GRAYS HARBOR RAIL TERMINAL LLC
TRAFFIC IMPACT TECHNICAL REPORT

March 2014

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1. Introduction

This traffic analysis was conducted to review the impacts of one additional train using three existing and one proposed at-grade crossings within Hoquiam, Washington as a result of a proposed operational change for this railroad facility. Traffic impacts at adjacent intersections, as well as crossing locations, were analyzed for potential impacts during the opening year, 2014, and the design year of 2034 for the project.

2. Project Description

Grays Harbor Rail Terminal LLC (GHRT) is proposing a bulk liquids rail logistics facility at the Port of Grays Harbor Terminal 3 (T3) property. The facility will accommodate the receipt for export of not more than 45,000 barrels per day on average of various liquid bulk materials, specifically, various types of crude oil and condensates.

T3 is a 150 acre industrial site and includes an existing 600-foot- long concrete shipping terminal. The Port of Grays Harbor currently leases approximately 25 acres of the T3 site to a private tenant (Willis Enterprises), which utilizes the property for storing and sorting logs, and operating a wood chipping and processing facility. The tenant utilizes the existing wharf for product loading on to barges for export. The remaining area of the property (a former mill site) is occupied by 4 metal buildings and a rail spur line but is otherwise currently vacant.

The liquid bulk materials would be delivered to the proposed facility via unit trains in fully contained liquid bulk rail cars, unloaded into on-site storage tanks, and then loaded onto barges or other marine vessels for delivery to refineries.

The general layout of the proposed rail and off-loading facilities includes four 20-car yard tracks and two 20-car off-loading tracks (120 rail cars total). In addition, a “run-around” track would be used to reposition the locomotive engines and could also be used to hold cars awaiting maintenance. The off-loading spots would be equipped with permanent rack access structures where each rack structure would support connections for a maximum of 40 rail cars (20 spots on each side of a rack). The off-loading spots and central header would be located within secondary containment. The rack structures consist of elevated steel walkways with extendable access platforms used to access the tops of the rail cars. Off-loading would occur via 4-inch dry break connections, hoses, valves, and risers connecting the bottom rail car couplers to a central piping header. The rail cars would be off-loaded by gravity feed into the central header.

The liquid bulk materials would be stored in approximately six to eight above-ground storage tanks with secondary containment and internal floating roofs until a marine vessel (ship or barge) arrives. All tanks will be located outside the Shoreline District. The total combined tank storage would be approximately 800,000 – 1,000,000 barrels. Construction of multiple storage

tanks would allow the facility to accommodate interruptions in vessel schedules as well as changes in delivery volumes, and would allow the facility to maintain consistent operations. Vessel calls are anticipated by barge and Panamax vessels occurring approximately 3-4 times per month.

As noted above, T3 includes an existing 600-foot-long concrete shipping terminal. There are currently four mooring dolphins (three downstream/one upstream) off the existing concrete wharf. Up to four additional mooring dolphins (two downstream and two upstream) would be constructed to minimize vessel movements during liquid bulk materials transfer. No additional overwater expansion of the wharf is proposed. The existing trestle (supporting the Willis conveyor) and the wharf can accommodate the liquid bulk materials pipe rack needed to transfer the materials from the tanks to the vessels. Stormwater collection, drainage improvements, and spill containment measures would be added to the existing wharf but no structural modifications are necessary.

To facilitate operations at the Grays Harbor Rail Terminal, the Puget Sound and Pacific Railroad would be permitting and supervising construction of an industrial lead track extension of their main line railroad system. This industrial lead track would extend from the current main line rail terminus, just east of Paulson Road, for approximately 1,300 lineal feet to the west. The industrial lead track would allow for the backing of rail cars strings into the project site and provide additional rail car storage for other Port tenants. The identification of the industrial lead track is to account for potential indirect or cumulative environmental impacts for the purposes of the State Environmental Policy Act (SEPA) only and is not a project component of the Grays Harbor Rail Terminal site development permitting.

3. Study Area

The study area is shown in Figure 1. The intersections and crossing locations analyzed within the study area are all within the city of Hoquiam, Washington. State Route (SR) 109 is the main arterial within Hoquiam, running east-west through the study area. The rest of the roadway network within the study area serves as access into residential, commercial, and industrial land uses. The project rail line runs generally east-west to the south of SR 109, but as it moves east through the study area, the route bears farther to the south of SR 109. There are currently three at-grade crossings, all of which are on local streets: S. Adams Street, 5th Street, and 8th Street. Only one of the at-grade crossings has crossing gates, the 8th Street crossing. The proposed project will create a fourth at-grade crossing at Paulson Road, just south of SR 109, by extending the existing rail line to the west of Paulson Road. All study area intersections are stop controlled except for the intersection of S. Adams Street with SR 109, which is signalized. In total, 13 area intersections are included in the analysis, as well as the three existing and one proposed at-grade rail crossing.

Figure 1. Study Area Intersections and Existing Crossings

4. Methodology

The operational conditions within the study area were evaluated by using a level of service (LOS) analysis based on the Highway Capacity Manual (HCM) methodology. LOS refers to the degree of congestion on a roadway or at an intersection, measured in average delay, based on the methodologies provided in the 2010 HCM. LOS A represents free-flow conditions (motorists experience little or no delay, and traffic levels are well below roadway capacity), LOS F represents forced-flow conditions (motorists experience very long delays, and traffic volumes exceed roadway capacity). LOS B to E represent decreasing operational conditions. For the intersections within the study area, a traffic analysis program, known as Synchro (Version 8.0), was used to determine intersection delay, queue lengths, and LOS for the peak A.M. and peak P.M. hourly volumes.

The minimum acceptable LOS was determined to be LOS C based on the *WSDOT Design Manual* (2013) guidelines for this type of facility.

Queuing information from the Synchro analysis was used to determine potential issues at railroad crossing locations within the study area.

5. Proposed Roadway Network

The proposed new crossing at Paulson Road will require additional safety features such as crossing gates; however, there will not be any geometric changes to the roadway network as a result of the project. No geometric or operational changes from the existing conditions were included in the year of opening or design year operational analyses.

6. Intersection Traffic Operations

Existing traffic volumes were collected for the A.M. and P.M. peak periods at all study area intersections. The existing traffic volumes are shown in Appendix A and represent 2013 conditions. Year of opening (2014) and design year (2034) traffic volumes were developed by applying a 0.5-percent annual growth rate to existing traffic volumes. This growth percentage was applied after reviewing historical count information provided in the *City of Hoquiam Comprehensive Land Use Plan* (2009), which showed no traffic growth year over year prior to the reports publishing. The project team used 0.5 percent growth to show a worst case scenario, even though traffic volume may grow at a lower rate. No additional roadway traffic is anticipated as a result of the project.

Intersection operation analyses were performed under existing, year of opening, and design year conditions. Intersection delay and level of service summary information is

shown in Table 1. For unsignalized intersections, the worst approach delay is shown in the table. Under the opening year and design year conditions, traffic operations will degrade from their current level; however, no study area intersection will operate below the WSDOT minimum operation standard LOS C. The full traffic analysis results are shown in Appendix B.

Table 1. Intersection Delay Analysis Results

Intersection	Control Type	AM Peak Hour						PM Peak Hour					
		Existing		Opening Day		Design Year		Existing		Opening Day		Design Year	
		Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS
SR 109 Spur & SR 109	Unsignalized	10.6	B	10.6	B	11	B	11.6	B	11.7	B	12.2	B
Paulson Road & SR 109	Unsignalized	10.2	B	10.3	B	10.5	B	12.2	B	11.8	B	13	B
Hoquiam HS DW & SR 109	Unsignalized	12.4	B	12.3	B	13	B	14	B	13.7	B	15	C
Adams Street & SR 109	Signalized	11.4	B	11.5	B	12.5	B	12.8	B	13	B	14.3	B
Adams Street & Railroad Avenue	Unsignalized	9.3	A	9.3	A	9.3	A	9.3	A	9.3	A	9.3	A
Adams Street & Maple Street	Unsignalized	8.8	A	8.9	A	8.9	A	8.8	A	8.8	A	8.8	A
Adams Street & Alder/Pierce	Unsignalized	8.7	A	8.8	A	8.8	A	8.7	A	8.8	A	8.7	A
5th Street & Earley Industrial Way	Unsignalized	9.7	A	9.7	A	9.8	A	9.7	A	9.8	A	9.8	A
5th Street & O Street	Unsignalized	9.2	A	9.2	A	9.2	A	9.1	A	9.2	A	9.2	A
5th Street & N Street	Unsignalized	10	B	9.9	A	10	B	9.8	A	9.8	A	9.9	A
8th Street & Earley Indusrial Way	Unsignalized	9.8	A	9.8	A	9.9	A	10.2	B	10.2	B	10.4	B
8th Street & N Street	Unsignalized	9.7	A	9.7	A	9.9	A	9.9	A	9.9	A	10	B
8th Street & M Street	Unsignalized	10.3	B	10.3	B	10.4	B	10.2	B	10.2	B	10.3	B

Note: Delay is reported in average seconds per vehicle

7. At-Grade Railroad Crossing Operations

The project proposes adding one train per day through the study area. Regardless of traffic volume, one additional train crossing per day will create delay that is not present under existing conditions. The extent of the impact depends on the time of day the additional crossing occurs. For the traffic analysis, a worse-case assumption that the additional train would block crossings through the study area during the P.M. peak hour was used. Queuing and delay from the Synchro analysis at nearby intersections was analyzed to determine impacts that train crossings may have at the four study area crossings.

The three crossings at S Adams Street, 5th Street, and 8th Street will experience more delay to through traffic but should not have queuing issues impacting the roadway network due to the low volume at these crossings at year of opening and in the design year, as well as the geometric design of the surrounding roadway network.

Although the traffic volume on Paulson Road is expected to be low in the year of opening and design year, the proximity of this crossing to the intersection with SR 109 will create a safety issue during a crossing event. Guidance from the *Railroad-Highway Grade Crossing Handbook* (2007) recommends the use of railroad pre-signals in addition to crossing gates in cases where crossings are within 75 feet of an intersection. The pre-signal would be interconnected with the rail system to stop vehicles south of the crossing to avoid potential queues backing onto the tracks from the intersection with SR 109.

8. Safety Impacts

Increased train traffic and vehicular traffic, combined with a new at-grade crossing, could increase vehicle/train exposure. Therefore, the proposed project will include crossing gates at the Paulson Road crossing to improve safety between trains and motor vehicles, especially in light of the proximity of this crossing to the intersection with SR 109. Actions would be taken to ensure that rail services provide enough advanced warning to the Paulson Road crossing pre-signal to clear queued vehicles on Paulson Road or ensure that northbound roadway traffic is stopped prior to the crossing.

9. Conclusion

The proposed project would not have foreseeable operational impacts on roadway traffic and, therefore, would not require mitigation. The addition of advance warning crossing gates and a pre-signal at the new crossing with Paulson Road should be designed to ensure enough time to clear vehicles at the intersection of Paulson Road with SR 109.

10. References

City of Hoquiam Comprehensive Land Use Plan. 2009

Federal Highway Administration Railroad-Highway Grade Crossing Handbook. 2007

Transportation Research Board Highway Capacity Manual. 2010

Washington State Department of Transportation (WSDOT) Design Manual. 2013

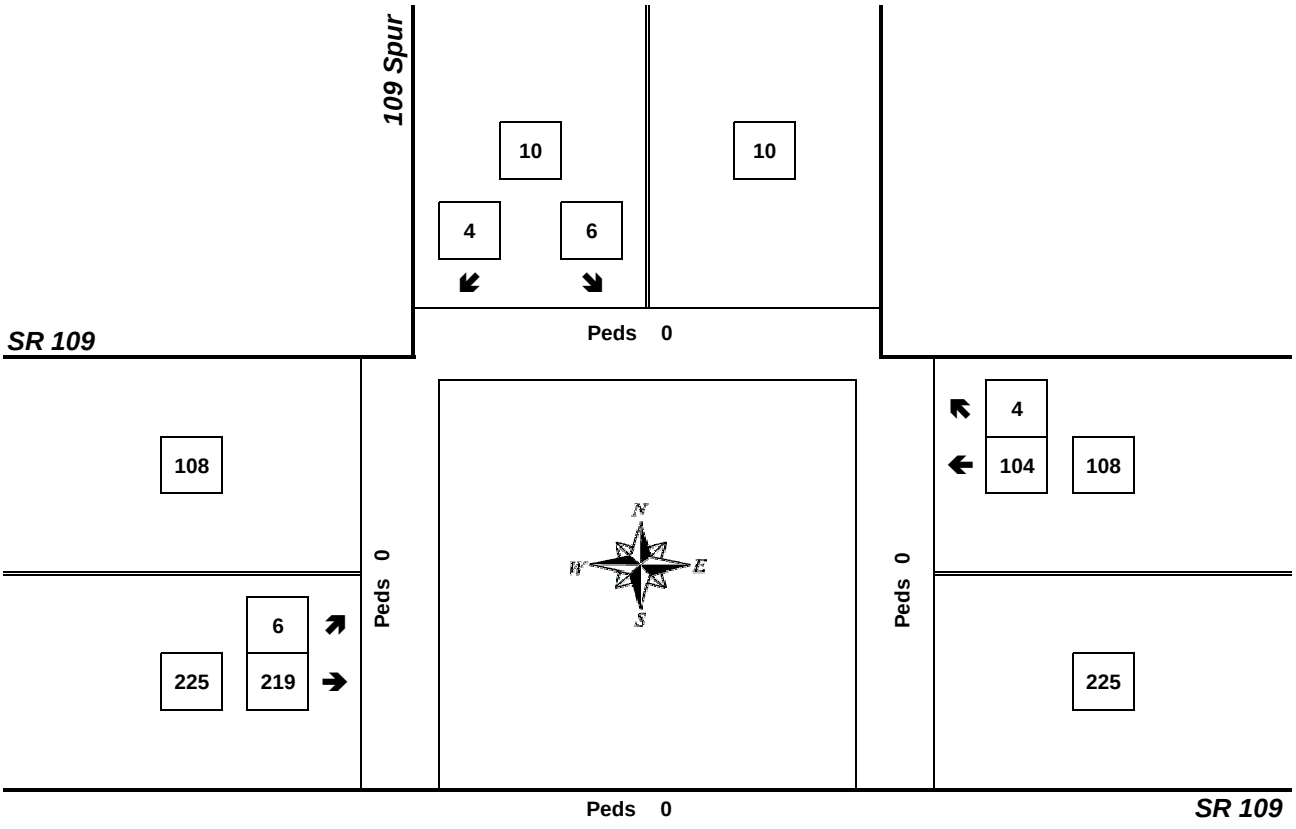
Appendix A: Traffic Volumes

Peak Hour Summary

Mark Skaggs
(206) 251-0300

109 Spur & SR 109

7:15 AM to 8:15 AM
Thursday, March 07, 2013

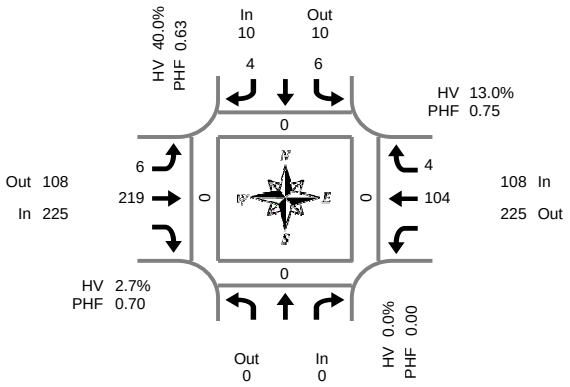


Approach	PHF	HV%	Volume
EB	0.70	2.7%	225
WB	0.75	13.0%	108
NB	0.00	0.0%	0
SB	0.63	40.0%	10
Intersection	0.77	7.0%	343

Count Period: 7:00 AM to 9:00 AM

Total Vehicle Summary

Mark Skaggs
(206) 251-0300



Peak Hour Summary
7:15 AM to 8:15 AM

109 Spur & SR 109

Thursday, March 07, 2013
7:00 AM to 9:00 AM

15-Minute Interval Summary
7:00 AM to 9:00 AM

Interval Start Time	Northbound 109 Spur				Southbound 109 Spur				Eastbound SR 109				Westbound SR 109				Interval Total	Pedestrians Crosswalk			
					L		R	HV	L	T		HV		T	R	HV		North	South	East	West
7:00 AM					0		2	1	1	30		3		15	3	4	51	0	0	0	0
7:15 AM					1		0	0	1	54		2		35	1	2	92	0	0	0	0
7:30 AM					3		0	4	1	79		2		27	1	4	111	0	0	0	0
7:45 AM					1		1	0	1	48		1		23	2	4	76	0	0	0	0
8:00 AM					1		3	0	3	38		1		19	0	4	64	0	0	0	0
8:15 AM					0		3	0	3	39		1		28	0	0	73	0	0	0	0
8:30 AM					1		2	1	0	44		1		37	0	1	84	0	0	0	0
8:45 AM					0		2	1	1	40		4		25	2	4	70	0	0	0	0
Total Survey					7		13	7	11	372		15		209	9	23	621	0	0	0	0

Peak Hour Summary
7:15 AM to 8:15 AM

By Approach	Northbound 109 Spur				Southbound 109 Spur				Eastbound SR 109				Westbound SR 109				Total	Pedestrians Crosswalk			
	In	Out	Total		In	Out	Total	HV	In	Out	Total	HV	In	Out	Total	HV		North	South	East	West
Volume	0	0	0		10	10	20	4	225	108	333	6	108	225	333	14	343	0	0	0	0
%HV	0.0%				40.0%				2.7%				13.0%				7.0%				
PHF	0.00				0.63				0.70				0.75				0.77				

By Movement	Northbound 109 Spur				Southbound 109 Spur				Eastbound SR 109				Westbound SR 109				Total
				Total	L		R	Total	L	T		Total		T	R	Total	
Volume				0	6		4	10	6	219		225		104	4	108	343
PHF				0.00	0.50		0.33	0.63	0.50	0.69		0.70		0.74	0.50	0.75	0.77

Rolling Hour Summary
7:00 AM to 9:00 AM

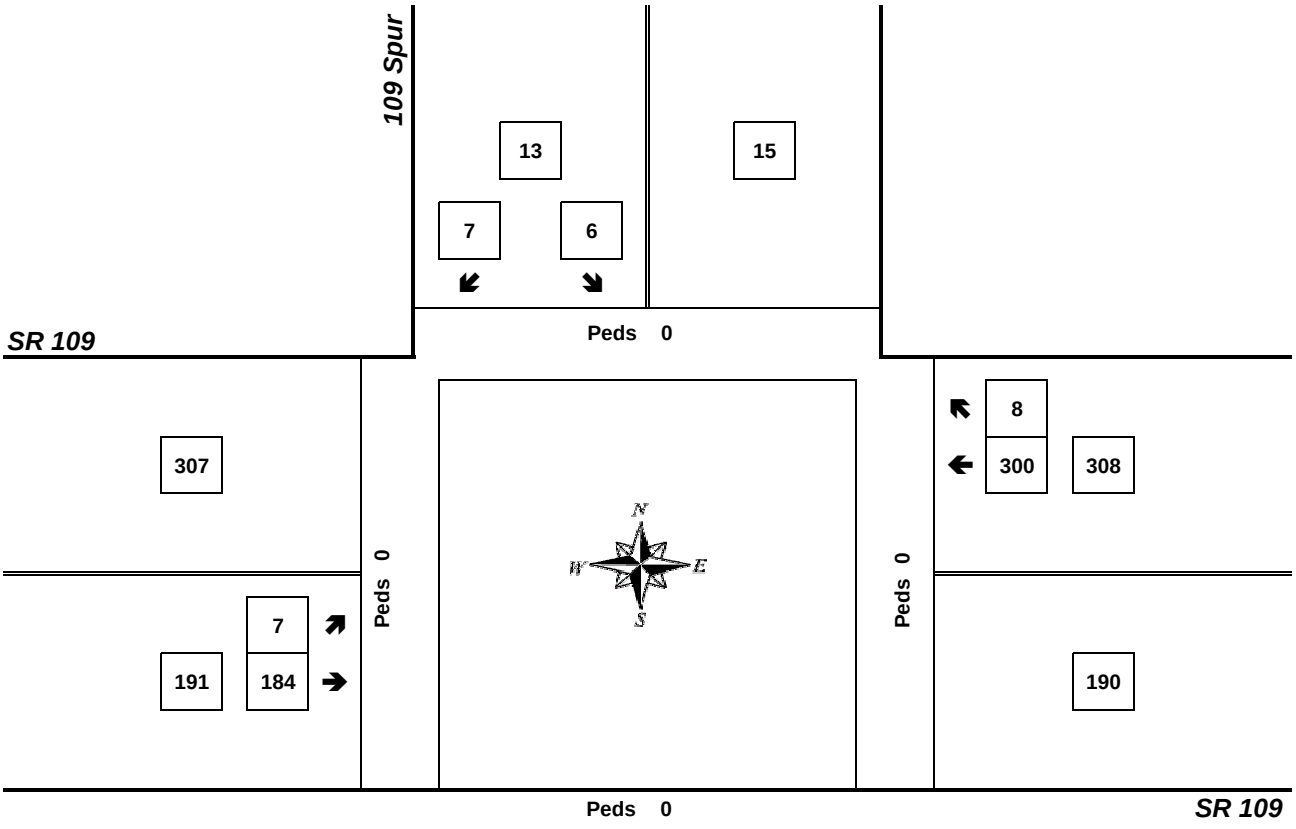
Interval Start Time	Northbound 109 Spur				Southbound 109 Spur				Eastbound SR 109				Westbound SR 109				Interval Total	Pedestrians Crosswalk			
					L		R	HV	L	T		HV		T	R	HV		North	South	East	West
7:00 AM					5		3	5	4	211		8		100	7	14	330	0	0	0	0
7:15 AM					6		4	4	6	219		6		104	4	14	343	0	0	0	0
7:30 AM					5		7	4	8	204		5		97	3	12	324	0	0	0	0
7:45 AM					3		9	1	7	169		4		107	2	9	297	0	0	0	0
8:00 AM					2		10	2	7	161		7		109	2	9	291	0	0	0	0

