

Traffic Data and Reports

Appendix G

48th and Cordova
Projected Traffic Volumes

By: rlc

Date: 6/20/2019

Population Growth Rate 0.80%

Anchorage 2040 LUP

International Airport

AADT 12332 ADOT 2017 AADT GIS Map
30th Hour 10.70% International West of Fairbanks
Directional Distribution 40.00% 60

Old Seward Highway

AADT 16413 ADOT 2017 AADT GIS Map
30th Hour 10.70% International West of Fairbanks
Directional Distribution 60.00% 40

Cordova Street

AADT 1160 Adjusted based on Counts
30th Hour 10.70% International West of Fairbanks
Directional Distribution 40% 60%

48th Avenue

AADT 1220 Adjusted based on Counts
30th Hour 10.70% International West of Fairbanks
Directional Distribution 30% 70%

AADT Projections

Growth Rate 0.80%

<u>AADT Projections</u>	2020	2030	2040
International Airport	12630	13680	14810
Old Seward Highway	16810	18200	19710
Cordova Street	1180	1280	1380
48th Avenue	1240	1340	1450

Directional Distribution 2020

	AM Peak			PM Peak		
	NB/EB	SB/WB	Total	NB/EB	SB/WB	Total
International Airport	541	811	1351	811	541	1351
Old Seward Highway	719	1079	1799	719	1079	1799
Cordova Street	76	51	126	51	76	126
48th Avenue	93	40	133	40	93	133

Directional Distribution 2040

	AM Peak			PM Peak		
	NB/EB	SB/WB	Total	NB/EB	SB/WB	Total
International Airport	634	951	1585	951	634	1585
Old Seward Highway	844	1265	2109	844	1265	2109
Cordova Street	89	59	148	59	89	148
48th Avenue	109	47	155	47	109	155



Cordova Street Radar Data					
Thursday (04/11/2019)					
	Total	AM	PM	Peak Count	85th Percentile Speed
SB	830	325	505	73 (2:00-3:00 PM)	32
NB	530	193	337	54 (11:00 AM-12:00 PM)	30



48th Avenue Radar Data					
Tuesday (04/09/2019)					
	Total	AM	PM	Peak Count	85th Percentile Speed
EB	541	230	311	50 (4:00-5:00 PM)	29
WB	799	288	511	73 (5:00-6:00 PM)	31



48th Avenue and Cordova Street Intersection Camera Data					
Thursday (11/08/2018)					
	Total	AM	PM	AM/ PM Peak Hour	
SB	1209	506	703	Morning	
NB	571	188	383	210 (7:30-8:30 AM)	
EB	315	125	190	Evening	
WB	663	228	435	269 (4:30-5:30 PM)	
Total	2758	1047	1711		

