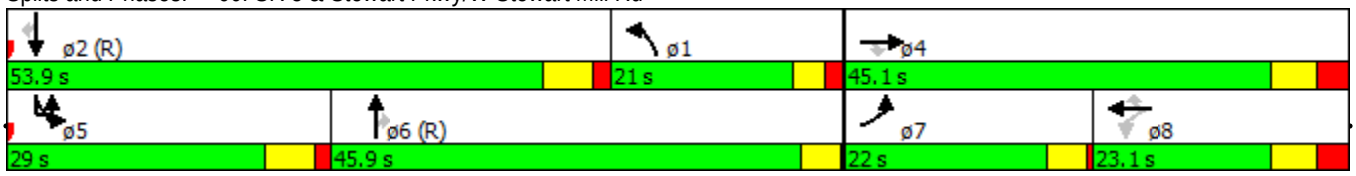


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBU	SBL	SBT
Lane Configurations												
Volume (vph)	197	140	124	40	138	117	159	620	22	79	262	936
Satd. Flow (prot)	1770	1900	1615	1805	1900	1583	1787	3539	1615	0	1770	3539
Flt Permitted	0.950			0.644			0.950				0.950	
Satd. Flow (perm)	1770	1900	1615	1224	1900	1583	1787	3539	1615	0	1770	3539
Satd. Flow (RTOR)			168			162			128			
Lane Group Flow (vph)	249	179	168	48	160	148	177	646	32	0	391	996
Turn Type	Prot	NA	Perm	Perm	NA	Perm	Prot	NA	Perm	Prot	Prot	NA
Protected Phases	7	4			8		1	6		5	5	2
Permitted Phases		4	4	8		8			6			
Total Split (s)	22.0	45.1	45.1	23.1	23.1	23.1	21.0	45.9	45.9	29.0	29.0	53.9
Total Lost Time (s)	4.0	7.1	7.1	7.1	7.1	7.1	4.8	4.0	4.0		6.0	6.0
Act Effct Green (s)	18.0	38.0	38.0	16.0	16.0	16.0	16.2	41.9	41.9		23.0	47.9
Actuated g/C Ratio	0.15	0.32	0.32	0.13	0.13	0.13	0.14	0.35	0.35		0.19	0.40
v/c Ratio	0.94	0.30	0.27	0.29	0.63	0.42	0.73	0.52	0.05		1.15	0.71
Control Delay	92.7	32.6	5.6	52.4	61.3	9.5	68.5	33.0	0.1		135.3	28.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0
Total Delay	92.7	32.6	5.6	52.4	61.3	9.5	68.5	33.0	0.1		135.3	28.0
LOS	F	C	A	D	E	A	E	C	A		F	C
Approach Delay		50.1			38.6			39.1				53.0
Approach LOS		D			D			D				D
Queue Length 50th (ft)	193	104	0	34	119	0	134	208	0		~359	343
Queue Length 95th (ft)	#284	141	23	67	183	29	#236	267	0		#521	421
Internal Link Dist (ft)		363			375			328				311
Turn Bay Length (ft)	130					170	200		200		285	
Base Capacity (vph)	265	601	626	163	253	351	241	1235	647		339	1412
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0		0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0		0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0		0	0
Reduced v/c Ratio	0.94	0.30	0.27	0.29	0.63	0.42	0.73	0.52	0.05		1.15	0.71

Intersection Summary

Cycle Length: 120
Actuated Cycle Length: 120
Offset: 116 (97%), Referenced to phase 2:SBT and 6:NBT, Start of 1st Green
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 1.15
Intersection Signal Delay: 47.4 Intersection LOS: D
Intersection Capacity Utilization 71.8% ICU Level of Service C
Analysis Period (min) 15
~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 60: SR 5 & Stewart Pkwy/W Stewart Mill Rd