Peak Hour Summary

Mark Skaggs
(206) 251-0300

109 Spur & SR 109

4:15 PM to 5:15 PM
Thursday, March 07, 2013

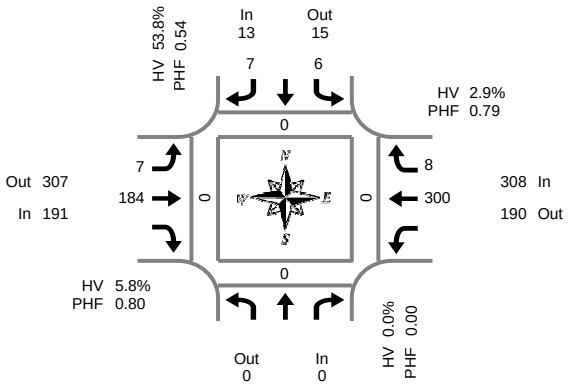


Approach	PHF	HV%	Volume
EB	0.80	5.8%	191
WB	0.79	2.9%	308
NB	0.00	0.0%	0
SB	0.54	53.8%	13
Intersection	0.96	5.3%	512

Count Period: 4:00 PM to 6:00 PM

Total Vehicle Summary

Mark Skaggs
(206) 251-0300



Peak Hour Summary
4:15 PM to 5:15 PM

109 Spur & SR 109

Thursday, March 07, 2013
4:00 PM to 6:00 PM

15-Minute Interval Summary
4:00 PM to 6:00 PM

Interval Start Time	Northbound 109 Spur				Southbound 109 Spur				Eastbound SR 109				Westbound SR 109				Interval Total	Pedestrians Crosswalk			
					L		R	HV	L	T		HV		T	R	HV		North	South	East	West
4:00 PM					4		3	0	2	21		0		68	0	2	98	0	0	0	0
4:15 PM					3		3	0	2	55		3		68	3	2	134	0	0	0	0
4:30 PM					0		1	7	2	30		2		94	4	3	131	0	0	0	0
4:45 PM					0		1	0	0	60		5		72	0	1	133	0	0	0	0
5:00 PM					3		2	0	3	39		1		66	1	3	114	0	0	0	0
5:15 PM					0		0	0	1	43		1		75	2	0	121	0	0	0	0
5:30 PM					1		1	1	4	28		4		68	4	1	106	0	0	0	0
5:45 PM					4		3	0	1	32		1		78	2	1	120	0	0	0	0
Total Survey					15		14	8	15	308		17		589	16	13	957	0	0	0	0

Peak Hour Summary
4:15 PM to 5:15 PM

By Approach	Northbound 109 Spur				Southbound 109 Spur				Eastbound SR 109				Westbound SR 109				Total	Pedestrians Crosswalk			
	In	Out	Total		In	Out	Total	HV	In	Out	Total	HV	In	Out	Total	HV		North	South	East	West
Volume	0	0	0		13	15	28	7	191	307	498	11	308	190	498	9	512	0	0	0	0
%HV	0.0%				53.8%				5.8%				2.9%				5.3%				
PHF	0.00				0.54				0.80				0.79				0.96				

By Movement	Northbound 109 Spur				Southbound 109 Spur				Eastbound SR 109				Westbound SR 109				Total
				Total	L		R	Total	L	T		Total		T	R	Total	
Volume				0	6		7	13	7	184		191		300	8	308	512
PHF				0.00	0.50		0.58	0.54	0.58	0.77		0.80		0.80	0.50	0.79	0.96

Rolling Hour Summary
4:00 PM to 6:00 PM

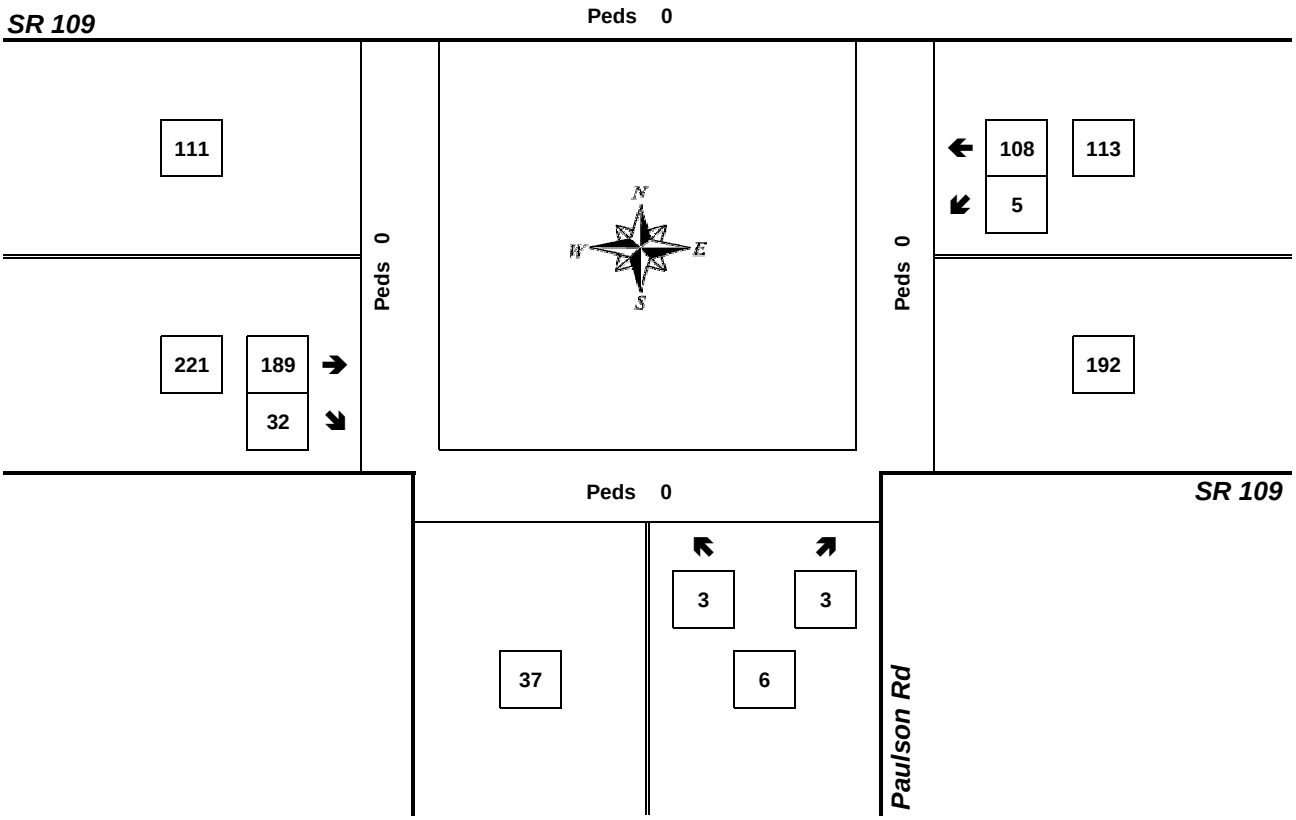
Interval Start Time	Northbound 109 Spur				Southbound 109 Spur				Eastbound SR 109				Westbound SR 109				Interval Total	Pedestrians Crosswalk			
					L		R	HV	L	T		HV		T	R	HV		North	South	East	West
4:00 PM					7		8	7	6	166		10		302	7	8	496	0	0	0	0
4:15 PM					6		7	7	7	184		11		300	8	9	512	0	0	0	0
4:30 PM					3		4	7	6	172		9		307	7	7	499	0	0	0	0
4:45 PM					4		4	1	8	170		11		281	7	5	474	0	0	0	0
5:00 PM					8		6	1	9	142		7		287	9	5	461	0	0	0	0

Peak Hour Summary

Mark Skaggs
(206) 251-0300

Paulson Rd & SR 109

7:15 AM to 8:15 AM
Thursday, March 07, 2013

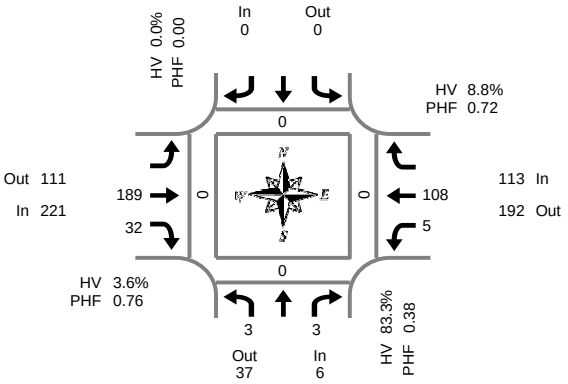


Approach	PHF	HV%	Volume
EB	0.76	3.6%	221
WB	0.72	8.8%	113
NB	0.38	83.3%	6
SB	0.00	0.0%	0
Intersection	0.83	6.8%	340

Count Period: 7:00 AM to 9:00 AM

Total Vehicle Summary

Mark Skaggs
(206) 251-0300



Peak Hour Summary
7:15 AM to 8:15 AM

Paulson Rd & SR 109

Thursday, March 07, 2013
7:00 AM to 9:00 AM

15-Minute Interval Summary
7:00 AM to 9:00 AM

Interval Start Time	Northbound Paulson Rd				Southbound Paulson Rd				Eastbound SR 109				Westbound SR 109				Interval Total	Pedestrians Crosswalk			
	L		R	HV						T	R	HV	L	T		HV		North	South	East	West
7:00 AM	1		0	1						25	1	4	2	15		4	44	0	0	0	0
7:15 AM	0		0	2						48	7	2	1	38		0	94	0	0	0	0
7:30 AM	1		0	1						68	5	5	2	27		4	103	0	0	0	0
7:45 AM	1		3	0						43	15	1	1	24		4	87	0	0	0	0
8:00 AM	1		0	2						30	5	0	1	19		2	56	0	0	0	0
8:15 AM	1		2	0						36	4	1	3	26		0	72	0	0	0	0
8:30 AM	1		2	0						36	8	2	5	34		2	86	0	0	0	0
8:45 AM	3		2	2						36	4	5	0	24		3	69	0	0	1	0
Total Survey	9		9	8						322	49	20	15	207		19	611	0	0	1	0

Peak Hour Summary
7:15 AM to 8:15 AM

By Approach	Northbound Paulson Rd				Southbound Paulson Rd				Eastbound SR 109				Westbound SR 109				Total	Pedestrians Crosswalk			
	In	Out	Total	HV	In	Out	Total		In	Out	Total	HV	In	Out	Total	HV		North	South	East	West
Volume	6	37	43	5	0	0	0		221	111	332	8	113	192	305	10	340	0	0	0	0
%HV	83.3%				0.0%				3.6%				8.8%				6.8%				
PHF	0.38				0.00				0.76				0.72				0.83				

By Movement	Northbound Paulson Rd				Southbound Paulson Rd				Eastbound SR 109				Westbound SR 109				Total
	L		R	Total				Total		T	R	Total	L	T		Total	
Volume	3		3	6				0		189	32	221	5	108		113	340
PHF	0.75		0.25	0.38				0.00		0.69	0.53	0.76	0.63	0.71		0.72	0.83

Rolling Hour Summary
7:00 AM to 9:00 AM

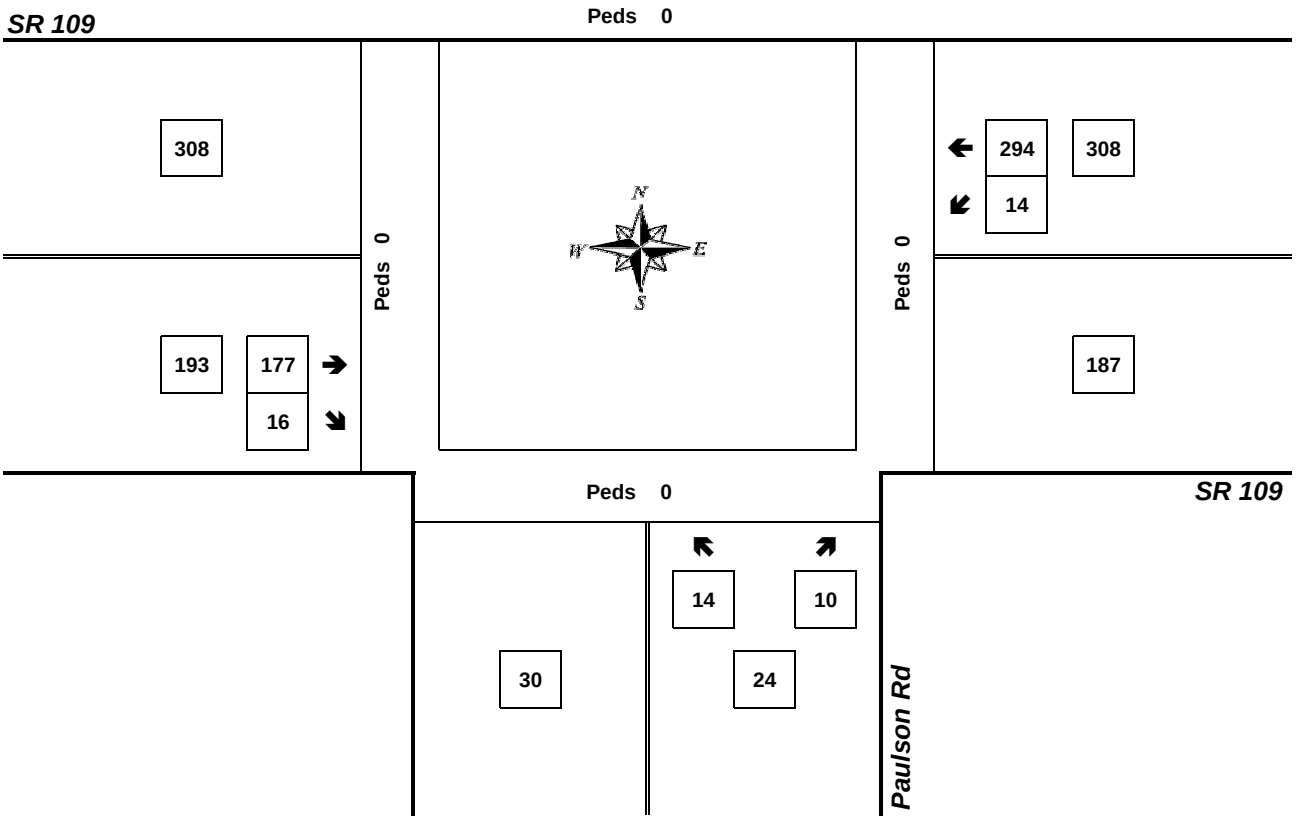
Interval Start Time	Northbound Paulson Rd				Southbound Paulson Rd				Eastbound SR 109				Westbound SR 109				Interval Total	Pedestrians Crosswalk			
	L		R	HV						T	R	HV	L	T		HV		North	South	East	West
7:00 AM	3		3	4						184	28	12	6	104		12	328	0	0	0	0
7:15 AM	3		3	5						189	32	8	5	108		10	340	0	0	0	0
7:30 AM	4		5	3						177	29	7	7	96		10	318	0	0	0	0
7:45 AM	4		7	2						145	32	4	10	103		8	301	0	0	0	0
8:00 AM	6		6	4						138	21	8	9	103		7	283	0	0	1	0

Peak Hour Summary

Mark Skaggs
(206) 251-0300

Paulson Rd & SR 109

4:15 PM to 5:15 PM
Thursday, March 07, 2013

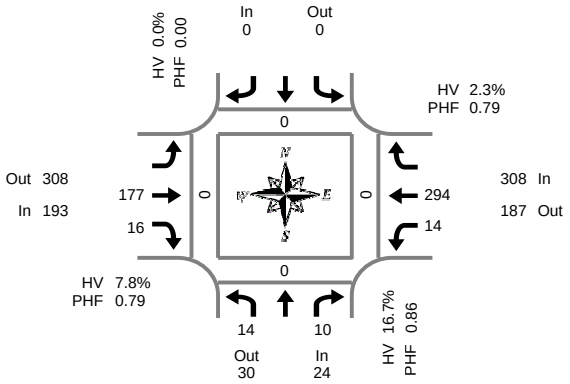


Approach	PHF	HV%	Volume
EB	0.79	7.8%	193
WB	0.79	2.3%	308
NB	0.86	16.7%	24
SB	0.00	0.0%	0
Intersection	0.94	5.0%	525

Count Period: 4:00 PM to 6:00 PM

Total Vehicle Summary

Mark Skaggs
(206) 251-0300



Peak Hour Summary
4:15 PM to 5:15 PM

Paulson Rd & SR 109

Thursday, March 07, 2013
4:00 PM to 6:00 PM

15-Minute Interval Summary
4:00 PM to 6:00 PM

Interval Start Time	Northbound Paulson Rd				Southbound Paulson Rd				Eastbound SR 109				Westbound SR 109				Interval Total	Pedestrians Crosswalk			
	L		R	HV						T	R	HV	L	T		HV		North	South	East	West
4:00 PM	2		1	2						35	3	2	2	65		0	108	0	0	0	0
4:15 PM	3		4	0						51	6	3	2	68		2	134	0	0	0	0
4:30 PM	4		1	1						26	1	4	3	95		2	130	0	0	0	0
4:45 PM	2		3	1						58	3	7	3	70		1	139	0	0	0	0
5:00 PM	5		2	2						42	6	1	6	61		2	122	0	0	0	0
5:15 PM	3		1	0						38	3	1	2	74		0	121	0	0	0	0
5:30 PM	5		4	0						31	3	3	4	66		2	113	0	0	0	0
5:45 PM	3		1	0						33	3	1	0	76		1	116	0	0	0	0
Total Survey	27		17	6						314	28	22	22	575		10	983	0	0	0	0

Peak Hour Summary
4:15 PM to 5:15 PM

By Approach	Northbound Paulson Rd				Southbound Paulson Rd				Eastbound SR 109				Westbound SR 109				Total	Pedestrians Crosswalk			
	In	Out	Total	HV	In	Out	Total		In	Out	Total	HV	In	Out	Total	HV		North	South	East	West
Volume	24	30	54	4	0	0	0		193	308	501	15	308	187	495	7	525	0	0	0	0
%HV	16.7%				0.0%				7.8%				2.3%				5.0%				
PHF	0.86				0.00				0.79				0.79				0.94				

By Movement	Northbound Paulson Rd				Southbound Paulson Rd				Eastbound SR 109				Westbound SR 109				Total
	L		R	Total				Total		T	R	Total	L	T		Total	
Volume	14		10	24				0		177	16	193	14	294		308	525
PHF	0.70		0.63	0.86				0.00		0.76	0.67	0.79	0.58	0.77		0.79	0.94