Note: Initial incoming directions listed

Legend

 Traffic Camera Location and Direction

 Radar Location and Direction

 Area of Analysis

SB = Southbound, NB = Northbound, EB = Eastbound, WB = Westbound





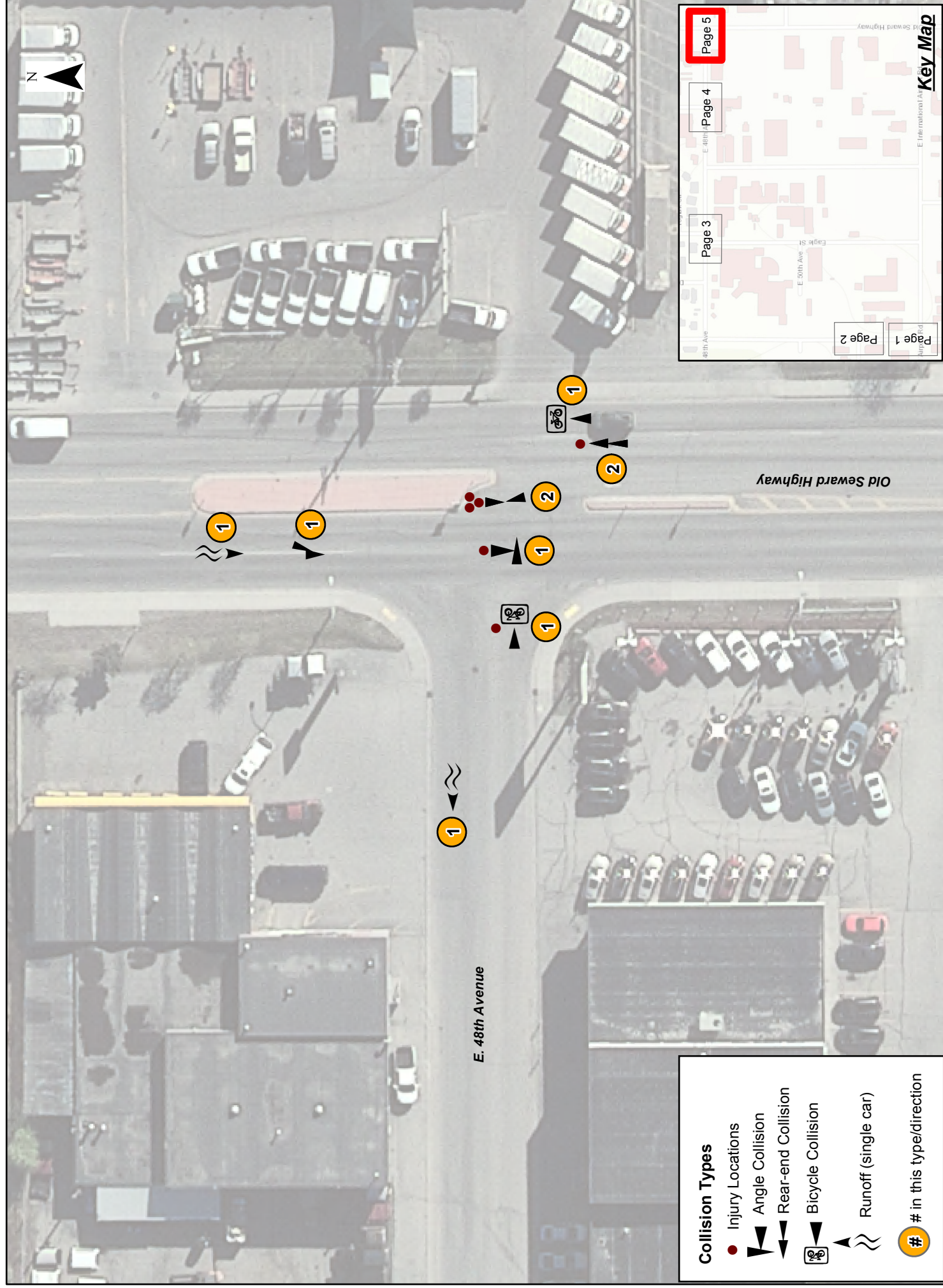
* Symbol locations for schematic purposes only



* Symbol locations for schematic purposes only



* Symbol locations for schematic purposes only



INTERNATIONAL AIRPORT ROAD - WEST OF FAIRBANKS ST - TOTAL

ROUTE: 133800

MILEPOINT: 3.210

STATION NUMBER: 1110538U 0

PERMANENT STN SUMMARY: 2013

MNTH	MADT	% AADT	6AM		PERCENT OF AADT FOR DAY OF WEEK							HISTORY		PERCENT GROWTH	
			- 10PM	10PM - 6AM	MON	TUE	WED	THU	FRI	WKDY	SAT	SUN	YEAR		AADT
JAN	12962	90.7	88.6	11.4	110.4	101.7	116.8	115.9	122.7	113.5	76.5	56.0	2013	14290	-16.1
FEB	13461	94.2	88.8	11.2	108.9	113.2	111.3	112.6	119.8	113.2	78.6	55.6	2012	17024	12.2
MAR	13839	96.8	88.5	11.5	106.9	113.1	114.0	114.3	119.3	113.5	78.6	54.0	2011	15177	1.0
APR	14131	98.9	89.6	10.4	110.4	111.6	112.8	114.0	119.7	113.7	77.1	54.4	2010	15033	-5.9
MAY	14953	104.6	89.3	10.7	100.1	117.2	117.0	116.6	120.1	114.2	74.8	54.2	2009	15968	-3.6
JUN	15986	111.9	87.8	12.2	112.0	113.9	114.5	115.1	116.4	114.4	74.5	53.7	2008	16558	-3.2
JUL	15426	107.9	87.8	12.2	115.4	117.8	117.2	100.6	111.9	112.6	78.3	58.8	2007	17101	-2.1
AUG	15498	108.5	88.5	11.5	111.6	112.5	115.6	113.9	116.3	114.0	75.1	55.0	2006	17473	3.2
SEP	14526	101.7	89.4	10.6	101.3	115.9	113.4	113.7	119.3	112.7	80.6	55.7	2005	16937	7.1
OCT	14486	101.4	89.9	10.1	109.6	112.0	111.6	112.7	119.5	113.1	80.3	54.4	2004	15814	0.2
NOV	12829	89.8	89.2	10.8	116.0	120.9	120.0	99.4	113.5	114.0	75.3	54.9	2003	15780	0.0
DEC	13387	93.7	87.5	12.5	115.9	107.8	96.0	115.6	123.8	111.8	80.6	60.3	2002	15778	2.6
AADT	14290		88.7	11.3	109.9	113.1	113.4	112.0	118.5	113.4	77.5	55.6	2001	15385	4.3
													2000	14745	6.1
													1999	13903	-2.9
													1998	14312	-2.5
													1997	14678	1.2
													1996	14508	-1.1
													1995	14668	-1.1
													1994	14832	-2.7
													1993	15241	-1.2
													1992	15419	-4.2
													1991	16091	8.9
													1990	14782	4.5
													1989	14147	