Wilburn Engineering

Lane Group	SBR
Lane Configurations	
Volume (vph)	114
Satd. Flow (prot)	1583
Flt Permitted	
Satd. Flow (perm)	1583
Satd. Flow (RTOR)	144
Lane Group Flow (vph)	144
Turn Type	Perm
Protected Phases	
Permitted Phases	2
Total Split (s)	53.9
Total Lost Time (s)	6.0
Act Effct Green (s)	47.9
Actuated g/C Ratio	0.40
v/c Ratio	0.20
Control Delay	2.3
Queue Delay	0.0
Total Delay	2.3
LOS	A
Approach Delay	
Approach LOS	
Queue Length 50th (ft)	13
Queue Length 95th (ft)	18
Internal Link Dist (ft)	
Turn Bay Length (ft)	285
Base Capacity (vph)	718
Starvation Cap Reductn	0
Spillback Cap Reductn	0
Storage Cap Reductn	0
Reduced v/c Ratio	0.20

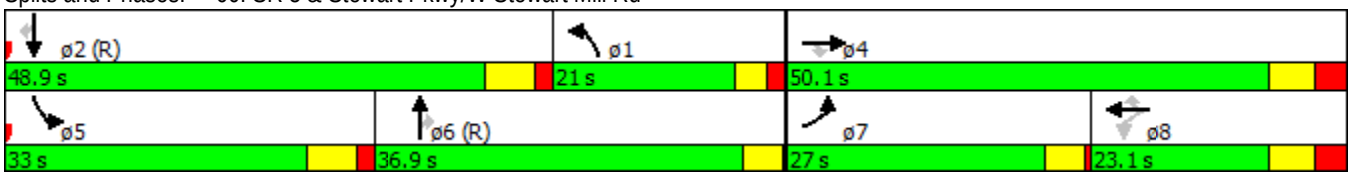
Intersection Summary

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	197	140	124	40	138	117	159	620	22	262	936	114
Satd. Flow (prot)	1770	1900	1615	1805	1900	1583	1787	3539	1615	1770	3539	1583
Flt Permitted	0.950			0.644			0.950			0.950		
Satd. Flow (perm)	1770	1900	1615	1224	1900	1583	1787	3539	1615	1770	3539	1583
Satd. Flow (RTOR)			168			162			128			141
Lane Group Flow (vph)	249	179	168	48	160	148	177	646	32	305	996	144
Turn Type	Prot	NA	Perm	Perm	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	7	4			8		1	6		5	2	
Permitted Phases		4	4	8		8			6			2
Total Split (s)	27.0	50.1	50.1	23.1	23.1	23.1	21.0	36.9	36.9	33.0	48.9	48.9
Total Lost Time (s)	4.0	7.1	7.1	7.1	7.1	7.1	4.8	4.0	4.0	6.0	6.0	6.0
Act Effct Green (s)	20.5	43.0	43.0	18.5	18.5	18.5	16.2	32.9	32.9	27.0	42.9	42.9
Actuated g/C Ratio	0.17	0.36	0.36	0.15	0.15	0.15	0.14	0.27	0.27	0.22	0.36	0.36
v/c Ratio	0.82	0.26	0.24	0.26	0.55	0.39	0.73	0.67	0.06	0.77	0.79	0.22
Control Delay	69.6	28.6	4.8	50.6	55.9	8.8	68.5	42.6	0.2	50.0	33.6	2.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	69.6	28.6	4.8	50.6	55.9	8.8	68.5	42.6	0.2	50.0	33.6	2.8
LOS	E	C	A	D	E	A	E	D	A	D	C	A
Approach Delay		39.0			35.6			46.4			34.0	
Approach LOS		D			D			D			C	
Queue Length 50th (ft)	184	98	0	34	118	0	134	234	0	225	367	14
Queue Length 95th (ft)	237	132	22	67	183	29	#236	300	0	310	450	20
Internal Link Dist (ft)		363			375			328			311	
Turn Bay Length (ft)	130					170	200		200	285		285
Base Capacity (vph)	339	680	686	188	292	380	241	970	535	398	1265	656
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.73	0.26	0.24	0.26	0.55	0.39	0.73	0.67	0.06	0.77	0.79	0.22