Rolling Hour Summary
4:00 PM to 6:00 PM

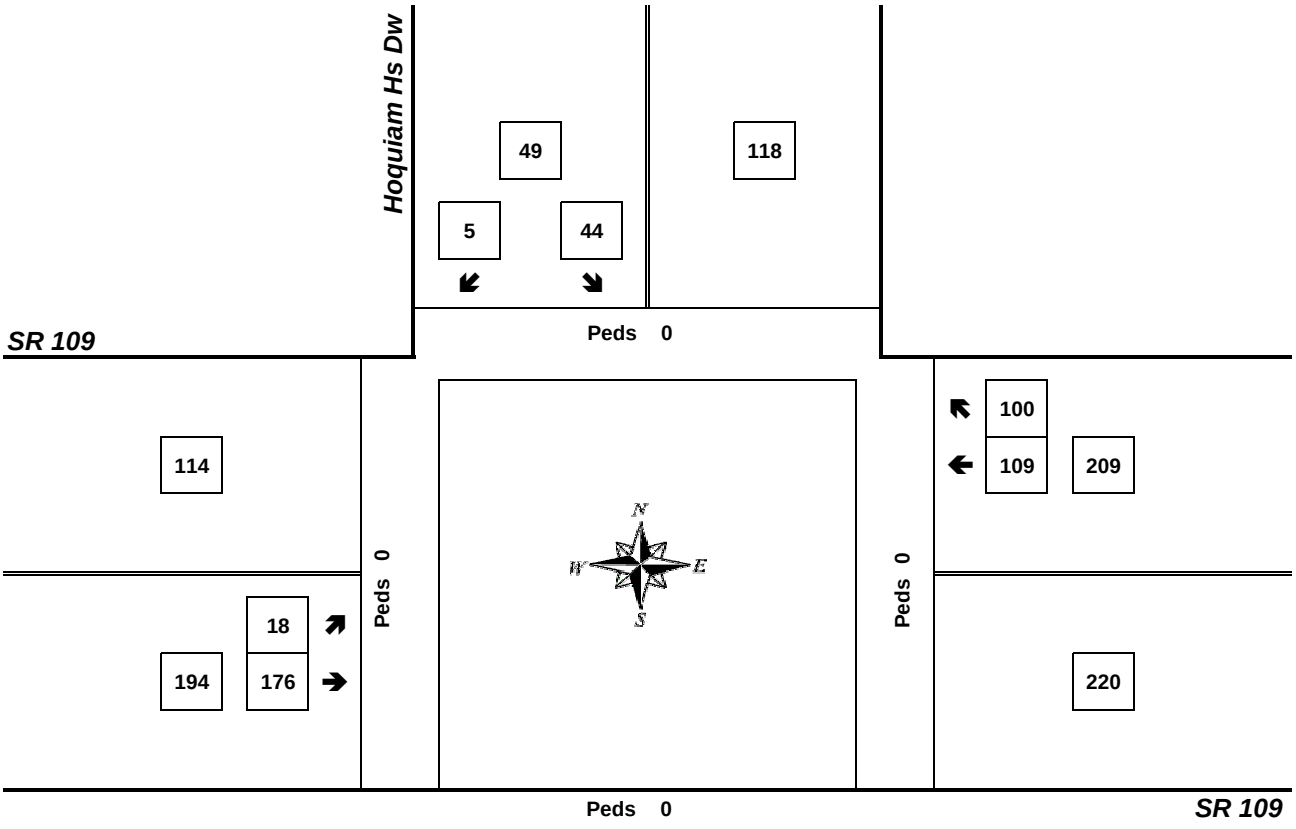
Interval Start Time	Northbound Paulson Rd				Southbound Paulson Rd				Eastbound SR 109				Westbound SR 109				Interval Total	Pedestrians Crosswalk			
	L		R	HV						T	R	HV	L	T		HV		North	South	East	West
4:00 PM	11		9	4						170	13	16	10	298		5	511	0	0	0	0
4:15 PM	14		10	4						177	16	15	14	294		7	525	0	0	0	0
4:30 PM	14		7	4						164	13	13	14	300		5	512	0	0	0	0
4:45 PM	15		10	3						169	15	12	15	271		5	495	0	0	0	0
5:00 PM	16		8	2						144	15	6	12	277		5	472	0	0	0	0

Peak Hour Summary

Mark Skaggs
(206) 251-0300

Hoquiam Hs Dw & SR 109

7:15 AM to 8:15 AM
Thursday, March 07, 2013

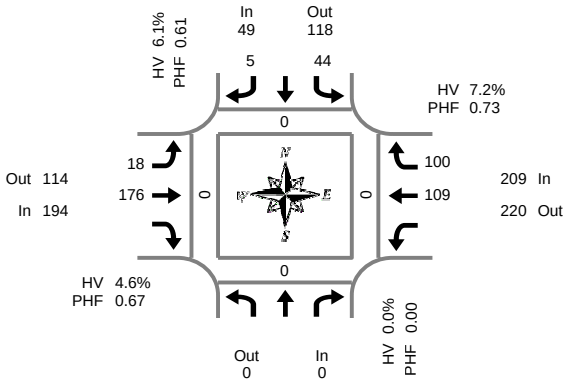


Approach	PHF	HV%	Volume
EB	0.67	4.6%	194
WB	0.73	7.2%	209
NB	0.00	0.0%	0
SB	0.61	6.1%	49
Intersection	0.74	6.0%	452

Count Period: 7:00 AM to 9:00 AM

Total Vehicle Summary

Mark Skaggs
(206) 251-0300



Peak Hour Summary
7:15 AM to 8:15 AM

Hoquiam Hs Dw & SR 109

Thursday, March 07, 2013
7:00 AM to 9:00 AM

15-Minute Interval Summary
7:00 AM to 9:00 AM

Interval Start Time	Northbound Hoquiam Hs Dw				Southbound Hoquiam Hs Dw				Eastbound SR 109				Westbound SR 109				Interval Total	Pedestrians Crosswalk			
					L		R	HV	L	T		HV		T	R	HV		North	South	East	West
7:00 AM					2		1	1	0	25		3		19	5	4	52	0	0	0	0
7:15 AM					4		1	2	2	43		2		36	9	2	95	0	0	0	0
7:30 AM					14		3	0	9	63		5		29	34	4	152	0	0	0	0
7:45 AM					19		1	1	5	41		2		23	49	7	138	0	0	0	0
8:00 AM					7		0	0	2	29		0		21	8	2	67	0	0	0	0
8:15 AM					0		0	0	0	39		1		32	0	0	71	0	0	0	0
8:30 AM					0		0	0	0	40		1		41	0	2	81	0	0	0	0
8:45 AM					2		0	0	1	40		5		26	1	3	70	2	0	0	0
Total Survey					48		6	4	19	320		19		227	106	24	726	2	0	0	0

Peak Hour Summary
7:15 AM to 8:15 AM

By Approach	Northbound Hoquiam Hs Dw				Southbound Hoquiam Hs Dw				Eastbound SR 109				Westbound SR 109				Total	Pedestrians Crosswalk			
	In	Out	Total		In	Out	Total	HV	In	Out	Total	HV	In	Out	Total	HV		North	South	East	West
Volume	0	0	0		49	118	167	3	194	114	308	9	209	220	429	15	452	0	0	0	0
%HV	0.0%				6.1%				4.6%				7.2%				6.0%				
PHF	0.00				0.61				0.67				0.73				0.74				

By Movement	Northbound Hoquiam Hs Dw				Southbound Hoquiam Hs Dw				Eastbound SR 109				Westbound SR 109				Total
				Total	L		R	Total	L	T		Total		T	R	Total	
Volume				0	44		5	49	18	176		194		109	100	209	452
PHF				0.00	0.58		0.42	0.61	0.50	0.70		0.67		0.76	0.51	0.73	0.74

Rolling Hour Summary
7:00 AM to 9:00 AM

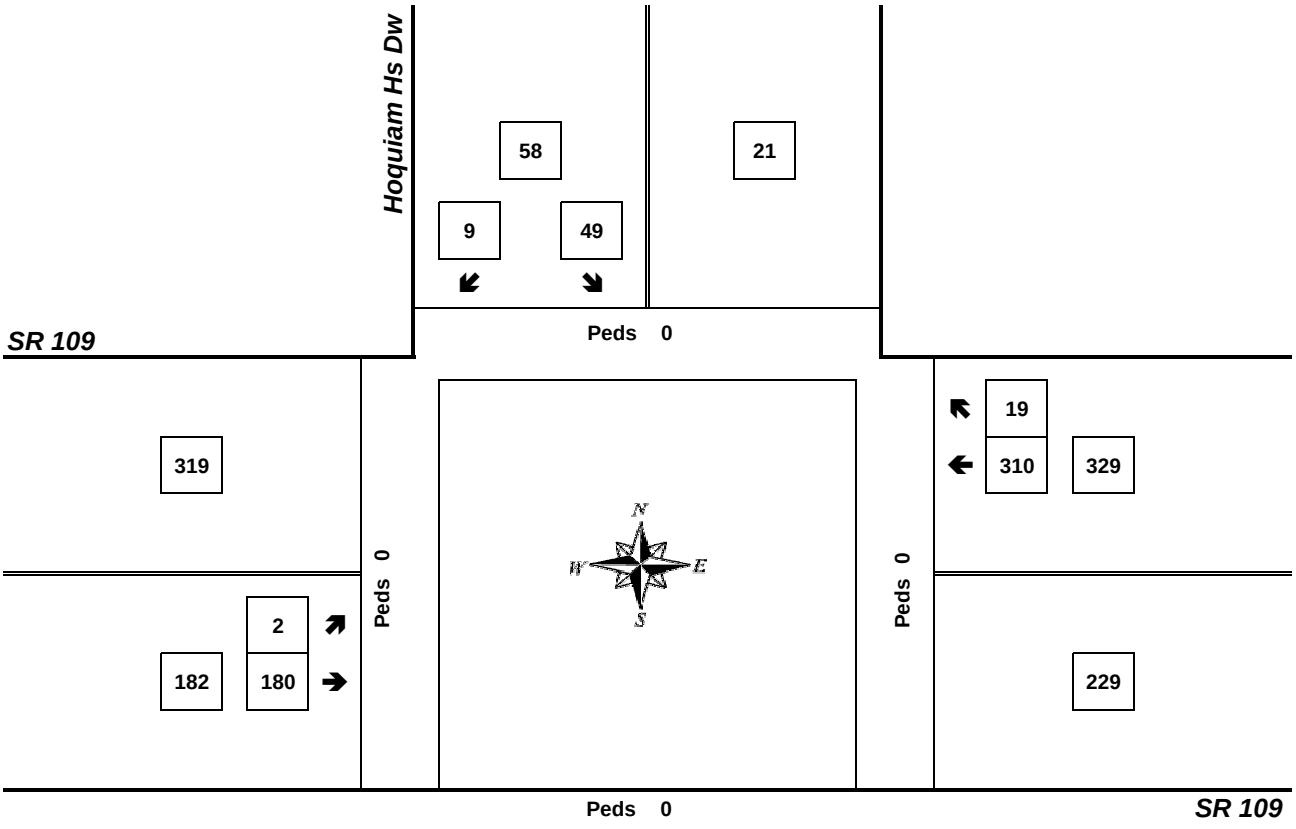
Interval Start Time	Northbound Hoquiam Hs Dw				Southbound Hoquiam Hs Dw				Eastbound SR 109				Westbound SR 109				Interval Total	Pedestrians Crosswalk			
					L		R	HV	L	T		HV		T	R	HV		North	South	East	West
7:00 AM					39		6	4	16	172		12		107	97	17	437	0	0	0	0
7:15 AM					44		5	3	18	176		9		109	100	15	452	0	0	0	0
7:30 AM					40		4	1	16	172		8		105	91	13	428	0	0	0	0
7:45 AM					26		1	1	7	149		4		117	57	11	357	0	0	0	0
8:00 AM					9		0	0	3	148		7		120	9	7	289	2	0	0	0

Peak Hour Summary

Mark Skaggs
(206) 251-0300

Hoquiam Hs Dw & SR 109

4:30 PM to 5:30 PM
Thursday, March 07, 2013

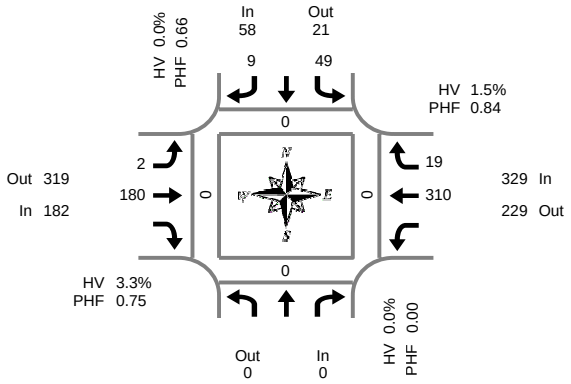


Approach	PHF	HV%	Volume
EB	0.75	3.3%	182
WB	0.84	1.5%	329
NB	0.00	0.0%	0
SB	0.66	0.0%	58
Intersection	0.93	1.9%	569

Count Period: 4:00 PM to 6:00 PM

Total Vehicle Summary

All Traffic Data Services Inc.
Mark Skaggs
(206) 251-0300



Peak Hour Summary
4:30 PM to 5:30 PM

Hoquiam Hs Dw & SR 109

Thursday, March 07, 2013
4:00 PM to 6:00 PM

15-Minute Interval Summary
4:00 PM to 6:00 PM

Interval Start Time	Northbound Hoquiam Hs Dw				Southbound Hoquiam Hs Dw				Eastbound SR 109				Westbound SR 109				Interval Total	Pedestrians Crosswalk			
					L		R	HV	L	T		HV		T	R	HV		North	South	East	West
4:00 PM					4		0	0	2	32		2		67	3	0	108	0	0	0	0
4:15 PM					1		0	0	2	50		2		74	1	2	128	0	0	0	0
4:30 PM					17		5	0	0	33		0		95	3	2	153	0	0	0	0
4:45 PM					8		1	0	1	60		5		68	6	1	144	0	0	0	0
5:00 PM					15		1	0	1	42		0		70	6	2	135	0	0	0	0
5:15 PM					9		2	0	0	45		1		77	4	0	137	0	0	0	0
5:30 PM					0		0	1	0	34		2		75	0	4	109	0	0	0	0
5:45 PM					1		0	0	0	36		1		77	1	0	115	0	0	0	0
Total Survey					55		9	1	6	332		13		603	24	11	1,029	0	0	0	0

Peak Hour Summary
4:30 PM to 5:30 PM

By Approach	Northbound Hoquiam Hs Dw				Southbound Hoquiam Hs Dw				Eastbound SR 109				Westbound SR 109				Total	Pedestrians Crosswalk			
	In	Out	Total		In	Out	Total	HV	In	Out	Total	HV	In	Out	Total	HV		North	South	East	West
Volume	0	0	0		58	21	79	0	182	319	501	6	329	229	558	5	569	0	0	0	0
%HV	0.0%				0.0%				3.3%				1.5%				1.9%				
PHF	0.00				0.66				0.75				0.84				0.93				

By Movement	Northbound Hoquiam Hs Dw				Southbound Hoquiam Hs Dw				Eastbound SR 109				Westbound SR 109				Total
				Total	L		R	Total	L	T		Total		T	R	Total	
Volume				0	49		9	58	2	180		182		310	19	329	569
PHF				0.00	0.72		0.45	0.66	0.50	0.75		0.75		0.82	0.79	0.84	0.93

Rolling Hour Summary
4:00 PM to 6:00 PM

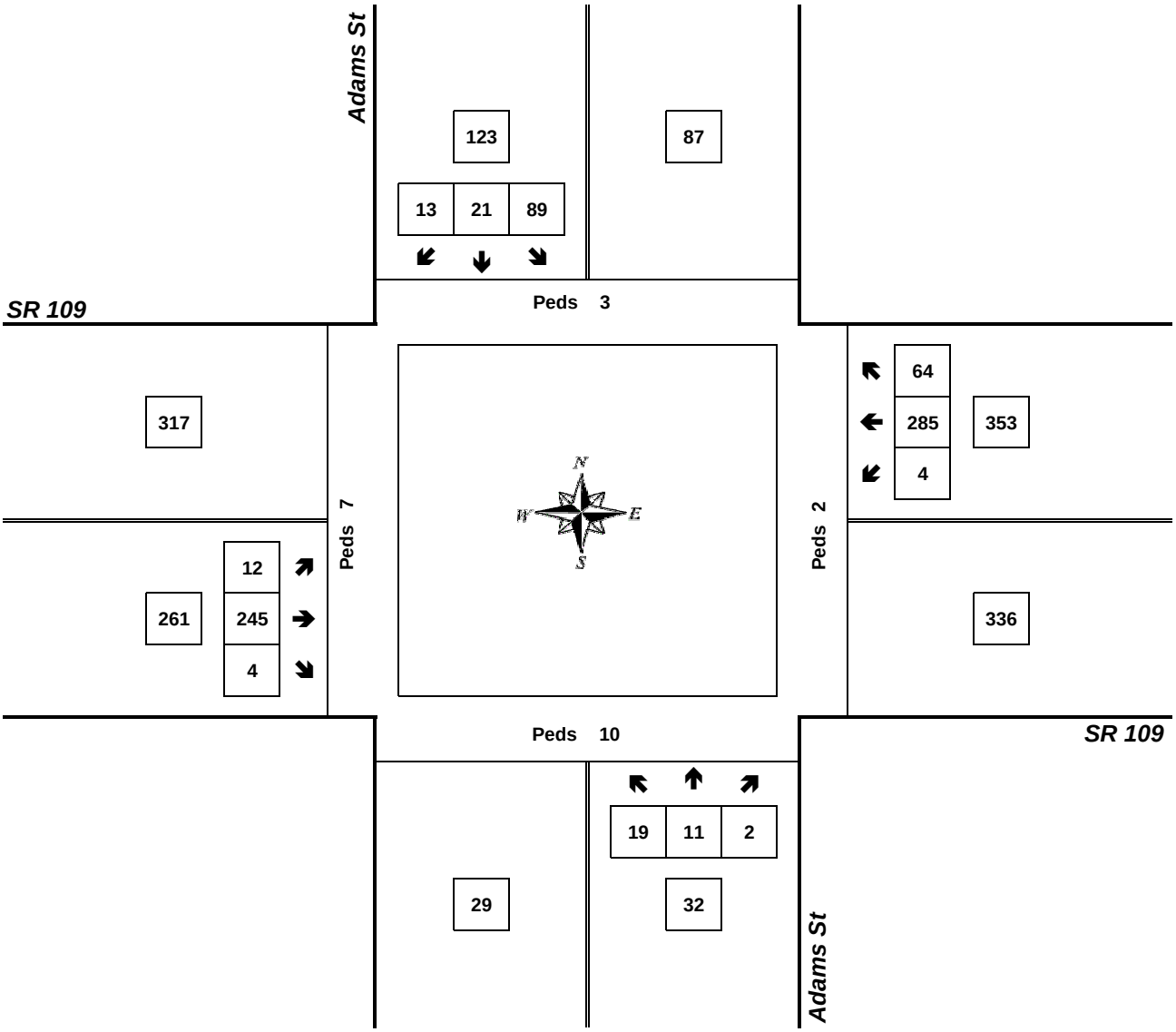
Interval Start Time	Northbound Hoquiam Hs Dw				Southbound Hoquiam Hs Dw				Eastbound SR 109				Westbound SR 109				Interval Total	Pedestrians Crosswalk			
					L		R	HV	L	T		HV		T	R	HV		North	South	East	West
4:00 PM					30		6	0	5	175		9		304	13	5	533	0	0	0	0
4:15 PM					41		7	0	4	185		7		307	16	7	560	0	0	0	0
4:30 PM					49		9	0	2	180		6		310	19	5	569	0	0	0	0
4:45 PM					32		4	1	2	181		8		290	16	7	525	0	0	0	0
5:00 PM					25		3	1	1	157		4		299	11	6	496	0	0	0	0

Peak Hour Summary

All Traffic Data Services Inc.
Mark Skaggs
(206) 251-0300

Adams St & SR 109

7:15 AM to 8:15 AM
Thursday, March 07, 2013

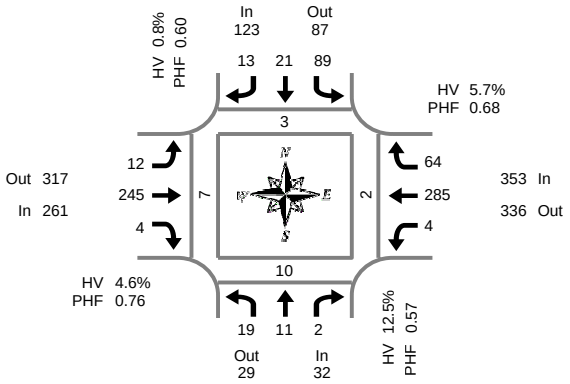


Approach	PHF	HV%	Volume
EB	0.76	4.6%	261
WB	0.68	5.7%	353
NB	0.57	12.5%	32
SB	0.60	0.8%	123
Intersection	0.72	4.8%	769

Count Period: 7:00 AM to 9:00 AM

Total Vehicle Summary

Mark Skaggs
(206) 251-0300



Peak Hour Summary
7:15 AM to 8:15 AM

Adams St & SR 109

Thursday, March 07, 2013
7:00 AM to 9:00 AM

15-Minute Interval Summary
7:00 AM to 9:00 AM

Interval Start Time	Northbound Adams St				Southbound Adams St				Eastbound SR 109				Westbound SR 109				Interval Total	Pedestrians Crosswalk			
	L	T	R	HV	L	T	R	HV	L	T	R	HV	L	T	R	HV		North	South	East	West
7:00 AM	1	0	0	0	7	1	1	0	1	37	0	4	10	31	5	3	94	5	0	0	0
7:15 AM	2	1	0	0	5	3	1	1	2	45	1	3	0	65	7	4	132	2	3	2	2
7:30 AM	7	6	1	0	22	7	6	0	1	85	0	3	1	82	16	5	234	1	2	0	1
7:45 AM	9	2	1	0	42	6	3	0	4	69	1	6	3	105	22	3	267	0	5	0	4
8:00 AM	1	2	0	4	20	5	3	0	5	46	2	0	0	33	19	8	136	0	0	0	0
8:15 AM	1	6	2	4	17	2	2	0	1	34	0	0	2	33	22	3	122	0	0	0	0
8:30 AM	1	0	2	3	17	3	2	1	0	45	0	2	3	43	9	5	125	1	0	0	0
8:45 AM	1	0	0	0	4	1	1	0	1	51	1	3	1	31	6	3	98	0	0	0	0
Total Survey	23	17	6	11	134	28	19	2	15	412	5	21	20	423	106	34	1,208	9	10	2	7