HIGH DAYS

1ST	2ND	3RD	4TH	5TH	6TH	7TH	8TH	9TH	10TH	AVG
VOLUME	20079	19468	19444	19039	18865	18791	18735	18665	18662	19059
DAY	12/19	07/12	12/20	08/21	05/31	06/14	06/28	07/11	06/25	06/07
% AADT	140.5	136.2	136.1	133.2	132.0	131.5	131.1	130.6	130.6	133.4

HIGH HOURS

1ST	2ND	3RD	4TH	5TH	6TH	7TH	8TH	9TH	10TH	20TH	30TH	40TH	50TH	AVG
VOLUME	1819	1763	1735	1708	1666	1654	1634	1624	1618	1612	1559	1531	1525	1517
HOUR	5PM	5PM	4PM	2PM	6PM	6PM	5PM	5PM	5PM	5PM	5PM	5PM	6PM	5PM
DAY	12/19	08/21	08/21	08/21	05/28	12/19	12/20	06/04	05/31	07/09	06/26	07/02	06/25	08/07
% AADT	12.7	12.3	12.1	12.0	11.7	11.6	11.4	11.4	11.3	11.3	10.9	10.7	10.6	11.8

PERCENT OF AADT BY HOUR

1AM	2AM	3AM	4AM	5AM	6AM	7AM	8AM	9AM	10AM	11AM	12PM	1PM	2PM	3PM	4PM	5PM	6PM	7PM	8PM	9PM	10PM	11PM	12AM
1.8	1.3	1.1	0.6	0.7	1.1	2.1	4.4	5.0	5.0	6.6	5.3	7.3	7.3	7.1	7.4	8.2	7.7	5.0	3.8	3.3	3.0	2.5	2.2

HCM 2010 TWSC
2: Old Seward Highway & 48th Avenue

07/02/2019

Intersection						
Int Delay, s/veh	0.5					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	38	35	719	1079	53
Future Vol, veh/h	0	38	35	719	1079	53
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	0	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	41	38	782	1173	58
Major/Minor	Minor2	Major1		Major2		
Conflicting Flow All	-	616	1231	0	-	0
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	6.94	4.14	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.32	2.22	-	-	-
Pot Cap-1 Maneuver	0	433	562	-	-	-
Stage 1	0	-	-	-	-	-
Stage 2	0	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	-	433	562	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Approach	EB	NB		SB		
HCM Control Delay, s	14.2	0.6		0		
HCM LOS	B					
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR	
Capacity (veh/h)	562	-	433	-	-	
HCM Lane V/C Ratio	0.068	-	0.095	-	-	
HCM Control Delay (s)	11.9	-	14.2	-	-	
HCM Lane LOS	B	-	B	-	-	
HCM 95th %tile Q(veh)	0.2	-	0.3	-	-	

Intersection	
Intersection Delay, s/veh	7.8
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	5	26	7	14	58	21	7	38	6	16	67	29
Future Vol, veh/h	5	26	7	14	58	21	7	38	6	16	67	29
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	5	28	8	15	63	23	8	41	7	17	73	32
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	7.6	7.9	7.7	7.9
HCM LOS	A	A	A	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	14%	13%	15%	14%
Vol Thru, %	75%	68%	62%	60%
Vol Right, %	12%	18%	23%	26%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	51	38	93	112
LT Vol	7	5	14	16
Through Vol	38	26	58	67
RT Vol	6	7	21	29
Lane Flow Rate	55	41	101	122
Geometry Grp	1	1	1	1
Degree of Util (X)	0.067	0.05	0.12	0.139
Departure Headway (Hd)	4.339	4.352	4.268	4.097
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	829	827	844	859
Service Time	2.347	2.359	2.272	2.197
HCM Lane V/C Ratio	0.066	0.05	0.12	0.142
HCM Control Delay	7.7	7.6	7.9	7.9
HCM Lane LOS	A	A	A	A
HCM 95th-tile Q	0.2	0.2	0.4	0.5

Intersection

Int Delay, s/veh 1

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	31	811	541	20	46	30
Future Vol, veh/h	31	811	541	20	46	30
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	34	882	588	22	50	33