Intersection Summary

Cycle Length: 120
Actuated Cycle Length: 120
Offset: 116 (97%), Referenced to phase 2:SBT and 6:NBT, Start of 1st Green
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.82
Intersection Signal Delay: 38.4 Intersection LOS: D
Intersection Capacity Utilization 71.1% ICU Level of Service C
Analysis Period (min) 15
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 60: SR 5 & Stewart Pkwy/W Stewart Mill Rd



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	0	59	1226	18	0	712
Sign Control	Yield		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	64	1333	20	0	774
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage veh)						
Upstream signal (ft)			887			646
pX, platoon unblocked	0.81	0.76			0.76	
vC, conflicting volume	1720	666			1352	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	918	0			838	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	92			100	
cM capacity (veh/h)	218	826			604	

Direction, Lane #	WB 1	NB 1	NB 2	NB 3	SB 1	SB 2
Volume Total	64	666	666	20	387	387
Volume Left	0	0	0	0	0	0
Volume Right	64	0	0	20	0	0
cSH	826	1700	1700	1700	1700	1700
Volume to Capacity	0.08	0.39	0.39	0.01	0.23	0.23
Queue Length 95th (ft)	6	0	0	0	0	0
Control Delay (s)	9.7	0.0	0.0	0.0	0.0	0.0
Lane LOS	A					
Approach Delay (s)	9.7	0.0			0.0	
Approach LOS	A					

Intersection Summary			
Average Delay	0.3		
Intersection Capacity Utilization	44.2%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	0	59	952	5	30	682
Sign Control	Yield		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	64	1035	5	33	741
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage veh)						
Upstream signal (ft)			887			646
pX, platoon unblocked	0.84	0.79			0.79	
vC, conflicting volume	1471	517			1040	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	692	0			522	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	93			96	
cM capacity (veh/h)	303	858			823	

Direction, Lane #	WB 1	NB 1	NB 2	NB 3	SB 1	SB 2
Volume Total	64	517	517	5	280	494
Volume Left	0	0	0	0	33	0
Volume Right	64	0	0	5	0	0
cSH	858	1700	1700	1700	823	1700
Volume to Capacity	0.07	0.30	0.30	0.00	0.04	0.29
Queue Length 95th (ft)	6	0	0	0	3	0
Control Delay (s)	9.5	0.0	0.0	0.0	1.5	0.0
Lane LOS	A				A	
Approach Delay (s)	9.5	0.0			0.5	
Approach LOS	A					

Intersection Summary			
Average Delay	0.5		
Intersection Capacity Utilization	44.2%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	0	112	1209	35	0	949
Sign Control	Yield		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	122	1314	38	0	1032
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage veh)						
Upstream signal (ft)			887			646
pX, platoon unblocked	0.79	0.72			0.72	
vC, conflicting volume	1830	657			1352	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	677	0			703	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	84			100	
cM capacity (veh/h)	306	778			639	

Direction, Lane #	WB 1	NB 1	NB 2	NB 3	SB 1	SB 2
Volume Total	122	657	657	38	516	516
Volume Left	0	0	0	0	0	0
Volume Right	122	0	0	38	0	0
cSH	778	1700	1700	1700	1700	1700
Volume to Capacity	0.16	0.39	0.39	0.02	0.30	0.30
Queue Length 95th (ft)	14	0	0	0	0	0
Control Delay (s)	10.5	0.0	0.0	0.0	0.0	0.0
Lane LOS	B					
Approach Delay (s)	10.5	0.0			0.0	
Approach LOS	B					