Peak Hour Summary
7:15 AM to 8:15 AM

By Approach	Northbound Adams St				Southbound Adams St				Eastbound SR 109				Westbound SR 109				Total	Pedestrians Crosswalk			
	In	Out	Total	HV	In	Out	Total	HV	In	Out	Total	HV	In	Out	Total	HV		North	South	East	West
Volume	32	29	61	4	123	87	210	1	261	317	578	12	353	336	689	20	769	3	10	2	7
%HV	12.5%				0.8%				4.6%				5.7%				4.8%				
PHF	0.57				0.60				0.76				0.68				0.72				

By Movement	Northbound Adams St				Southbound Adams St				Eastbound SR 109				Westbound SR 109				Total
	L	T	R	Total	L	T	R	Total	L	T	R	Total	L	T	R	Total	
Volume	19	11	2	32	89	21	13	123	12	245	4	261	4	285	64	353	769
PHF	0.53	0.46	0.50	0.57	0.53	0.75	0.54	0.60	0.60	0.72	0.50	0.76	0.33	0.68	0.73	0.68	0.72

Rolling Hour Summary
7:00 AM to 9:00 AM

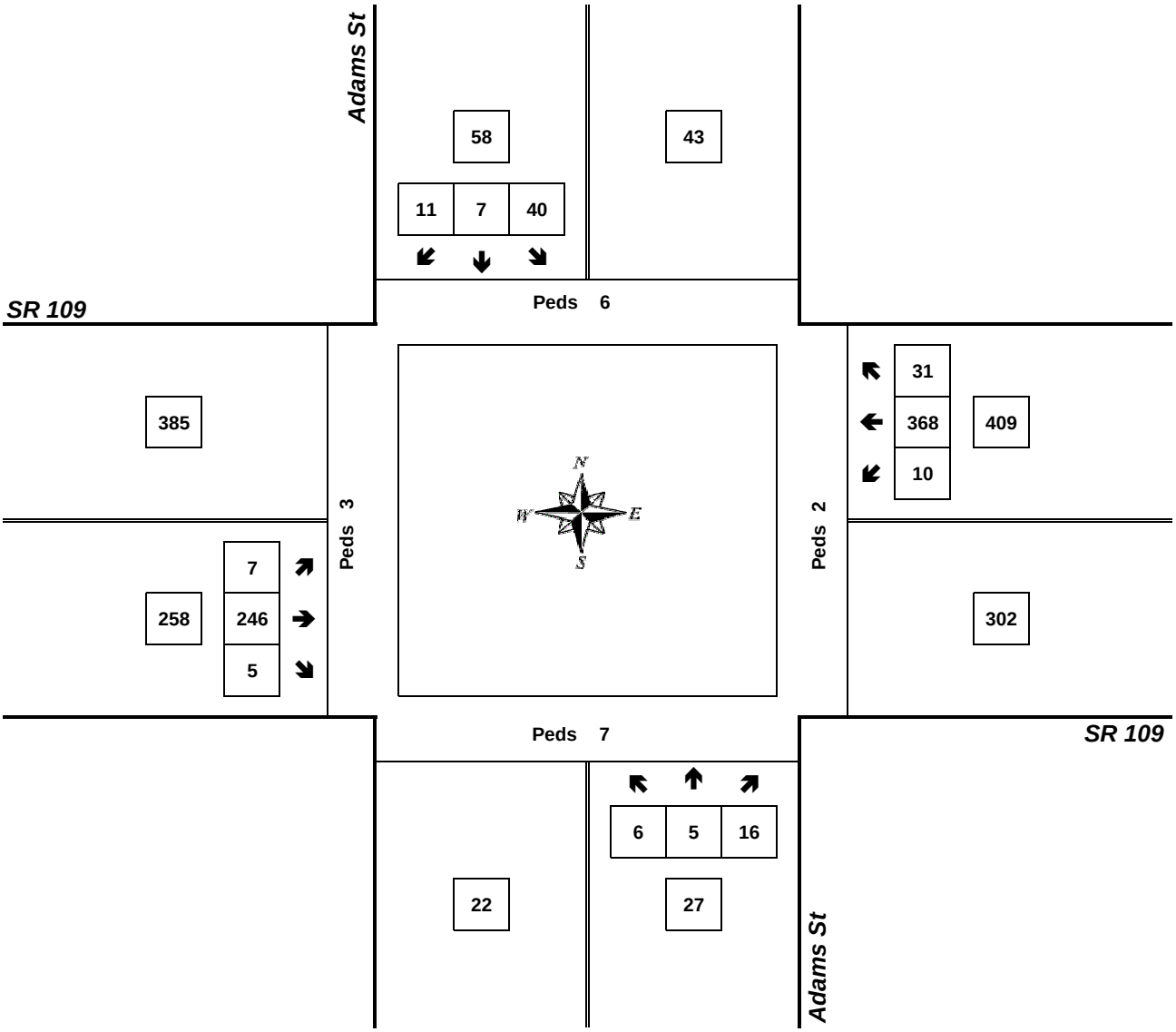
Interval Start Time	Northbound Adams St				Southbound Adams St				Eastbound SR 109				Westbound SR 109				Interval Total	Pedestrians Crosswalk			
	L	T	R	HV	L	T	R	HV	L	T	R	HV	L	T	R	HV		North	South	East	West
7:00 AM	19	9	2	0	76	17	11	1	8	236	2	16	14	283	50	15	727	8	10	2	7
7:15 AM	19	11	2	4	89	21	13	1	12	245	4	12	4	285	64	20	769	3	10	2	7
7:30 AM	18	16	4	8	101	20	14	0	11	234	3	9	6	253	79	19	759	1	7	0	5
7:45 AM	12	10	5	11	96	16	10	1	10	194	3	8	8	214	72	19	650	1	5	0	4
8:00 AM	4	8	4	11	58	11	8	1	7	176	3	5	6	140	56	19	481	1	0	0	0

Peak Hour Summary

Mark Skaggs
(206) 251-0300

Adams St & SR 109

4:30 PM to 5:30 PM
Thursday, March 07, 2013

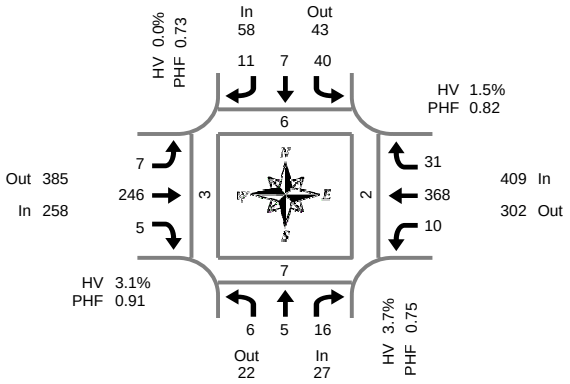


Approach	PHF	HV%	Volume
EB	0.91	3.1%	258
WB	0.82	1.5%	409
NB	0.75	3.7%	27
SB	0.73	0.0%	58
Intersection	0.93	2.0%	752

Count Period: 4:00 PM to 6:00 PM

Total Vehicle Summary

Mark Skaggs
(206) 251-0300



Peak Hour Summary
4:30 PM to 5:30 PM

Adams St & SR 109

Thursday, March 07, 2013
4:00 PM to 6:00 PM

15-Minute Interval Summary
4:00 PM to 6:00 PM

Interval Start Time	Northbound Adams St				Southbound Adams St				Eastbound SR 109				Westbound SR 109				Interval Total	Pedestrians Crosswalk			
	L	T	R	HV	L	T	R	HV	L	T	R	HV	L	T	R	HV		North	South	East	West
4:00 PM	5	0	7	0	8	0	0	1	0	56	1	1	3	81	14	1	175	2	0	0	0
4:15 PM	1	0	6	0	1	1	4	0	1	57	1	2	4	71	6	2	153	1	2	1	0
4:30 PM	1	1	0	1	13	2	5	0	0	55	1	2	4	111	9	3	202	1	0	0	0
4:45 PM	1	2	5	0	8	2	1	0	2	59	3	3	2	88	6	1	179	2	1	0	0
5:00 PM	3	0	6	0	7	1	2	0	2	68	1	2	4	80	7	1	181	1	5	1	2
5:15 PM	1	2	5	0	12	2	3	0	3	64	0	1	0	89	9	1	190	2	1	1	1
5:30 PM	1	1	2	1	6	4	2	0	2	42	0	1	0	76	2	5	138	2	0	0	0
5:45 PM	0	4	3	0	6	0	0	0	0	51	1	3	0	89	9	1	163	0	0	0	0
Total Survey	13	10	34	2	61	12	17	1	10	452	8	15	17	685	62	15	1,381	11	9	3	3

Peak Hour Summary
4:30 PM to 5:30 PM

By Approach	Northbound Adams St				Southbound Adams St				Eastbound SR 109				Westbound SR 109				Total	Pedestrians Crosswalk			
	In	Out	Total	HV	In	Out	Total	HV	In	Out	Total	HV	In	Out	Total	HV		North	South	East	West
Volume	27	22	49	1	58	43	101	0	258	385	643	8	409	302	711	6	752	6	7	2	3
%HV	3.7%				0.0%				3.1%				1.5%				2.0%				
PHF	0.75				0.73				0.91				0.82				0.93				

By Movement	Northbound Adams St				Southbound Adams St				Eastbound SR 109				Westbound SR 109				Total
	L	T	R	Total	L	T	R	Total	L	T	R	Total	L	T	R	Total	
Volume	6	5	16	27	40	7	11	58	7	246	5	258	10	368	31	409	752
PHF	0.50	0.63	0.67	0.75	0.77	0.88	0.55	0.73	0.58	0.90	0.42	0.91	0.63	0.83	0.86	0.82	0.93

Rolling Hour Summary
4:00 PM to 6:00 PM

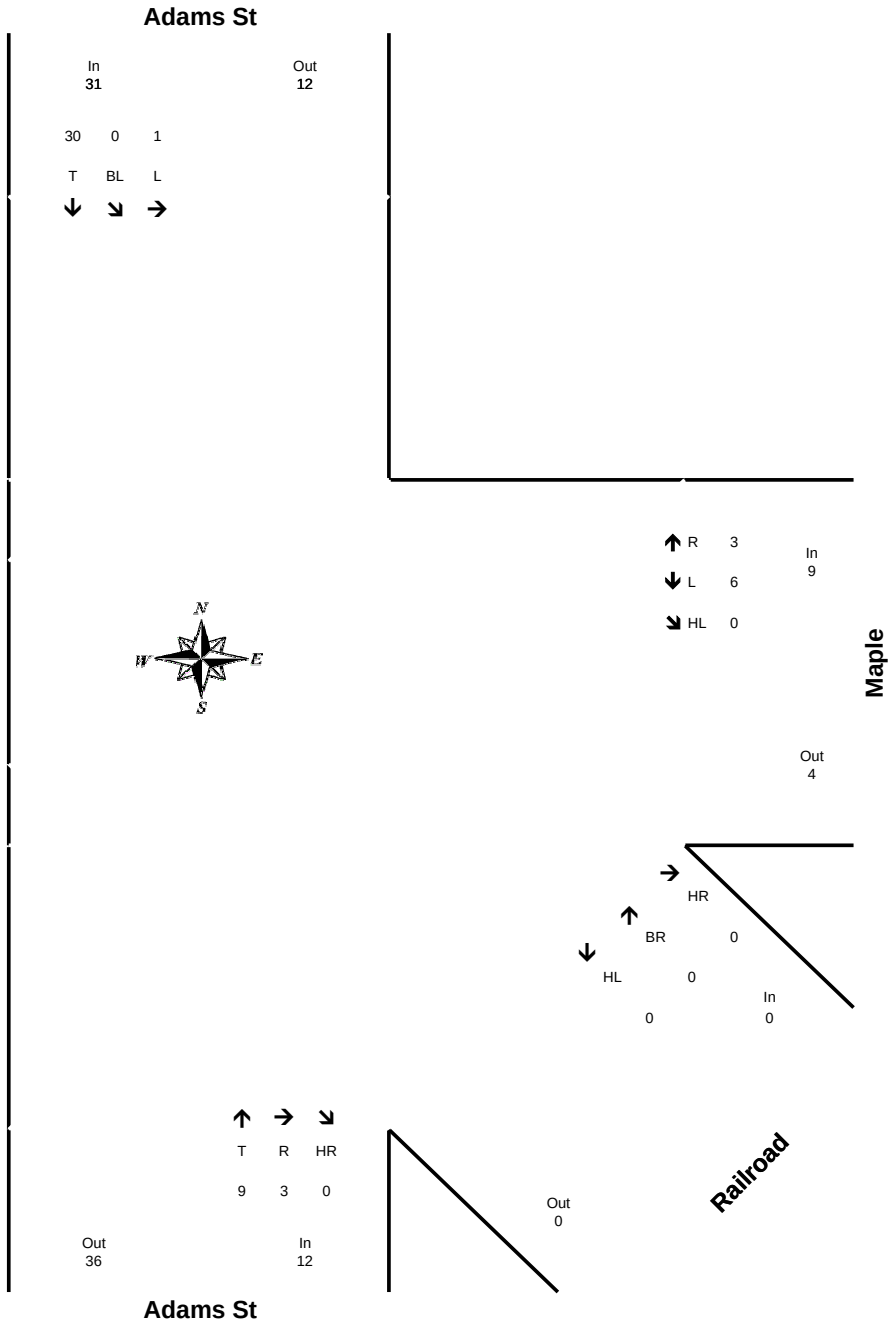
Interval Start Time	Northbound Adams St				Southbound Adams St				Eastbound SR 109				Westbound SR 109				Interval Total	Pedestrians Crosswalk			
	L	T	R	HV	L	T	R	HV	L	T	R	HV	L	T	R	HV		North	South	East	West
4:00 PM	8	3	18	1	30	5	10	1	3	227	6	8	13	351	35	7	709	6	3	1	0
4:15 PM	6	3	17	1	29	6	12	0	5	239	6	9	14	350	28	7	715	5	8	2	2
4:30 PM	6	5	16	1	40	7	11	0	7	246	5	8	10	368	31	6	752	6	7	2	3
4:45 PM	6	5	18	1	33	9	8	0	9	233	4	7	6	333	24	8	688	7	7	2	3
5:00 PM	5	7	16	1	31	7	7	0	7	225	2	7	4	334	27	8	672	5	6	2	3

Peak Hour Summary

Mark Skaggs
(206) 251-0300

Adams St & Maple & Railroad

7:15 AM to 8:15 AM
Thursday, March 07, 2013



	Intersection	NB	SB	WB	NWB
Volume	52	12	31	9	0
HV%	0.0%	0.0%	0.0%	0.0%	0.0%
PHF	0.87	0.60	0.65	0.56	0.00

Count Period: 7:00 AM to 9:00 AM

Total Vehicle Summary

Mark Skaggs
(206) 251-0300

Adams St & Maple & Railroad

Thursday, March 07, 2013
7:00 AM to 9:00 AM

15-Minute Interval Summary
7:00 AM to 9:00 AM

Interval Start Time	Northbound Adams St			Southbound Adams St				Westbound Maple				Northwestbound Railroad				Interval Total
	R	HR	HV	L	BL	T	HV	HL	L	R	HV	HL	BR	HR	HV	
07:00	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	3
07:15	2	0	0	1	0	2	0	0	4	0	0	0	0	0	0	11
07:30	0	0	0	0	0	10	0	0	1	2	0	0	0	0	0	14
07:45	0	0	0	0	0	12	0	0	0	1	0	0	0	0	0	15
08:00	1	0	0	0	0	6	0	0	1	0	0	0	0	0	0	12
08:15	0	0	0	0	0	3	0	0	1	0	0	0	0	0	0	8
08:30	1	0	0	0	0	4	0	0	0	0	0	0	0	0	0	6
08:45	0	0	0	0	0	3	0	0	1	0	0	0	0	0	0	5
Total Survey	4	0	0	1	0	43	0	0	8	3	0	0	0	0	0	74

Peak Hour Summary
7:15 AM to 8:15 AM

By Approach	Northbound Adams St		Southbound Adams St		Westbound Maple		Northwestbound Railroad		Total
	Approach	HV	Approach	HV	Approach	HV	Approach	HV	
In	12	0	31	0	9	0	0	0	52
Out	36		12		4		0		
Total	48		43		13		0		
%HV	0.0%		0.0%		0.0%		0.0%		0.0%
PHF	0.60		0.65		0.56		0.00		0.87

By Movement				Southbound Adams St				Westbound Maple				Northwestbound Railroad				Total
	R	HR	Total	L	BL	T	Total	HL	L	R	Total	HL	BR	HR	Total	
Volume	3	0	12	1	0	30	31	0	6	3	9	0	0	0	0	52
PHF	0.38	0.00	0.60	0.25	0.00	0.63	0.65	0.00	0.38	0.38	0.56	0.00	0.00	0.00	0.00	0.87

Rolling Hour Summary
7:00 AM to 9:00 AM

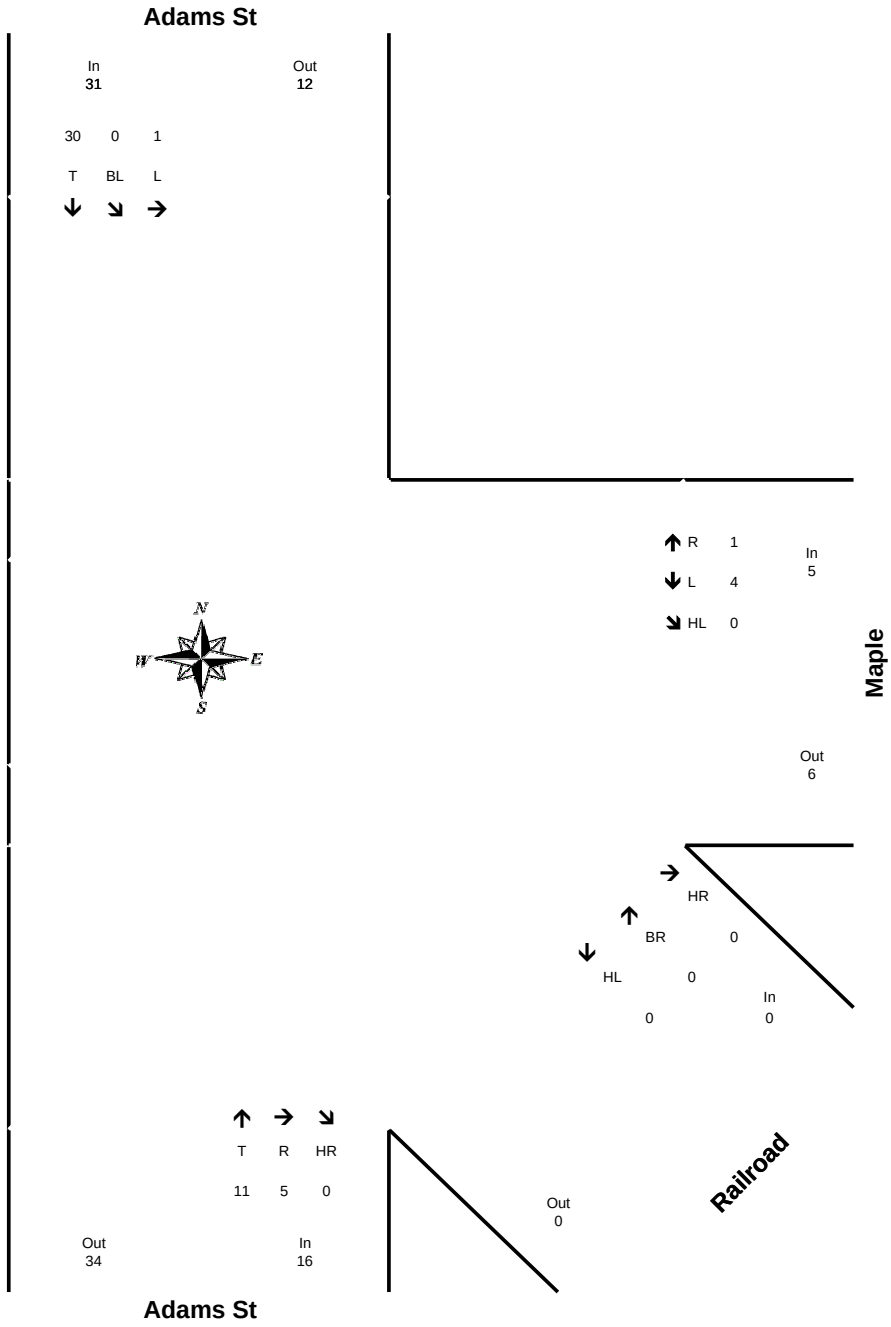
Interval Start Time	Northbound Adams St			Southbound Adams St				Westbound Maple				Northwestbound Railroad				Interval Total
	R	HR	HV	L	BL	T	HV	HL	L	R	HV	HL	BR	HR	HV	
07:00	2	0	0	1	0	27	0	0	5	3	0	0	0	0	0	43
07:15	3	0	0	1	0	30	0	0	6	3	0	0	0	0	0	52
07:30	1	0	0	0	0	31	0	0	3	3	0	0	0	0	0	49
07:45	2	0	0	0	0	25	0	0	2	1	0	0	0	0	0	41
08:00	2	0	0	0	0	16	0	0	3	0	0	0	0	0	0	31