Major/Minor	Major1	Major2	Minor2
Conflicting Flow All	610	0	0 1108 305
Stage 1	-	-	- 599 -
Stage 2	-	-	- 509 -
Critical Hdwy	4.14	-	- 6.84 6.94
Critical Hdwy Stg 1	-	-	- 5.84 -
Critical Hdwy Stg 2	-	-	- 5.84 -
Follow-up Hdwy	2.22	-	- 3.52 3.32
Pot Cap-1 Maneuver	965	-	- 204 691
Stage 1	-	-	- 511 -
Stage 2	-	-	- 569 -
Platoon blocked, %		-	-
Mov Cap-1 Maneuver	965	-	- 197 691
Mov Cap-2 Maneuver	-	-	- 324 -
Stage 1	-	-	- 493 -
Stage 2	-	-	- 569 -

Approach	EB	WB	SB
HCM Control Delay, s	0.3	0	16
HCM LOS			C

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	965	-	-	-	410
HCM Lane V/C Ratio	0.035	-	-	-	0.201
HCM Control Delay (s)	8.9	-	-	-	16
HCM Lane LOS	A	-	-	-	C
HCM 95th %tile Q(veh)	0.1	-	-	-	0.7

HCM 2010 TWSC
2: Old Seward Highway & 48th Avenue

07/02/2019

Intersection						
Int Delay, s/veh	0.6					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations		↗	↘	↑↑	↑↑	
Traffic Vol, veh/h	0	44	41	844	1265	62
Future Vol, veh/h	0	44	41	844	1265	62
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	0	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	48	45	917	1375	67
Major/Minor	Minor2	Major1		Major2		
Conflicting Flow All	-	721	1442	0	-	0
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	6.94	4.14	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.32	2.22	-	-	-
Pot Cap-1 Maneuver	0	370	466	-	-	-
Stage 1	0	-	-	-	-	-
Stage 2	0	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	-	370	466	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Approach	EB	NB		SB		
HCM Control Delay, s	16.2	0.6		0		
HCM LOS	C					
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR	
Capacity (veh/h)	466	-	370	-	-	
HCM Lane V/C Ratio	0.096	-	0.129	-	-	
HCM Control Delay (s)	13.5	-	16.2	-	-	
HCM Lane LOS	B	-	C	-	-	
HCM 95th %tile Q(veh)	0.3	-	0.4	-	-	

Intersection	
Intersection Delay, s/veh	8
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	6	30	8	8	69	32	8	44	7	34	79	18
Future Vol, veh/h	6	30	8	8	69	32	8	44	7	34	79	18
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	7	33	9	9	75	35	9	48	8	37	86	20
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	7.7	8	7.8	8.3
HCM LOS	A	A	A	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	14%	14%	7%	26%
Vol Thru, %	75%	68%	63%	60%
Vol Right, %	12%	18%	29%	14%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	59	44	109	131
LT Vol	8	6	8	34
Through Vol	44	30	69	79
RT Vol	7	8	32	18
Lane Flow Rate	64	48	118	142
Geometry Grp	1	1	1	1
Degree of Util (X)	0.079	0.059	0.141	0.172
Departure Headway (Hd)	4.42	4.452	4.296	4.349
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	813	806	836	827
Service Time	2.436	2.469	2.311	2.363
HCM Lane V/C Ratio	0.079	0.06	0.141	0.172
HCM Control Delay	7.8	7.7	8	8.3
HCM Lane LOS	A	A	A	A
HCM 95th-tile Q	0.3	0.2	0.5	0.6

Intersection						
Int Delay, s/veh	1.4					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑	↑↑		↑↑	
Traffic Vol, veh/h	35	951	634	24	53	36
Future Vol, veh/h	35	951	634	24	53	36
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	38	1034	689	26	58	39
Major/Minor	Major1	Major2		Minor2		
Conflicting Flow All	715	0	-	0	1295	358
Stage 1	-	-	-	-	702	-
Stage 2	-	-	-	-	593	-
Critical Hdwy	4.14	-	-	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	2.22	-	-	-	3.52	3.32
Pot Cap-1 Maneuver	881	-	-	-	154	638
Stage 1	-	-	-	-	453	-
Stage 2	-	-	-	-	515	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	881	-	-	-	138	638
Mov Cap-2 Maneuver	-	-	-	-	263	-
Stage 1	-	-	-	-	407	-
Stage 2	-	-	-	-	515	-
Approach	EB	WB		SB		
HCM Control Delay, s	0.7	0		19.5		
HCM LOS				C		
Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	
Capacity (veh/h)	881	-	-	-	345	
HCM Lane V/C Ratio	0.043	-	-	-	0.28	
HCM Control Delay (s)	9.3	0.4	-	-	19.5	
HCM Lane LOS	A	A	-	-	C	
HCM 95th %tile Q(veh)	0.1	-	-	-	1.1	