Intersection Summary			
Average Delay	0.5		
Intersection Capacity Utilization	47.0%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	0	112	1182	5	68	881
Sign Control	Yield		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	122	1285	5	74	958
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage veh)						
Upstream signal (ft)			887			646
pX, platoon unblocked	0.79	0.72			0.72	
vC, conflicting volume	1911	642			1290	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	781	0			618	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	84			89	
cM capacity (veh/h)	235	778			688	

Direction, Lane #	WB 1	NB 1	NB 2	NB 3	SB 1	SB 2
Volume Total	122	642	642	5	393	638
Volume Left	0	0	0	0	74	0
Volume Right	122	0	0	5	0	0
cSH	778	1700	1700	1700	688	1700
Volume to Capacity	0.16	0.38	0.38	0.00	0.11	0.38
Queue Length 95th (ft)	14	0	0	0	9	0
Control Delay (s)	10.5	0.0	0.0	0.0	3.2	0.0
Lane LOS	B				A	
Approach Delay (s)	10.5	0.0			1.2	
Approach LOS	B					

Intersection Summary			
Average Delay	1.0		
Intersection Capacity Utilization	65.7%	ICU Level of Service	C
Analysis Period (min)	15		

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	0	90	971	51	0	1130
Sign Control	Yield		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	98	1055	55	0	1228
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage veh)						
Upstream signal (ft)			887			646
pX, platoon unblocked	0.89	0.87			0.87	
vC, conflicting volume	1670	528			1111	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	847	159			829	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	87			100	
cM capacity (veh/h)	268	747			695	

Direction, Lane #	WB 1	NB 1	NB 2	NB 3	SB 1	SB 2
Volume Total	98	528	528	55	614	614
Volume Left	0	0	0	0	0	0
Volume Right	98	0	0	55	0	0
cSH	747	1700	1700	1700	1700	1700
Volume to Capacity	0.13	0.31	0.31	0.03	0.36	0.36
Queue Length 95th (ft)	11	0	0	0	0	0
Control Delay (s)	10.5	0.0	0.0	0.0	0.0	0.0
Lane LOS	B					
Approach Delay (s)	10.5	0.0			0.0	
Approach LOS	B					

Intersection Summary			
Average Delay	0.4		
Intersection Capacity Utilization	39.1%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	0	90	952	5	79	1051
Sign Control	Yield		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	98	1035	5	86	1142
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage veh)						
Upstream signal (ft)			887			646
pX, platoon unblocked	0.91	0.85			0.85	
vC, conflicting volume	1778	517			1040	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	919	87			700	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	88			89	
cM capacity (veh/h)	218	814			761	

Direction, Lane #	WB 1	NB 1	NB 2	NB 3	SB 1	SB 2	SB 3
Volume Total	98	517	517	5	86	571	571
Volume Left	0	0	0	0	86	0	0
Volume Right	98	0	0	5	0	0	0
cSH	814	1700	1700	1700	761	1700	1700
Volume to Capacity	0.12	0.30	0.30	0.00	0.11	0.34	0.34
Queue Length 95th (ft)	10	0	0	0	10	0	0
Control Delay (s)	10.0	0.0	0.0	0.0	10.3	0.0	0.0
Lane LOS	B				B		
Approach Delay (s)	10.0	0.0			0.7		
Approach LOS	B						

Intersection Summary			
Average Delay	0.8		
Intersection Capacity Utilization	38.6%	ICU Level of Service	A
Analysis Period (min)	15		

ATTACHMENT 6

MEETING MINUTES

Meeting Minutes

PROJECT: SR 5 (Bill Arp Road) Congestion & Traffic Flow Improvements

MEETING DATE: May 15, 2014
2:00 PM at Douglas County Courthouse
1st Floor Development Services Conference Room #4

PARTICIPANTS: Gary Westmoreland, DCDOT
Randy Hulsey, DCDOT
Steven Sheffield, DCDOT
Robert Baker, GDOT
Mike Lobdell, GDOT
Michelle Wright, City of Douglasville
Scott Mohler, URS
BJ Martin, URS
Vern Wilburn, Wilburn Engineering

DISCUSSION: Kickoff meeting to discuss goals and objectives for the project.