Peak Hour Summary

Mark Skaggs
(206) 251-0300

Adams St & Maple & Railroad

4:15 PM to 5:15 PM
Thursday, March 07, 2013



	Intersection	NB	SB	WB	NWB
Volume	52	16	31	5	0
HV%	3.8%	6.3%	3.2%	0.0%	0.0%
PHF	0.93	0.67	0.86	0.63	0.00

Count Period: 4:00 PM to 6:00 PM

Total Vehicle Summary

Mark Skaggs
(206) 251-0300

Adams St & Maple & Railroad

Thursday, March 07, 2013
4:00 PM to 6:00 PM

15-Minute Interval Summary
4:00 PM to 6:00 PM

Interval Start Time	Northbound Adams St			Southbound Adams St				Westbound Maple				Northwestbound Railroad				Interval Total
	R	HR	HV	L	BL	T	HV	HL	L	R	HV	HL	BR	HR	HV	
16:00	1	0	0	0	0	9	0	0	1	1	0	0	0	0	0	12
16:15	1	0	0	1	0	4	0	0	1	0	0	0	0	0	0	12
16:30	3	0	1	0	0	9	1	0	1	0	0	0	0	0	0	13
16:45	0	0	0	0	0	8	0	0	2	0	0	0	0	0	0	13
17:00	1	0	0	0	0	9	0	0	0	1	0	0	0	0	0	14
17:15	1	0	0	0	0	6	0	0	2	0	0	0	0	0	0	10
17:30	1	0	0	0	0	3	0	0	1	0	0	0	0	0	0	10
17:45	0	0	0	0	0	3	0	1	1	0	0	0	0	0	0	7
Total Survey	8	0	1	1	0	51	1	1	9	2	0	0	0	0	0	91

Peak Hour Summary
4:15 PM to 5:15 PM

By Approach	Northbound Adams St		Southbound Adams St		Westbound Maple		Northwestbound Railroad		Total
	Approach	HV	Approach	HV	Approach	HV	Approach	HV	
In	16	1	31	1	5	0	0	0	52
Out	34		12		6		0		
Total	50		43		11		0		
%HV	6.3%		3.2%		0.0%		0.0%		3.8%
PHF	0.67		0.86		0.63		0.00		0.93

By Movement				Southbound Adams St				Westbound Maple				Northwestbound Railroad				Total
	R	HR	Total	L	BL	T	Total	HL	L	R	Total	HL	BR	HR	Total	
Volume	5	0	16	1	0	30	31	0	4	1	5	0	0	0	0	52
PHF	0.42	0.00	0.67	0.25	0.00	0.83	0.86	0.00	0.50	0.25	0.63	0.00	0.00	0.00	0.00	0.93

Rolling Hour Summary
4:00 PM to 6:00 PM

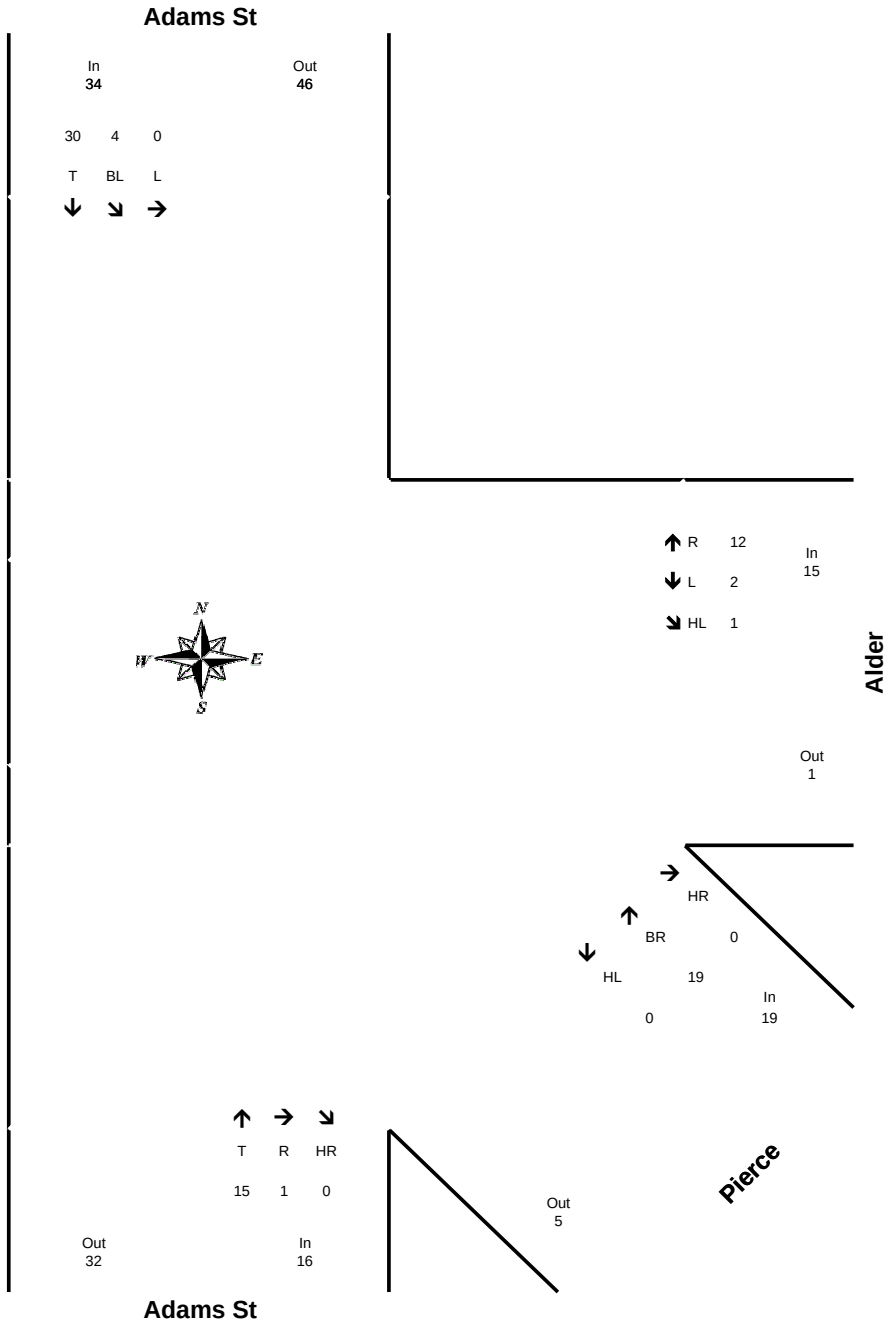
Interval Start Time	Northbound Adams St			Southbound Adams St				Westbound Maple				Northwestbound Railroad				Interval Total
	R	HR	HV	L	BL	T	HV	HL	L	R	HV	HL	BR	HR	HV	
16:00	5	0	1	1	0	30	1	0	5	1	0	0	0	0	0	50
16:15	5	0	1	1	0	30	1	0	4	1	0	0	0	0	0	52
16:30	5	0	1	0	0	32	1	0	5	1	0	0	0	0	0	50
16:45	3	0	0	0	0	26	0	0	5	1	0	0	0	0	0	47
17:00	3	0	0	0	0	21	0	1	4	1	0	0	0	0	0	41

Peak Hour Summary

Mark Skaggs
(206) 251-0300

Adams St & Alder & Pierce

7:30 AM to 8:30 AM
Thursday, March 07, 2013



	Intersection	NB	SB	WB	NWB
Volume	84	16	34	15	19
HV%	0.0%	0.0%	0.0%	0.0%	0.0%
PHF	0.75	0.67	0.71	0.54	0.48

Count Period: 7:00 AM to 9:00 AM

Total Vehicle Summary

Mark Skaggs
(206) 251-0300

Adams St & Alder & Pierce

Thursday, March 07, 2013
7:00 AM to 9:00 AM

15-Minute Interval Summary
7:00 AM to 9:00 AM

Interval Start Time	Northbound Adams St			Southbound Adams St				Westbound Alder				Northwestbound Pierce				Interval Total
	R	HR	HV	L	BL	T	HV	HL	L	R	HV	HL	BR	HR	HV	
07:00	0	0	0	0	0	4	0	0	0	2	0	0	1	0	0	7
07:15	0	0	0	0	3	2	0	0	1	1	0	0	4	0	0	11
07:30	1	0	0	0	2	10	0	0	1	2	0	0	7	0	0	26
07:45	0	0	0	0	1	11	0	0	0	3	0	0	10	0	0	28
08:00	0	0	0	0	1	5	0	0	1	6	0	0	1	0	0	17
08:15	0	0	0	0	0	4	0	1	0	1	0	0	1	0	0	13
08:30	0	0	1	0	1	3	0	0	2	0	0	0	0	0	0	7
08:45	0	0	0	0	1	3	0	0	0	0	0	0	3	0	0	7
Total Survey	1	0	1	0	9	42	0	1	5	15	0	0	27	0	0	116

Peak Hour Summary
7:30 AM to 8:30 AM

By Approach	Northbound Adams St		Southbound Adams St		Westbound Alder		Northwestbound Pierce		Total
	Approach	HV	Approach	HV	Approach	HV	Approach	HV	
In	16	0	34	0	15	0	19	0	84
Out	32		46		1		5		
Total	48		80		16		24		
%HV	0.0%		0.0%		0.0%		0.0%		0.0%
PHF	0.67		0.71		0.54		0.48		0.75

By Movement				Southbound Adams St				Westbound Alder				Northwestbound Pierce				Total
	R	HR	Total	L	BL	T	Total	HL	L	R	Total	HL	BR	HR	Total	
Volume	1	0	16	0	4	30	34	1	2	12	15	0	19	0	19	84
PHF	0.25	0.00	0.67	0.00	0.50	0.68	0.71	0.25	0.50	0.50	0.54	0.00	0.48	0.00	0.48	0.75

Rolling Hour Summary
7:00 AM to 9:00 AM

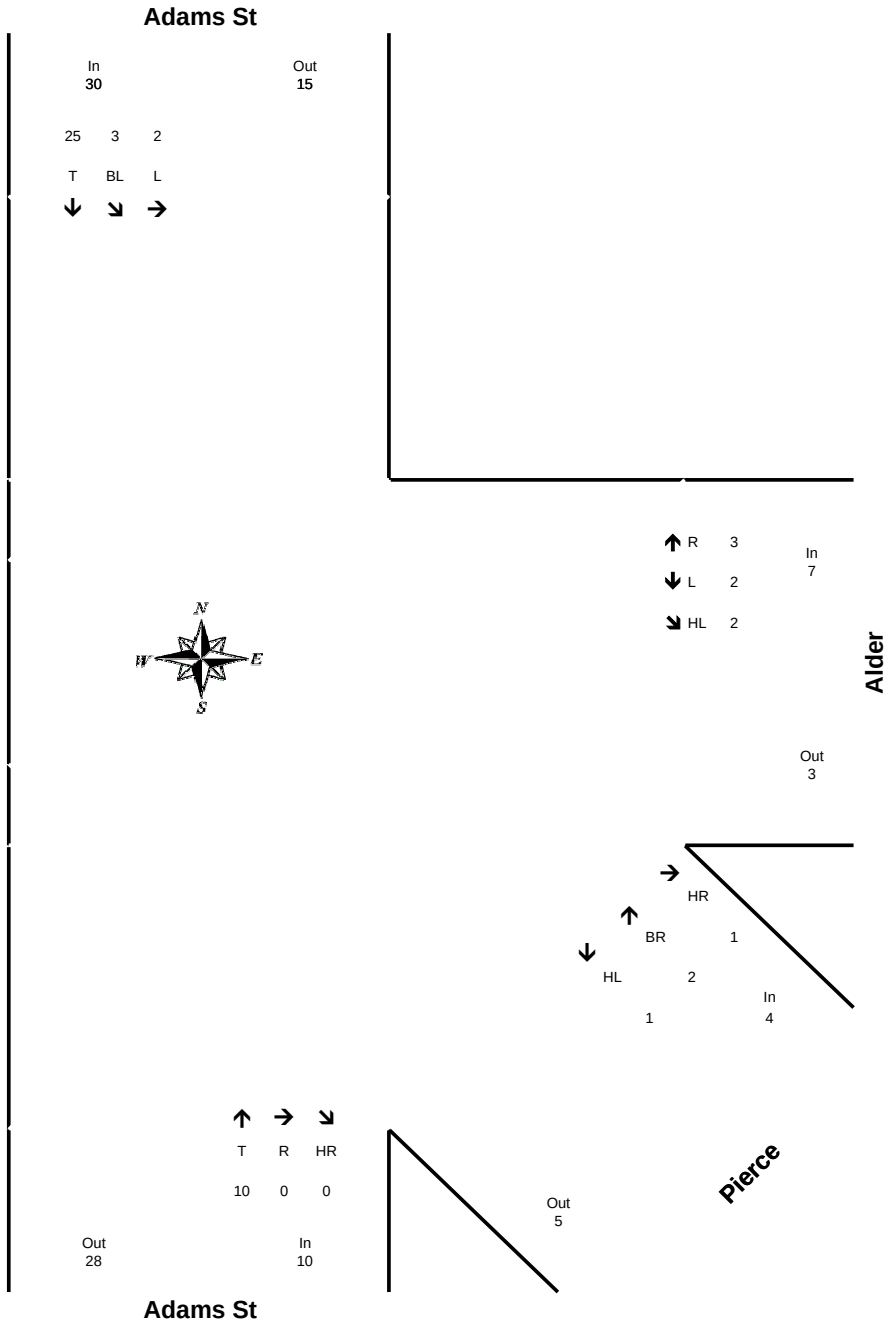
Interval Start Time	Northbound Adams St			Southbound Adams St				Westbound Alder				Northwestbound Pierce				Interval Total
	R	HR	HV	L	BL	T	HV	HL	L	R	HV	HL	BR	HR	HV	
07:00	1	0	0	0	6	27	0	0	2	8	0	0	22	0	0	72
07:15	1	0	0	0	7	28	0	0	3	12	0	0	22	0	0	82
07:30	1	0	0	0	4	30	0	1	2	12	0	0	19	0	0	84
07:45	0	0	1	0	3	23	0	1	3	10	0	0	12	0	0	65
08:00	0	0	1	0	3	15	0	1	3	7	0	0	5	0	0	44

Peak Hour Summary

Mark Skaggs
(206) 251-0300

Adams St & Alder & Pierce

4:00 PM to 5:00 PM
Thursday, March 07, 2013



	Intersection	NB	SB	WB	NWB
Volume	51	10	30	7	4
HV%	3.9%	10.0%	3.3%	0.0%	0.0%
PHF	0.80	0.63	0.83	0.58	0.50

Count Period: 4:00 PM to 6:00 PM

Total Vehicle Summary

Mark Skaggs
(206) 251-0300

Adams St & Alder & Pierce

Thursday, March 07, 2013
4:00 PM to 6:00 PM

15-Minute Interval Summary
4:00 PM to 6:00 PM

Interval Start Time	Northbound Adams St			Southbound Adams St				Westbound Alder				Northwestbound Pierce				Interval Total
	R	HR	HV	L	BL	T	HV	HL	L	R	HV	HL	BR	HR	HV	
16:00	0	0	0	0	1	7	0	1	1	1	0	0	2	0	0	16
16:15	0	0	0	1	2	4	0	1	0	0	0	1	0	0	0	13
16:30	0	0	1	0	0	6	1	0	1	2	0	0	0	0	0	10
16:45	0	0	0	1	0	8	0	0	0	0	0	0	0	1	0	12
17:00	0	0	0	0	0	9	0	0	0	0	0	0	1	0	0	15
17:15	0	0	0	0	1	5	0	0	0	0	0	0	2	0	0	8
17:30	1	0	0	0	1	3	0	0	1	0	0	0	1	1	0	12
17:45	0	0	0	0	0	3	0	0	0	0	0	0	1	0	0	7
Total Survey	1	0	1	2	5	45	1	2	3	3	0	1	7	2	0	93

Peak Hour Summary
4:00 PM to 5:00 PM

By Approach	Northbound Adams St		Southbound Adams St		Westbound Alder		Northwestbound Pierce		Total
	Approach	HV	Approach	HV	Approach	HV	Approach	HV	
In	10	1	30	1	7	0	4	0	51
Out	28		15		3		5		
Total	38		45		10		9		
%HV	10.0%		3.3%		0.0%		0.0%		3.9%
PHF	0.63		0.83		0.58		0.50		0.80

By Movement				Southbound Adams St				Westbound Alder				Northwestbound Pierce				Total
	R	HR	Total	L	BL	T	Total	HL	L	R	Total	HL	BR	HR	Total	
Volume	0	0	10	2	3	25	30	2	2	3	7	1	2	1	4	51
PHF	0.00	0.00	0.63	0.50	0.38	0.78	0.83	0.50	0.50	0.38	0.58	0.25	0.25	0.25	0.50	0.80

Rolling Hour Summary
4:00 PM to 6:00 PM

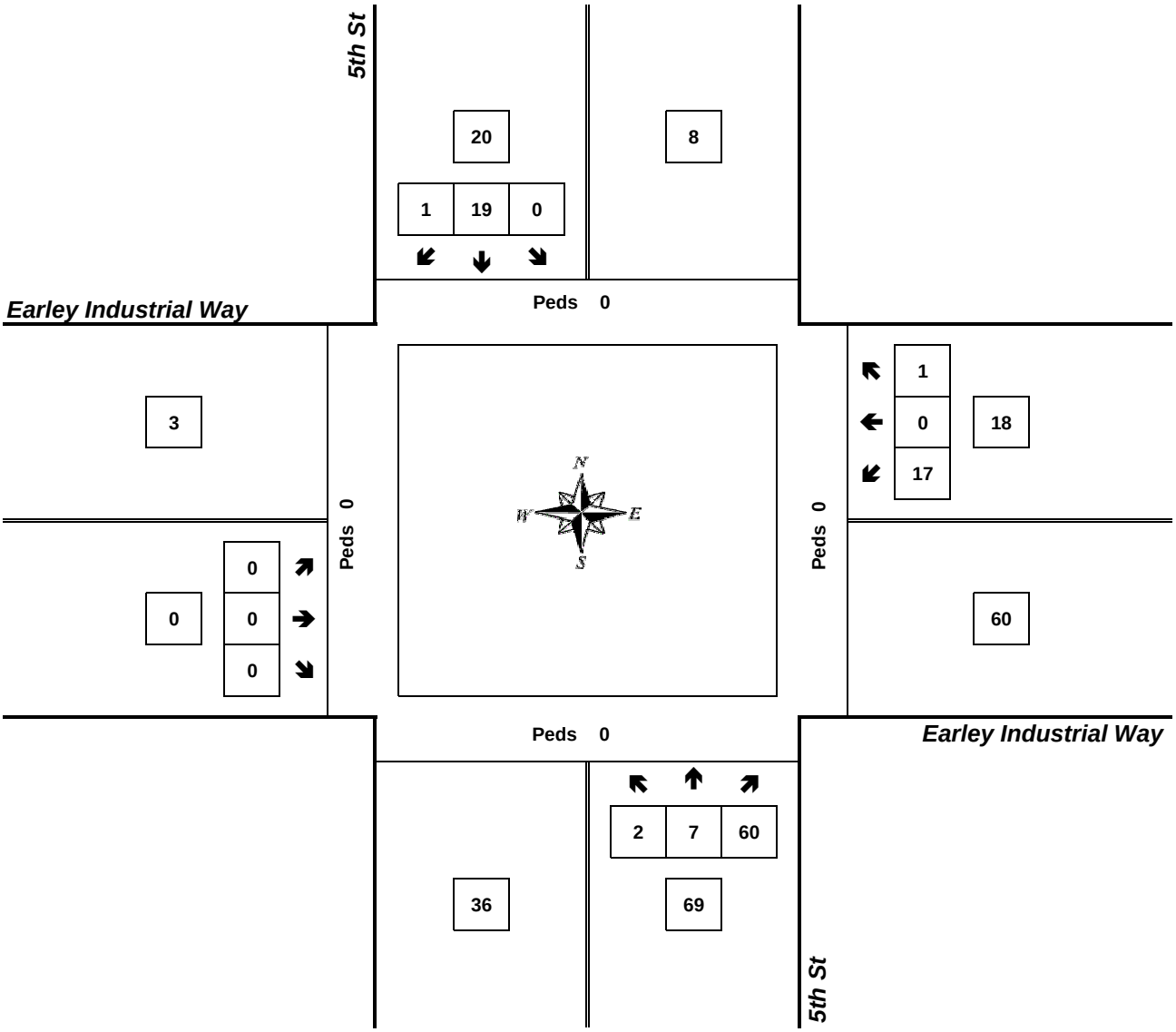
Interval Start Time	Northbound Adams St			Southbound Adams St				Westbound Alder				Northwestbound Pierce				Interval Total
	R	HR	HV	L	BL	T	HV	HL	L	R	HV	HL	BR	HR	HV	
16:00	0	0	1	2	3	25	1	2	2	3	0	1	2	1	0	51
16:15	0	0	1	2	2	27	1	1	1	2	0	1	1	1	0	50
16:30	0	0	1	1	1	28	1	0	1	2	0	0	3	1	0	45
16:45	1	0	0	1	2	25	0	0	1	0	0	0	4	2	0	47
17:00	1	0	0	0	2	20	0	0	1	0	0	0	5	1	0	42

Peak Hour Summary

Mark Skaggs
(206) 251-0300

5th St & Earley Industrial Way

7:30 AM to 8:30 AM
Thursday, March 07, 2013

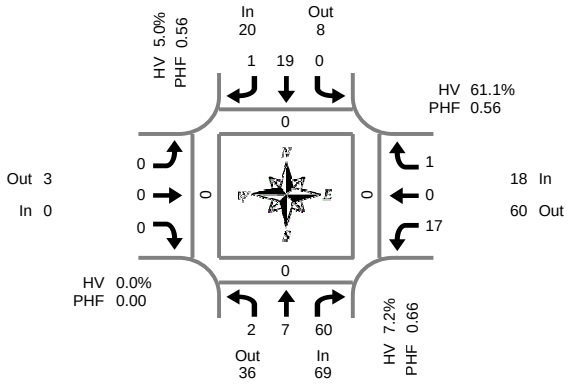


Approach	PHF	HV%	Volume
EB	0.00	0.0%	0
WB	0.56	61.1%	18
NB	0.66	7.2%	69
SB	0.56	5.0%	20
Intersection	0.84	15.9%	107

Count Period: 7:00 AM to 9:00 AM

Total Vehicle Summary

Mark Skaggs
(206) 251-0300



Peak Hour Summary
7:30 AM to 8:30 AM

5th St & Earley Industrial Way

Thursday, March 07, 2013
7:00 AM to 9:00 AM

15-Minute Interval Summary
7:00 AM to 9:00 AM

Interval Start Time	Northbound 5th St				Southbound 5th St				Eastbound Earley Industrial Way				Westbound Earley Industrial Way				Interval Total	Pedestrians Crosswalk			
	L	T	R	HV	L	T	R	HV	L	T	R	HV	L	T	R	HV		North	South	East	West
7:00 AM	0	0	5	1	0	6	0	0	0	0	0	0	0	0	0	1	11	0	1	1	0
7:15 AM	0	0	8	0	0	5	0	0	0	0	0	0	2	0	0	0	15	0	0	0	0
7:30 AM	0	3	23	0	0	2	1	0	0	0	0	0	3	0	0	5	32	0	0	0	0
7:45 AM	1	2	16	0	0	9	0	1	0	0	0	0	4	0	0	2	32	0	0	0	0
8:00 AM	1	1	11	3	0	6	0	0	0	0	0	0	3	0	0	1	22	0	0	0	0
8:15 AM	0	1	10	2	0	2	0	0	0	0	0	0	7	0	1	3	21	0	0	0	0
8:30 AM	0	3	14	2	1	5	0	0	0	0	1	0	4	0	0	0	28	0	0	0	0
8:45 AM	0	0	11	0	0	1	0	0	0	0	0	0	1	0	0	0	13	0	0	0	0
Total Survey	2	10	98	8	1	36	1	1	0	0	1	0	24	0	1	12	174	0	1	1	0

Peak Hour Summary
7:30 AM to 8:30 AM

By Approach	Northbound 5th St				Southbound 5th St				Eastbound Earley Industrial Way				Westbound Earley Industrial Way				Total
	In	Out	Total	HV	In	Out	Total	HV	In	Out	Total	HV	In	Out	Total	HV	
Volume	69	36	105	5	20	8	28	1	0	3	3	0	18	60	78	11	107
%HV	7.2%				5.0%				0.0%				61.1%				15.9%
PHF	0.66				0.56				0.00				0.56				0.84

Pedestrians Crosswalk			
North	South	East	West
0	0	0	0

By Movement	Northbound 5th St				Southbound 5th St				Eastbound Earley Industrial Way				Westbound Earley Industrial Way				Total
	L	T	R	Total	L	T	R	Total	L	T	R	Total	L	T	R	Total	
Volume	2	7	60	69	0	19	1	20	0	0	0	0	17	0	1	18	107
PHF	0.50	0.58	0.65	0.66	0.00	0.53	0.25	0.56	0.00	0.00	0.00	0.00	0.61	0.00	0.25	0.56	0.84

Rolling Hour Summary
7:00 AM to 9:00 AM

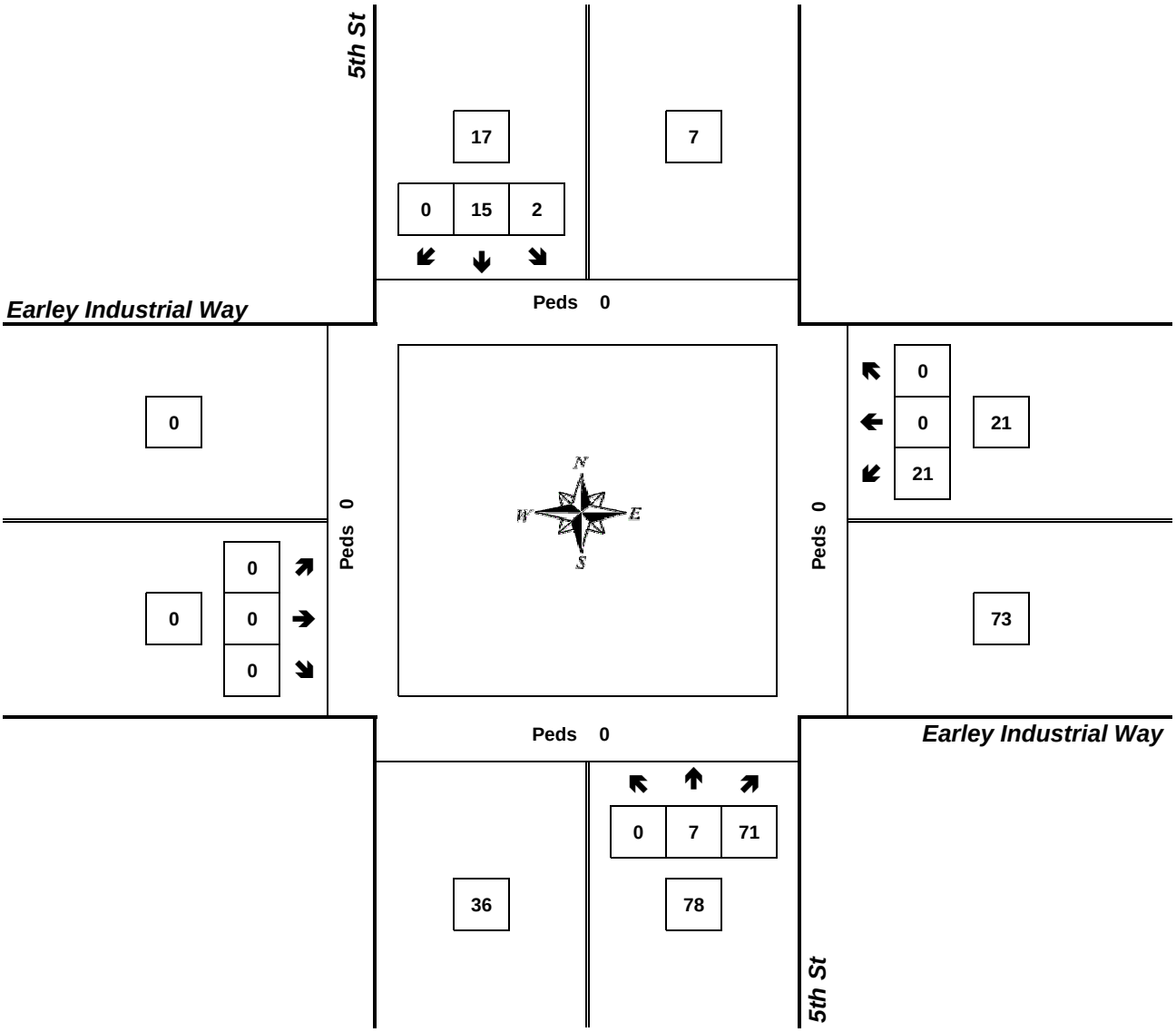
Interval Start Time	Northbound 5th St				Southbound 5th St				Eastbound Earley Industrial Way				Westbound Earley Industrial Way				Interval Total	Pedestrians Crosswalk			
	L	T	R	HV	L	T	R	HV	L	T	R	HV	L	T	R	HV		North	South	East	West
7:00 AM	1	5	52	1	0	22	1	1	0	0	0	0	9	0	0	8	90	0	1	1	0
7:15 AM	2	6	58	3	0	22	1	1	0	0	0	0	12	0	0	8	101	0	0	0	0
7:30 AM	2	7	60	5	0	19	1	1	0	0	0	0	17	0	1	11	107	0	0	0	0
7:45 AM	2	7	51	7	1	22	0	1	0	0	1	0	18	0	1	6	103	0	0	0	0
8:00 AM	1	5	46	7	1	14	0	0	0	0	1	0	15	0	1	4	84	0	0	0	0

Peak Hour Summary

Mark Skaggs
(206) 251-0300

5th St & Earley Industrial Way

4:30 PM to 5:30 PM
Thursday, March 07, 2013

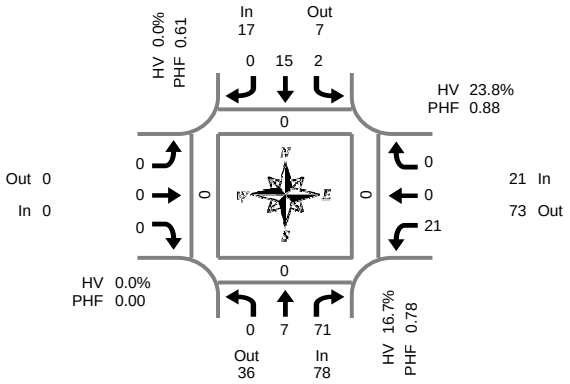


Approach	PHF	HV%	Volume
EB	0.00	0.0%	0
WB	0.88	23.8%	21
NB	0.78	16.7%	78
SB	0.61	0.0%	17
Intersection	0.88	15.5%	116

Count Period: 4:00 PM to 6:00 PM

Total Vehicle Summary

Mark Skaggs
(206) 251-0300



Peak Hour Summary
4:30 PM to 5:30 PM

5th St & Earley Industrial Way

Thursday, March 07, 2013
4:00 PM to 6:00 PM

15-Minute Interval Summary
4:00 PM to 6:00 PM

Interval Start Time	Northbound 5th St				Southbound 5th St				Eastbound Earley Industrial Way				Westbound Earley Industrial Way				Interval Total	Pedestrians Crosswalk			
	L	T	R	HV	L	T	R	HV	L	T	R	HV	L	T	R	HV		North	South	East	West
4:00 PM	0	2	20	1	0	1	0	0	0	0	1	0	4	0	1	1	29	0	1	1	0
4:15 PM	0	3	7	4	0	5	0	0	0	0	0	0	7	0	0	3	22	0	0	0	0
4:30 PM	0	3	16	6	0	5	0	0	0	0	0	0	5	0	0	3	29	0	0	0	0
4:45 PM	0	2	17	0	1	6	0	0	0	0	0	0	5	0	0	2	31	0	0	0	0
5:00 PM	0	2	23	6	1	2	0	0	0	0	0	0	5	0	0	0	33	0	0	0	0
5:15 PM	0	0	15	1	0	2	0	0	0	0	0	0	6	0	0	0	23	0	0	0	0
5:30 PM	0	3	14	0	0	2	0	0	0	0	0	0	3	0	0	2	22	0	0	0	0
5:45 PM	0	2	10	1	0	1	0	0	0	0	0	0	4	0	0	2	17	0	0	0	0
Total Survey	0	17	122	19	2	24	0	0	0	0	1	0	39	0	1	13	206	0	1	1	0

Peak Hour Summary
4:30 PM to 5:30 PM

By Approach	Northbound 5th St				Southbound 5th St				Eastbound Earley Industrial Way				Westbound Earley Industrial Way				Total
	In	Out	Total	HV	In	Out	Total	HV	In	Out	Total	HV	In	Out	Total	HV	
Volume	78	36	114	13	17	7	24	0	0	0	0	0	21	73	94	5	116
%HV	16.7%				0.0%				0.0%				23.8%				15.5%
PHF	0.78				0.61				0.00				0.88				0.88

Pedestrians Crosswalk			
North	South	East	West
0	0	0	0

By Movement	Northbound 5th St				Southbound 5th St				Eastbound Earley Industrial Way				Westbound Earley Industrial Way				Total
	L	T	R	Total	L	T	R	Total	L	T	R	Total	L	T	R	Total	
Volume	0	7	71	78	2	15	0	17	0	0	0	0	21	0	0	21	116
PHF	0.00	0.58	0.77	0.78	0.50	0.63	0.00	0.61	0.00	0.00	0.00	0.00	0.88	0.00	0.00	0.88	0.88

Rolling Hour Summary
4:00 PM to 6:00 PM

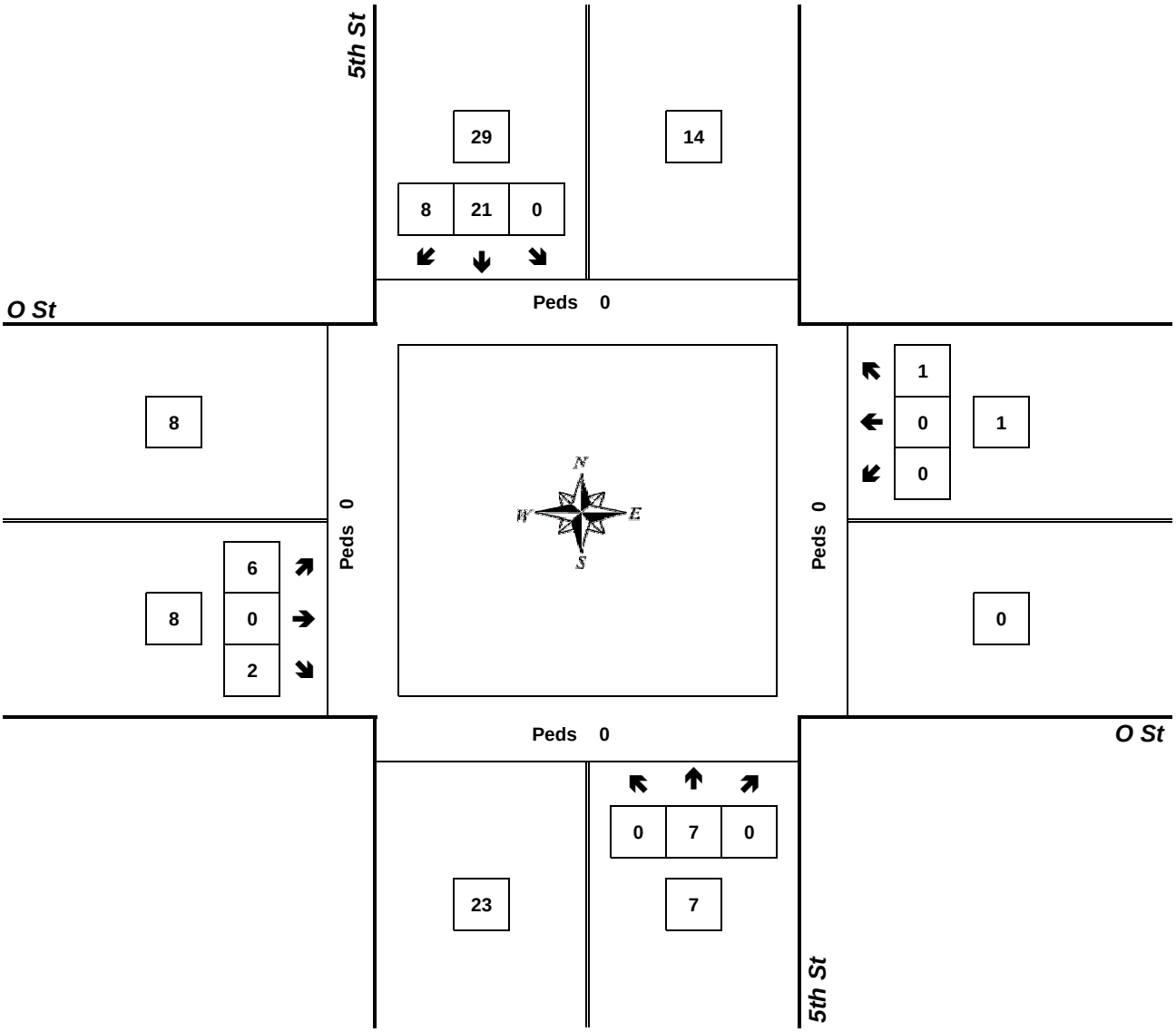
Interval Start Time	Northbound 5th St				Southbound 5th St				Eastbound Earley Industrial Way				Westbound Earley Industrial Way				Interval Total	Pedestrians Crosswalk			
	L	T	R	HV	L	T	R	HV	L	T	R	HV	L	T	R	HV		North	South	East	West
4:00 PM	0	10	60	11	1	17	0	0	0	0	1	0	21	0	1	9	111	0	1	1	0
4:15 PM	0	10	63	16	2	18	0	0	0	0	0	0	22	0	0	8	115	0	0	0	0
4:30 PM	0	7	71	13	2	15	0	0	0	0	0	0	21	0	0	5	116	0	0	0	0
4:45 PM	0	7	69	7	2	12	0	0	0	0	0	0	19	0	0	4	109	0	0	0	0
5:00 PM	0	7	62	8	1	7	0	0	0	0	0	0	18	0	0	4	95	0	0	0	0

Peak Hour Summary

Mark Skaggs
(206) 251-0300

5th St & O St

7:30 AM to 8:30 AM
Thursday, March 07, 2013

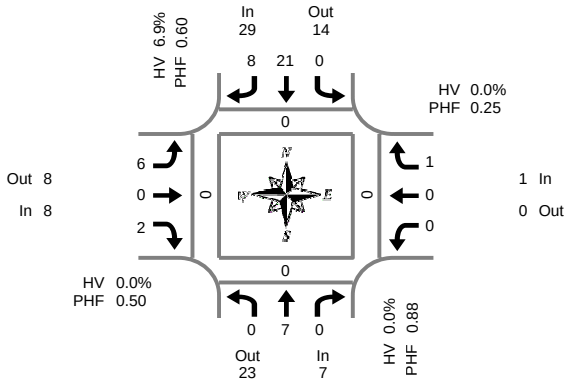


Approach	PHF	HV%	Volume
EB	0.50	0.0%	8
WB	0.25	0.0%	1
NB	0.88	0.0%	7
SB	0.60	6.9%	29
Intersection	0.80	4.4%	45

Count Period: 7:00 AM to 9:00 AM

Total Vehicle Summary

Mark Skaggs
(206) 251-0300



Peak Hour Summary
7:30 AM to 8:30 AM

5th St & O St

Thursday, March 07, 2013
7:00 AM to 9:00 AM

15-Minute Interval Summary
7:00 AM to 9:00 AM

Interval Start Time	Northbound 5th St				Southbound 5th St				Eastbound O St				Westbound O St				Interval Total	Pedestrians Crosswalk			
	L	T	R	HV	L	T	R	HV	L	T	R	HV	L	T	R	HV		North	South	East	West
7:00 AM	0	0	0	0	0	4	0	0	0	1	1	0	0	0	0	0	6	0	0	0	0
7:15 AM	0	0	0	0	0	4	1	0	1	0	0	0	0	0	0	0	6	0	0	0	0
7:30 AM	0	2	0	0	0	2	3	1	3	0	1	0	0	0	1	0	12	0	0	0	0
7:45 AM	0	2	0	0	0	10	2	0	0	0	0	0	0	0	0	0	14	0	0	0	0
8:00 AM	0	1	0	0	0	6	3	1	2	0	0	0	0	0	0	0	12	0	0	0	0
8:15 AM	0	2	0	0	0	3	0	0	1	0	1	0	0	0	0	0	7	0	0	0	0
8:30 AM	1	2	0	0	0	4	0	0	1	0	0	0	0	0	0	0	8	0	0	0	0
8:45 AM	0	0	0	0	0	1	1	0	0	0	1	0	0	0	0	0	3	0	0	0	0
Total Survey	1	9	0	0	0	34	10	2	8	1	4	0	0	0	1	0	68	0	0	0	0

Peak Hour Summary
7:30 AM to 8:30 AM

By Approach	Northbound 5th St				Southbound 5th St				Eastbound O St				Westbound O St				Total
	In	Out	Total	HV	In	Out	Total	HV	In	Out	Total	HV	In	Out	Total	HV	
Volume	7	23	30	0	29	14	43	2	8	8	16	0	1	0	1	0	45
%HV	0.0%				6.9%				0.0%				0.0%				4.4%
PHF	0.88				0.60				0.50				0.25				0.80