A meeting of the above listed participants was held on May 15, 2014 at the Douglas County Courthouse. Gary Westmoreland moderated the meeting and provided the introductions.

A new GDOT Project Manager has been assigned: Sam Samu (who was not in attendance).

Scott Mohler is the Project Manager and led a discussion of the agenda items. The following list summarizes the key items that were discussed:

1. Discussed project goals.
2. Noted that schedule has not been entered into T-Pro. GDOT provided a potential schedule that shows letting in FY2017. URS will coordinate with County and propose a revised schedule with the letting occurring in FY2016. To be conservative, the schedule will include CE and two construction easements.
3. Year 2018 should be used as the base year for traffic projections (conservative approach)
4. Michelle Wright mentioned current study is considering a CD road on I-20 EB between Bright Star Road and Chapel Hill Road.

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5. Consulting team will study long-range concepts with short-term operational solutions in a balanced approach.
6. Right turn at off ramp has a high frequency of rear end collisions. Operational solution should increase driver awareness. Physical improvements to consider are signalization or continuous right turn lane. Need to inquire with GDOT PM whether an IMR would be needed. The rate or volume of vehicles added to the interstate from SR 5 is unaffected.
7. Consultant team will use Synchro/SimTraffic for modeling.
8. Proposed left turn onto Wesley Pond Road may be eligible as a Quick Response project due to the safety concerns. The proposed improvements would be less than $200,000 and would require accident data and u-turn volumes for consideration. Approval from Todd Long would be required.
9. Agreed to coordinating with RTOP and holding our project coordination meetings directly following RTOP (currently held every third Tuesday from 9:30am – 11:00am)
10. All correspondence with GDOT should include Douglas County. Deliverables to Douglas County will be in the form of pdf documents.
11. The ITS project elements originally anticipated for this project are instead being accomplished by the RTOP project. However, if there are excess construction funds available in this project, then the County wants key CCTV cameras (such as Douglas Blvd/SR 5) to be relocated to new taller poles to improve the field of vision.
12. No public meetings are anticipated, however, Douglas County and City of Douglasville will provide handouts, signage and website notices to inform public as needed.
13. Project is currently setup as GDOT Let. County will submit paperwork to change to County Let.

ACTION ITEMS:

1. Coordinate a revised schedule with the County and have entered into TPro (Scott Mohler)
2. Assess whether an IMR is needed to modify the off ramp. (BJ Martin)
3. Collect traffic data prior to school being out for summer (Vern Wilburn)
4. Wesley Pond Road modifications may be eligible as a Quick Response project:
    a. Prepare construction estimate; gather accident data, u-turn volumes, and aerial drawing of location; and send to Mike Lobdell (BJ Martin)
    b. Propose as a Quick Response project (Mike Lobdell)
5. Prepare paperwork to change project to County Let (Gary Westmoreland)

Please notify Scott Mohler with any corrections or additions to these minutes.

AGENDA

KICKOFF MEETING
SR 5 (BILL ARP ROAD) CONGESTION & TRAFFIC FLOW IMPROVEMENTS
MAY 15, 2014 AT 2:00 PM

PI #0012618
Douglas County Project No. 13-012

1. Introductions
2. Project Goals
3. Scope of Work & Schedule
4. Quality Assurance / Quality Control Plan
5. Project Staffing and Responsibilities
6. Communication Methods and Documentation
7. Project Software
8. Invoicing
9. Open Discussion

Key Staff	Role	Email	Office	Cell
Scott Mohler, PE	Project Manager	scott.mohler@urs.com	678-808-8811	770-313-5147
BJ Martin, PE	Project Design Lead	bj.martin@urs.com	678.808.8984	404-416-8130
Patrick Smith	Environmental Lead	patrick.n.smith@urs.com	678.808.8876	678-643-0267
Vern Wilburn, PE	Traffic Lead	vwilburn@WilburnEngineering.com	678-423-0050	770-362-6184
RJ Surgi, PE	ITS Technical Expert	rj.surgi@urs.com	678-808-8847	770-331-0357