Pedestrians Crosswalk			
North	South	East	West
0	0	0	0

By Movement	Northbound 5th St				Southbound 5th St				Eastbound O St				Westbound O St				Total
	L	T	R	Total	L	T	R	Total	L	T	R	Total	L	T	R	Total	
Volume	0	7	0	7	0	21	8	29	6	0	2	8	0	0	1	1	45
PHF	0.00	0.88	0.00	0.88	0.00	0.53	0.67	0.60	0.50	0.00	0.50	0.50	0.00	0.00	0.25	0.25	0.80

Rolling Hour Summary
7:00 AM to 9:00 AM

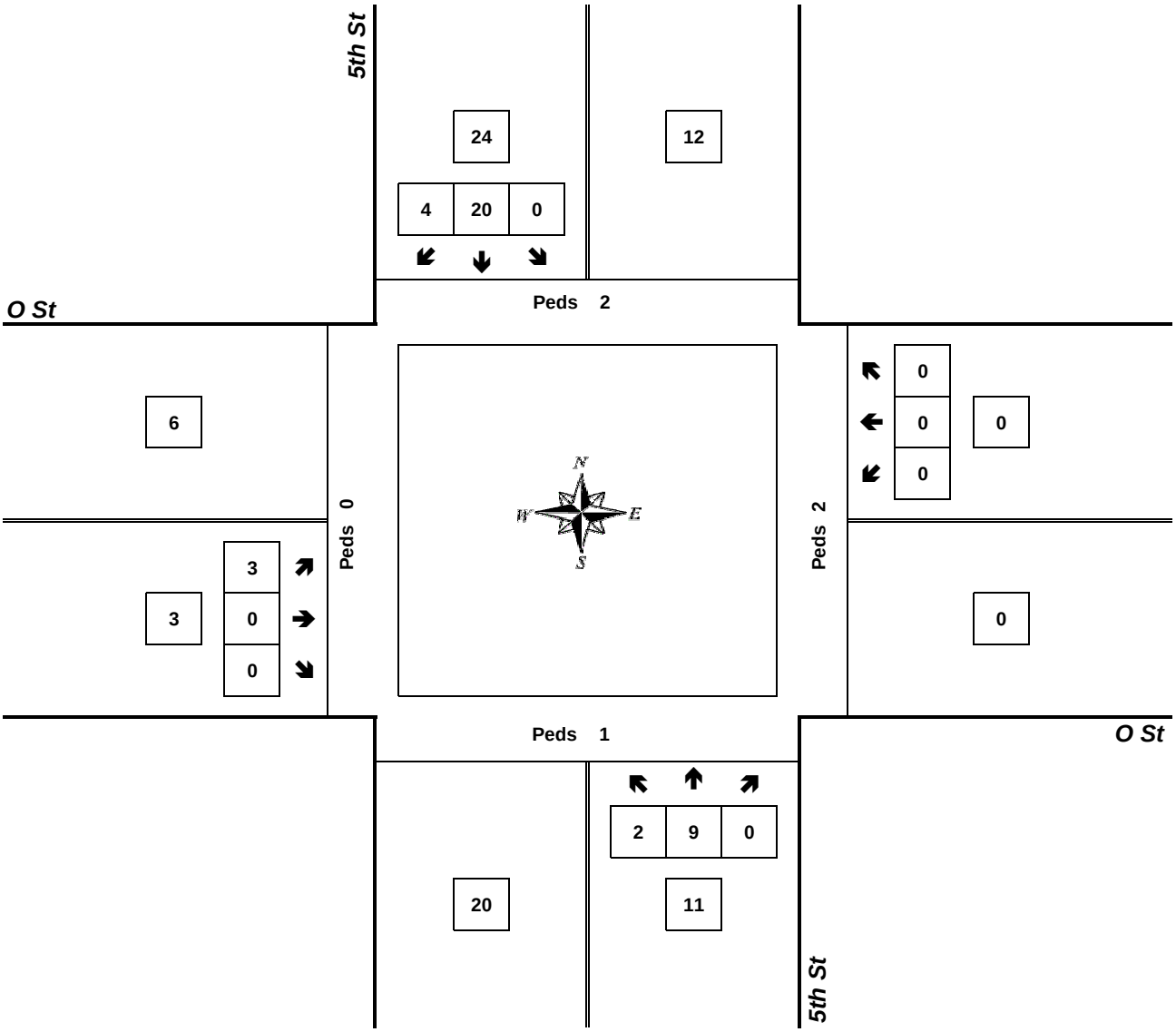
Interval Start Time	Northbound 5th St				Southbound 5th St				Eastbound O St				Westbound O St				Interval Total	Pedestrians Crosswalk			
	L	T	R	HV	L	T	R	HV	L	T	R	HV	L	T	R	HV		North	South	East	West
7:00 AM	0	4	0	0	0	20	6	1	4	1	2	0	0	0	1	0	38	0	0	0	0
7:15 AM	0	5	0	0	0	22	9	2	6	0	1	0	0	0	1	0	44	0	0	0	0
7:30 AM	0	7	0	0	0	21	8	2	6	0	2	0	0	0	1	0	45	0	0	0	0
7:45 AM	1	7	0	0	0	23	5	1	4	0	1	0	0	0	0	0	41	0	0	0	0
8:00 AM	1	5	0	0	0	14	4	1	4	0	2	0	0	0	0	0	30	0	0	0	0

Peak Hour Summary

Mark Skaggs
(206) 251-0300

5th St & O St

4:15 PM to 5:15 PM
Thursday, March 07, 2013

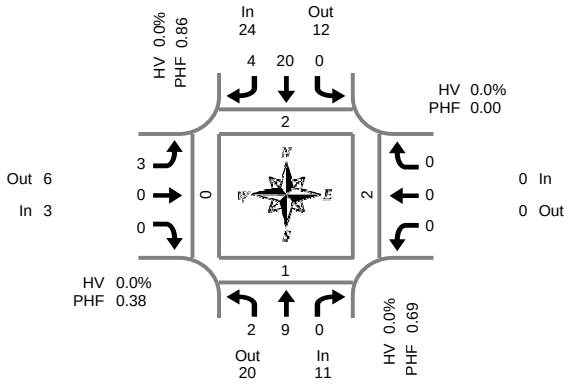


Approach	PHF	HV%	Volume
EB	0.38	0.0%	3
WB	0.00	0.0%	0
NB	0.69	0.0%	11
SB	0.86	0.0%	24
Intersection	0.79	0.0%	38

Count Period: 4:00 PM to 6:00 PM

Total Vehicle Summary

Mark Skaggs
(206) 251-0300



Peak Hour Summary
4:15 PM to 5:15 PM

5th St & O St

Thursday, March 07, 2013
4:00 PM to 6:00 PM

15-Minute Interval Summary
4:00 PM to 6:00 PM

Interval Start Time	Northbound 5th St				Southbound 5th St				Eastbound O St				Westbound O St				Interval Total	Pedestrians Crosswalk			
	L	T	R	HV	L	T	R	HV	L	T	R	HV	L	T	R	HV		North	South	East	West
4:00 PM	0	3	0	0	0	1	0	0	3	0	0	0	0	0	0	0	7	0	1	0	0
4:15 PM	1	2	0	0	0	5	1	0	0	0	0	0	0	0	0	0	9	0	0	0	0
4:30 PM	1	3	0	0	0	7	0	0	1	0	0	0	0	0	0	0	12	0	0	0	0
4:45 PM	0	2	0	0	0	6	1	0	0	0	0	0	0	0	0	0	9	1	1	2	0
5:00 PM	0	2	0	0	0	2	2	0	2	0	0	0	0	0	0	0	8	1	0	0	0
5:15 PM	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	2	0	0	0	0
5:30 PM	0	3	0	0	1	3	1	0	1	0	0	0	0	0	0	0	9	0	1	0	0
5:45 PM	0	2	0	0	0	1	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0
Total Survey	2	17	0	0	1	26	5	0	8	0	0	0	0	0	0	0	59	2	3	2	0

Peak Hour Summary
4:15 PM to 5:15 PM

By Approach	Northbound 5th St				Southbound 5th St				Eastbound O St				Westbound O St				Total
	In	Out	Total	HV	In	Out	Total	HV	In	Out	Total	HV	In	Out	Total	HV	
Volume	11	20	31	0	24	12	36	0	3	6	9	0	0	0	0	0	38
%HV	0.0%				0.0%				0.0%				0.0%				0.0%
PHF	0.69				0.86				0.38				0.00				0.79

Pedestrians Crosswalk			
North	South	East	West
2	1	2	0

By Movement	Northbound 5th St				Southbound 5th St				Eastbound O St				Westbound O St				Total
	L	T	R	Total	L	T	R	Total	L	T	R	Total	L	T	R	Total	
Volume	2	9	0	11	0	20	4	24	3	0	0	3	0	0	0	0	38
PHF	0.50	0.75	0.00	0.69	0.00	0.71	0.50	0.86	0.38	0.00	0.00	0.38	0.00	0.00	0.00	0.00	0.79

Rolling Hour Summary
4:00 PM to 6:00 PM

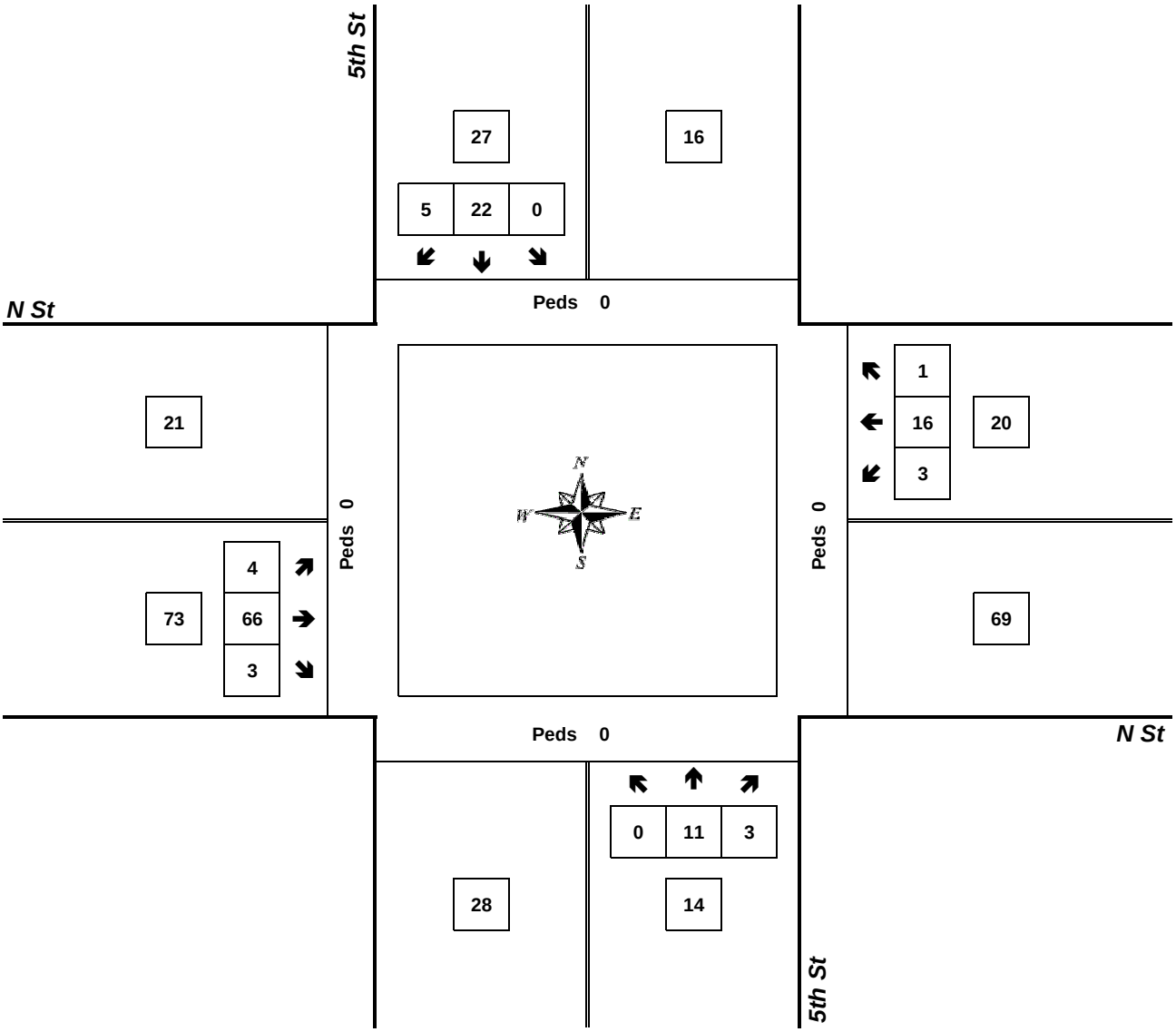
Interval Start Time	Northbound 5th St				Southbound 5th St				Eastbound O St				Westbound O St				Interval Total	Pedestrians Crosswalk			
	L	T	R	HV	L	T	R	HV	L	T	R	HV	L	T	R	HV		North	South	East	West
4:00 PM	2	10	0	0	0	19	2	0	4	0	0	0	0	0	0	0	37	1	2	2	0
4:15 PM	2	9	0	0	0	20	4	0	3	0	0	0	0	0	0	0	38	2	1	2	0
4:30 PM	1	7	0	0	0	16	3	0	4	0	0	0	0	0	0	0	31	2	1	2	0
4:45 PM	0	7	0	0	1	12	4	0	4	0	0	0	0	0	0	0	28	2	2	2	0
5:00 PM	0	7	0	0	1	7	3	0	4	0	0	0	0	0	0	0	22	1	1	0	0

Peak Hour Summary

Mark Skaggs
(206) 251-0300

5th St & N St

7:15 AM to 8:15 AM
Thursday, March 07, 2013

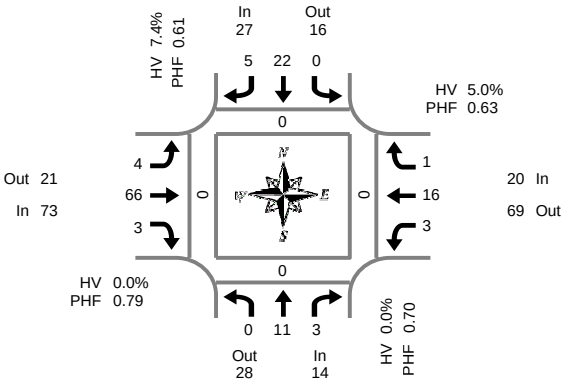


Approach	PHF	HV%	Volume
EB	0.79	0.0%	73
WB	0.63	5.0%	20
NB	0.70	0.0%	14
SB	0.61	7.4%	27
Intersection	0.73	2.2%	134

Count Period: 7:00 AM to 9:00 AM

Total Vehicle Summary

Mark Skaggs
(206) 251-0300



Peak Hour Summary
7:15 AM to 8:15 AM

5th St & N St

Thursday, March 07, 2013
7:00 AM to 9:00 AM

15-Minute Interval Summary
7:00 AM to 9:00 AM

Interval Start Time	Northbound 5th St				Southbound 5th St				Eastbound N St				Westbound N St				Interval Total	Pedestrians Crosswalk			
	L	T	R	HV	L	T	R	HV	L	T	R	HV	L	T	R	HV		North	South	East	West
7:00 AM	0	1	0	0	0	5	0	0	0	6	0	0	0	0	0	1	12	0	0	0	0
7:15 AM	0	2	0	0	0	4	2	0	0	15	0	0	1	3	0	0	27	0	0	0	0
7:30 AM	0	4	1	0	0	3	1	1	0	16	1	0	0	5	0	0	31	0	0	0	0
7:45 AM	0	3	1	0	0	9	2	0	2	19	2	0	1	7	0	1	46	0	0	0	0
8:00 AM	0	2	1	0	0	6	0	1	2	16	0	0	1	1	1	0	30	0	0	0	0
8:15 AM	0	2	1	0	1	2	2	0	0	10	0	0	0	1	2	0	21	0	0	0	0
8:30 AM	0	2	1	0	1	6	2	0	0	5	0	0	0	2	0	0	19	0	0	0	0
8:45 AM	0	0	0	0	0	2	0	0	1	6	0	0	0	2	0	0	11	1	0	0	0
Total Survey	0	16	5	0	2	37	9	2	5	93	3	0	3	21	3	2	197	1	0	0	0

Peak Hour Summary
7:15 AM to 8:15 AM

By Approach	Northbound 5th St				Southbound 5th St				Eastbound N St				Westbound N St				Total	Pedestrians Crosswalk			
	In	Out	Total	HV	In	Out	Total	HV	In	Out	Total	HV	In	Out	Total	HV		North	South	East	West
Volume	14	28	42	0	27	16	43	2	73	21	94	0	20	69	89	1	134	0	0	0	0
%HV	0.0%				7.4%				0.0%				5.0%				2.2%				
PHF	0.70				0.61				0.79				0.63				0.73				

By Movement	Northbound 5th St				Southbound 5th St				Eastbound N St				Westbound N St				Total
	L	T	R	Total	L	T	R	Total	L	T	R	Total	L	T	R	Total	
Volume	0	11	3	14	0	22	5	27	4	66	3	73	3	16	1	20	134
PHF	0.00	0.69	0.75	0.70	0.00	0.61	0.63	0.61	0.50	0.87	0.38	0.79	0.75	0.57	0.25	0.63	0.73

Rolling Hour Summary
7:00 AM to 9:00 AM

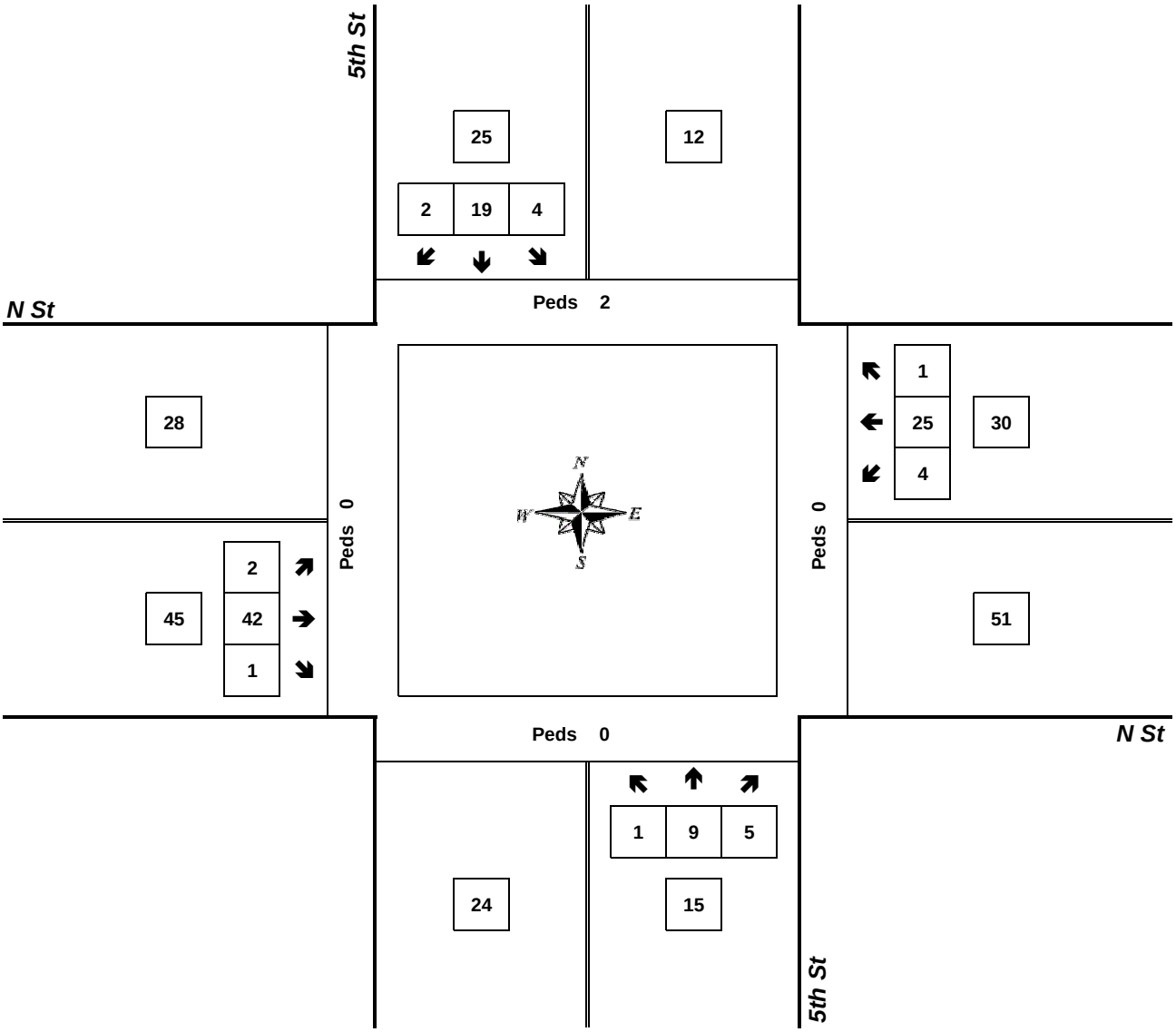
Interval Start Time	Northbound 5th St				Southbound 5th St				Eastbound N St				Westbound N St				Interval Total	Pedestrians Crosswalk			
	L	T	R	HV	L	T	R	HV	L	T	R	HV	L	T	R	HV		North	South	East	West
7:00 AM	0	10	2	0	0	21	5	1	2	56	3	0	2	15	0	2	116	0	0	0	0
7:15 AM	0	11	3	0	0	22	5	2	4	66	3	0	3	16	1	1	134	0	0	0	0
7:30 AM	0	11	4	0	1	20	5	2	4	61	3	0	2	14	3	1	128	0	0	0	0
7:45 AM	0	9	4	0	2	23	6	1	4	50	2	0	2	11	3	1	116	0	0	0	0
8:00 AM	0	6	3	0	2	16	4	1	3	37	0	0	1	6	3	0	81	1	0	0	0