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Douglas County Department of Transportation

MEETING SIGN-IN SHEET

Project:	URS KICK-OFF MEETING- SR 5 (Bill Arp Road) Congestion & Traffic Flow Improvements Project (PI0012618)	**Meeting Date:**	5-15-14
Location	Douglas County DOT– Conf Room 4	**Time:**	2:00 PM

Name/Title		Organization	Phone	E-Mail
Gary Westmoreland, Pre-Construction Div Mgr		DCDOT	678.715.5365	gwestmoreland@co.douglas.ga.us
Randy Hulsey, Director		DCDOT	770.920.4932	rhulsey@co.douglas.ga.us
Steven Sheffield, Traffic Operations Manager		DCDOT	678.715.5372	ssheffield@co.douglas.ga.us
Robert Baker RTOP		GDOT TMC	404-635-6837	robbaker@dot.ga.gov
Mike Lobdell Traffic Eng		GDOT	7/986-1765	mlobdell@dot.ga.gov
BJ Martin		URS	678-808-8584	bj.martin@urs.com
Scott Mohler		URS	678-808-8811	scott.mohler@urs.com
Vern Wilburn		Wilburn Eng.	770.362.6184	vwilburn@wilburnengineering.com
Michelle Wright		City of Douglasville	678-449-3052	wrightm@douglasvillega.gov
~~Randy Hulsey~~		~~D~~		

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STATUS MEETING AGENDA

SR 5 (BILL ARP ROAD) CONGESTION & TRAFFIC FLOW IMPROVEMENTS
AUGUST 19, 2014 AT 10:30 AM

PI #0012618
Douglas County Project No. 13-012

1. Project Status

Task 1 – Concept Development (15% Complete)

- Conducted kick-off meeting on 5/15/14
- Collected traffic counts data in May 2014
- Began traffic diagrams and crash analysis
- Began investigation whether Wesley Pond Road modifications may be eligible as a Quick Response project:
    - Gathered accident data and u-turn volumes
    - Created aerial drawing
- Began draft Concept Report and started researching data needed

Task 2 – Database Preparation (20% Complete)

- Acquired GIS files from DCDOT
- Began preparing baseline plan sheets

Task 3 – Environmental Document (5% Complete)

- Inquired with GDOT OEL about using 106 worksheet. GDOT will not allow worksheet any longer, but we can ask for reduced area of potential effect because of our low impact construction work.
- Began gathering data for ecology worksheet

Task 4 – Preliminary Design (Not started)

Task 5 – ROW Coordination (Not started)

Task 6 – Final Design (Not started)

Project Management

- Received executed contract on 7/10/14
- Coordinated schedule edits with GDOT PM

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2. Discussion Topics

- Review and discuss concept
- Review and discuss proposed schedule

3. Issues/Concerns

- None

4. Open Discussion

Next Status Meeting is Tuesday, September 23rd (ITS3C Summit is on September 14-17).

Key Staff	Role	Email	Office	Cell
Scott Mohler, PE	Project Manager	scott.mohler@urs.com	678-808-8811	770-313-5147
Jeff Henry, PE	Project Design Lead	jeff.henry@urs.com	678.808.8910	404-663-8649
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RJ Surgi, PE	ITS Technical Expert	rj.surgi@urs.com	678-808-8847	770-331-0357

STATUS MEETING AGENDA

SR 5 (BILL ARP ROAD) CONGESTION & TRAFFIC FLOW IMPROVEMENTS
SEPTEMBER 22, 2014 AT 1:30 PM

PI #0012618
Douglas County Project No. 13-012

1. Project Status

Task 1 – Concept Development (50% Complete)

- Conducted kick-off meeting on 5/15/14
- Collected traffic counts data in May 2014
- **Prepared and submitted draft Traffic Study. Analyzed the following:**
    - **Wesley Pond Road modifications**
    - **I-20 WB off ramp and SR 5 turn lanes**
    - **Douglas Blvd/SR 5**
- **Prepared draft Quick Response form for Wesley Pond Road modifications**
- **Conducted meeting with GDOT (Mike Lobdell) and DCDOT (Randy Hulsey and Steven Sheffield) on 9/12/14 to discuss project**
- **Prepared and submitted concept drawings for I-20 WB off ramp.**
- **Continued preparing draft Concept Report**

Task 2 – Database Preparation (30% Complete)

- Acquired GIS files from DCDOT
- **Continued preparing baseline plan sheets**

Task 3 – Environmental Document (10% Complete)

- Inquired with GDOT OEL about using 106 worksheet. GDOT will not allow worksheet any longer, but we can ask for reduced area of potential effect because of our low impact construction work.
- **Gathered data for ecology worksheet**

Task 4 – Preliminary Design (Not started)

Task 5 – ROW Coordination (Not started)

Task 6 – Final Design (Not started)

Project Management

- Received executed contract on 7/10/14
- Coordinated schedule edits with GDOT PM

2. Discussion Topics

- Review and discuss concept
- Review and discuss proposed schedule

3. Issues/Concerns

- None

4. Open Discussion

Next Status Meeting is Tuesday, October 21st

Key Staff	Role	Email	Office	Cell
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Sam Samu, PE	GDOT Proj. Manager	ssamu@dot.ga.gov	404-631-1545	404-694-6449

STATUS MEETING AGENDA

SR 5 (BILL ARP ROAD) CONGESTION & TRAFFIC FLOW IMPROVEMENTS
OCTOBER 21, 2014 AT 10:30 AM

PI #0012618
Douglas County Project No. 13-012

1. Project Status

Task 1 – Concept Development (80% Complete)

- Conducted kick-off meeting on 5/15/14
- Collected traffic counts data in May 2014
- Conducted meeting with GDOT (Mike Lobdell) and DCDOT (Randy Hulsey and Steven Sheffield) on 9/12/14 to discuss project
- **Completed and submitted Quick Response form for Wesley Pond Road modifications on 9/30/14**
- **Updated Traffic Study and Concept Layout to include:**
    - **Wesley Pond Road left turn median opening from SR 5**
    - **I-20 WB off ramp dual right turn lanes to SR 5 NB**
    - **Dual left turn lanes from SR 5 SB to Douglas Blvd EB**
    - **Concourse Pkwy EB right to SR 5 SB**
    - **Removal of raised median at SR 5 SB / I-20 WB on-ramp**
- **Prepared multiple construction cost estimates and entered final concept estimate into GDOT CES**
- **Continued preparing draft Concept Report**

Task 2 – Database Preparation (40% Complete)

- Acquired GIS files from DCDOT
- **Continued preparing baseline plan sheets**

Task 3 – Environmental Document (20% Complete)

- Inquired with GDOT OEL about using 106 worksheet. GDOT will not allow worksheet any longer, but we can ask for reduced area of potential effect because of our low impact construction work.
- Gathered data for ecology worksheet
- **Conducted ecology field survey week of 10/13/14**

Task 4 – Preliminary Design (Not started)

Task 5 – ROW Coordination (Not started)

Task 6 – Final Design (Not started)

Project Management

- Received executed contract on 7/10/14
- Coordinated schedule edits with GDOT PM

2. Discussion Topics

- Review and discuss final concept plans and estimate

3. Issues/Concerns

- None

4. Open Discussion

Next Status Meeting is Tuesday, November 18th

Key Staff	Role	Email	Office	Cell
Scott Mohler, PE	Project Manager	scott.mohler@urs.com	678-808-8811	770-313-5147
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