Peak Hour Summary

Mark Skaggs
(206) 251-0300

5th St & N St

4:30 PM to 5:30 PM
Thursday, March 07, 2013

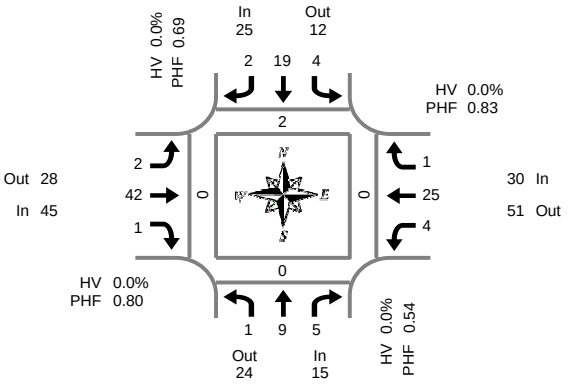


Approach	PHF	HV%	Volume
EB	0.80	0.0%	45
WB	0.83	0.0%	30
NB	0.54	0.0%	15
SB	0.69	0.0%	25
Intersection	0.82	0.0%	115

Count Period: 4:00 PM to 6:00 PM

Total Vehicle Summary

Mark Skaggs
(206) 251-0300



Peak Hour Summary
4:30 PM to 5:30 PM

5th St & N St

Thursday, March 07, 2013
4:00 PM to 6:00 PM

15-Minute Interval Summary
4:00 PM to 6:00 PM

Interval Start Time	Northbound 5th St				Southbound 5th St				Eastbound N St				Westbound N St				Interval Total	Pedestrians Crosswalk			
	L	T	R	HV	L	T	R	HV	L	T	R	HV	L	T	R	HV		North	South	East	West
4:00 PM	2	3	1	0	0	3	4	0	1	9	0	0	0	7	0	0	30	0	0	1	0
4:15 PM	0	0	0	0	0	4	1	0	0	6	0	0	1	7	0	0	19	0	0	0	0
4:30 PM	0	5	2	0	1	4	1	0	0	10	1	0	2	5	1	0	32	0	0	0	0
4:45 PM	0	2	0	0	1	8	0	0	0	8	0	0	1	5	0	0	25	0	0	0	0
5:00 PM	1	2	2	0	1	5	1	0	2	12	0	0	1	8	0	0	35	1	0	0	0
5:15 PM	0	0	1	0	1	2	0	0	0	12	0	0	0	7	0	0	23	1	0	0	0
5:30 PM	0	3	1	0	0	5	2	0	2	14	0	0	0	4	0	0	31	0	0	0	0
5:45 PM	0	3	1	0	0	0	0	0	2	9	0	0	0	2	0	0	17	0	0	0	0
Total Survey	3	18	8	0	4	31	9	0	7	80	1	0	5	45	1	0	212	2	0	1	0

Peak Hour Summary
4:30 PM to 5:30 PM

By Approach	Northbound 5th St				Southbound 5th St				Eastbound N St				Westbound N St				Total	Pedestrians Crosswalk			
	In	Out	Total	HV	In	Out	Total	HV	In	Out	Total	HV	In	Out	Total	HV		North	South	East	West
Volume	15	24	39	0	25	12	37	0	45	28	73	0	30	51	81	0	115	2	0	0	0
%HV	0.0%				0.0%				0.0%				0.0%				0.0%				
PHF	0.54				0.69				0.80				0.83				0.82				

By Movement	Northbound 5th St				Southbound 5th St				Eastbound N St				Westbound N St				Total
	L	T	R	Total	L	T	R	Total	L	T	R	Total	L	T	R	Total	
Volume	1	9	5	15	4	19	2	25	2	42	1	45	4	25	1	30	115
PHF	0.25	0.45	0.63	0.54	1.00	0.59	0.50	0.69	0.25	0.88	0.25	0.80	0.50	0.78	0.25	0.83	0.82

Rolling Hour Summary
4:00 PM to 6:00 PM

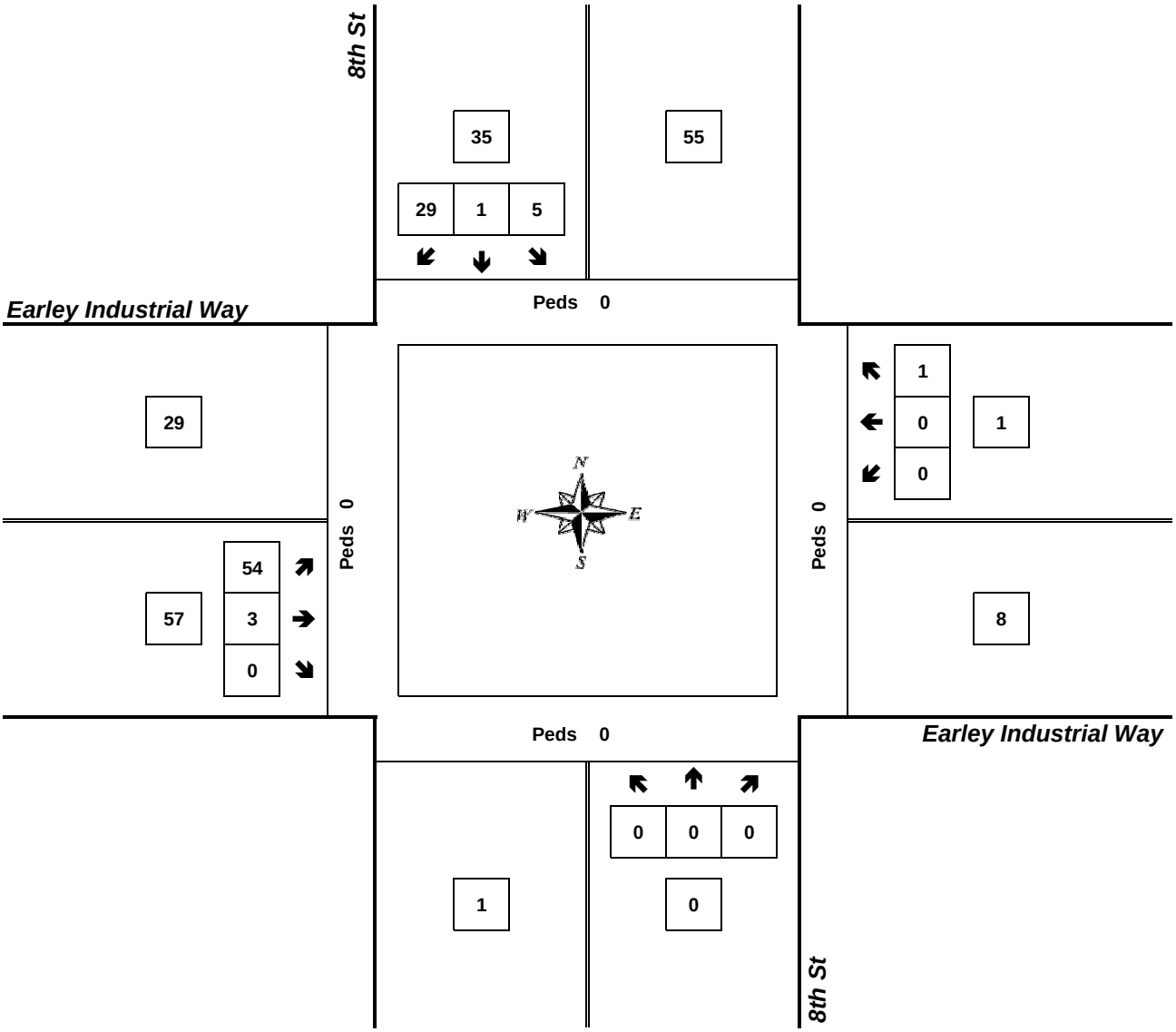
Interval Start Time	Northbound 5th St				Southbound 5th St				Eastbound N St				Westbound N St				Interval Total	Pedestrians Crosswalk			
	L	T	R	HV	L	T	R	HV	L	T	R	HV	L	T	R	HV		North	South	East	West
4:00 PM	2	10	3	0	2	19	6	0	1	33	1	0	4	24	1	0	106	0	0	1	0
4:15 PM	1	9	4	0	3	21	3	0	2	36	1	0	5	25	1	0	111	1	0	0	0
4:30 PM	1	9	5	0	4	19	2	0	2	42	1	0	4	25	1	0	115	2	0	0	0
4:45 PM	1	7	4	0	3	20	3	0	4	46	0	0	2	24	0	0	114	2	0	0	0
5:00 PM	1	8	5	0	2	12	3	0	6	47	0	0	1	21	0	0	106	2	0	0	0

Peak Hour Summary

Mark Skaggs
(206) 251-0300

8th St & Earley Industrial Way

7:30 AM to 8:30 AM
Thursday, March 07, 2013

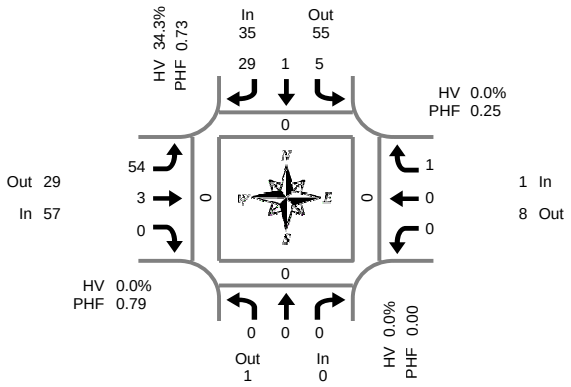


Approach	PHF	HV%	Volume
EB	0.79	0.0%	57
WB	0.25	0.0%	1
NB	0.00	0.0%	0
SB	0.73	34.3%	35
Intersection	0.80	12.9%	93

Count Period: 7:00 AM to 9:00 AM

Total Vehicle Summary

Mark Skaggs
(206) 251-0300



Peak Hour Summary
7:30 AM to 8:30 AM

8th St & Earley Industrial Way

Thursday, March 07, 2013
7:00 AM to 9:00 AM

15-Minute Interval Summary
7:00 AM to 9:00 AM

Interval Start Time	Northbound 8th St				Southbound 8th St				Eastbound Earley Industrial Way				Westbound Earley Industrial Way				Interval Total	Pedestrians Crosswalk			
	L	T	R	HV	L	T	R	HV	L	T	R	HV	L	T	R	HV		North	South	East	West
7:00 AM	0	0	0	0	0	0	1	1	5	0	0	1	0	0	0	0	6	0	0	0	0
7:15 AM	0	0	0	0	0	0	2	0	10	1	0	0	0	0	1	0	14	0	0	0	0
7:30 AM	0	0	0	0	1	0	11	6	16	1	0	0	0	0	0	0	29	0	0	0	0
7:45 AM	0	0	0	0	1	0	4	2	17	1	0	0	0	0	0	0	23	0	0	0	0
8:00 AM	0	0	0	0	2	1	6	3	9	1	0	0	0	0	0	0	19	0	0	0	0
8:15 AM	0	0	0	0	1	0	8	1	12	0	0	0	0	0	1	0	22	0	0	0	0
8:30 AM	0	0	0	0	0	0	2	0	15	0	0	0	0	0	1	0	18	1	0	0	0
8:45 AM	0	0	0	0	0	0	2	0	10	0	0	1	0	0	0	0	12	0	0	0	0
Total Survey	0	0	0	0	5	1	36	13	94	4	0	2	0	0	3	0	143	1	0	0	0

Peak Hour Summary
7:30 AM to 8:30 AM

By Approach	Northbound 8th St				Southbound 8th St				Eastbound Earley Industrial Way				Westbound Earley Industrial Way				Total	Pedestrians Crosswalk			
	In	Out	Total	HV	In	Out	Total	HV	In	Out	Total	HV	In	Out	Total	HV		North	South	East	West
Volume	0	1	1	0	35	55	90	12	57	29	86	0	1	8	9	0	93	0	0	0	0
%HV	0.0%				34.3%				0.0%				0.0%				12.9%				
PHF	0.00				0.73				0.79				0.25				0.80				

By Movement	Northbound 8th St				Southbound 8th St				Eastbound Earley Industrial Way				Westbound Earley Industrial Way				Total
	L	T	R	Total	L	T	R	Total	L	T	R	Total	L	T	R	Total	
Volume	0	0	0	0	5	1	29	35	54	3	0	57	0	0	1	1	93
PHF	0.00	0.00	0.00	0.00	0.63	0.25	0.66	0.73	0.79	0.75	0.00	0.79	0.00	0.00	0.25	0.25	0.80

Rolling Hour Summary
7:00 AM to 9:00 AM

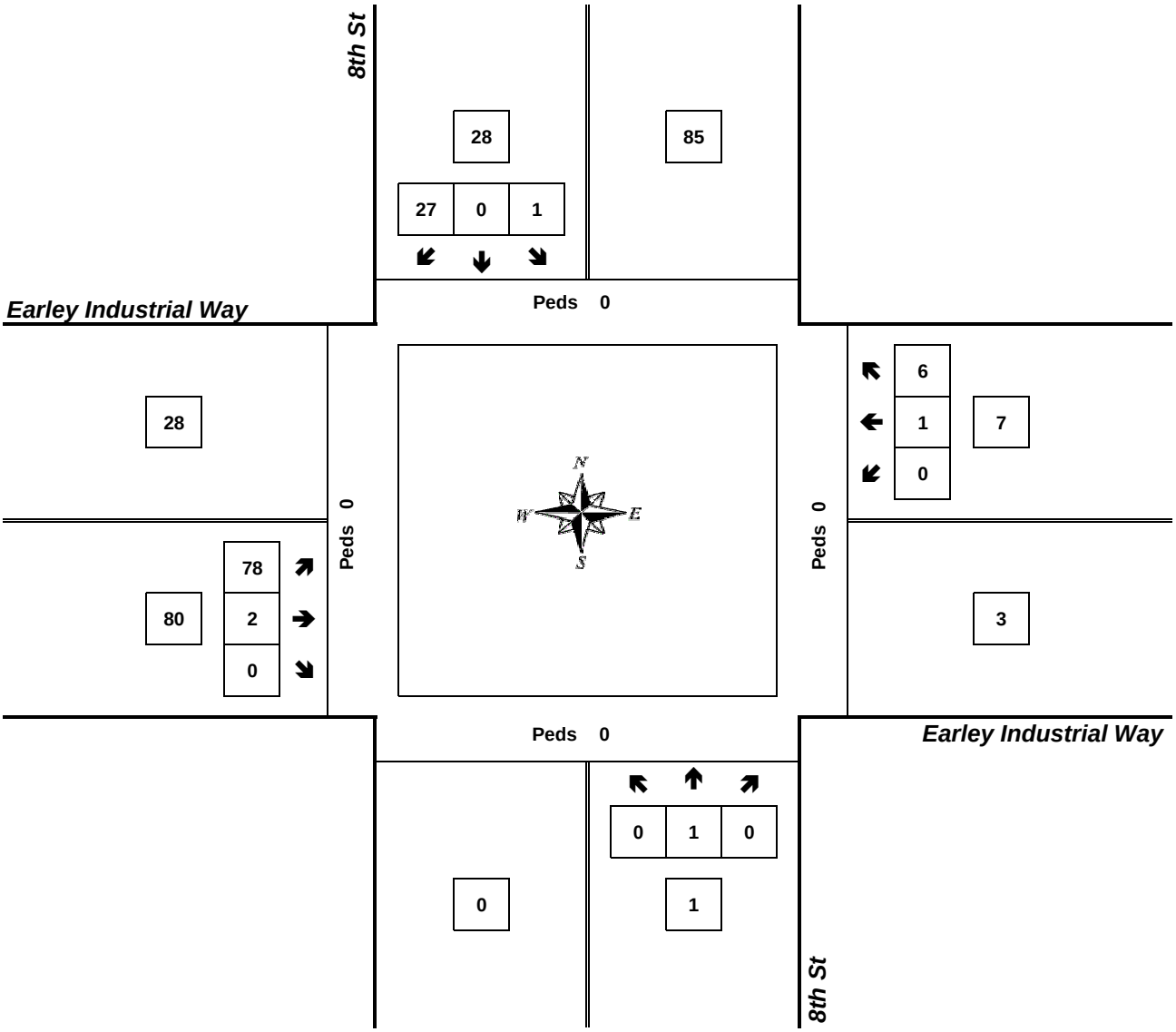
Interval Start Time	Northbound 8th St				Southbound 8th St				Eastbound Earley Industrial Way				Westbound Earley Industrial Way				Interval Total	Pedestrians Crosswalk			
	L	T	R	HV	L	T	R	HV	L	T	R	HV	L	T	R	HV		North	South	East	West
7:00 AM	0	0	0	0	2	0	18	9	48	3	0	1	0	0	1	0	72	0	0	0	0
7:15 AM	0	0	0	0	4	1	23	11	52	4	0	0	0	0	1	0	85	0	0	0	0
7:30 AM	0	0	0	0	5	1	29	12	54	3	0	0	0	0	1	0	93	0	0	0	0
7:45 AM	0	0	0	0	4	1	20	6	53	2	0	0	0	0	2	0	82	1	0	0	0
8:00 AM	0	0	0	0	3	1	18	4	46	1	0	1	0	0	2	0	71	1	0	0	0

Peak Hour Summary

Mark Skaggs
(206) 251-0300

8th St & Earley Industrial Way

4:15 PM to 5:15 PM
Thursday, March 07, 2013

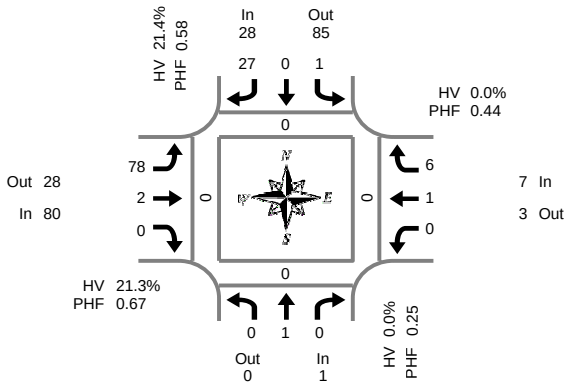


Approach	PHF	HV%	Volume
EB	0.67	21.3%	80
WB	0.44	0.0%	7
NB	0.25	0.0%	1
SB	0.58	21.4%	28
Intersection	0.78	19.8%	116

Count Period: 4:00 PM to 6:00 PM

Total Vehicle Summary

Mark Skaggs
(206) 251-0300



Peak Hour Summary
4:15 PM to 5:15 PM

8th St & Earley Industrial Way

Thursday, March 07, 2013
4:00 PM to 6:00 PM

15-Minute Interval Summary
4:00 PM to 6:00 PM

Interval Start Time	Northbound 8th St				Southbound 8th St				Eastbound Earley Industrial Way				Westbound Earley Industrial Way				Interval Total	Pedestrians Crosswalk			
	L	T	R	HV	L	T	R	HV	L	T	R	HV	L	T	R	HV		North	South	East	West
4:00 PM	0	0	0	0	0	0	7	1	17	0	0	1	0	0	0	0	24	0	0	0	0
4:15 PM	0	0	0	0	0	0	12	4	13	1	0	3	0	1	1	0	28	0	0	0	0
4:30 PM	0	0	0	0	1	0	6	2	18	1	0	5	0	0	0	0	26	0	0	0	0
4:45 PM	0	0	0	0	0	0	7	0	17	0	0	5	0	0	1	0	25	0	0	0	0
5:00 PM	0	1	0	0	0	0	2	0	30	0	0	4	0	0	4	0	37	0	0	0	0
5:15 PM	0	0	0	0	0	0	6	0	14	0	0	2	0	0	1	0	21	0	0	0	0
5:30 PM	0	1	0	0	2	0	6	1	13	0	0	1	0	0	1	0	23	0	0	0	0
5:45 PM	0	0	0	0	1	0	6	1	10	0	0	2	0	0	1	0	18	0	0	0	0
Total Survey	0	2	0	0	4	0	52	9	132	2	0	23	0	1	9	0	202	0	0	0	0

Peak Hour Summary
4:15 PM to 5:15 PM

By Approach	Northbound 8th St				Southbound 8th St				Eastbound Earley Industrial Way				Westbound Earley Industrial Way				Total	Pedestrians Crosswalk			
	In	Out	Total	HV	In	Out	Total	HV	In	Out	Total	HV	In	Out	Total	HV		North	South	East	West
Volume	1	0	1	0	28	85	113	6	80	28	108	17	7	3	10	0	116	0	0	0	0
%HV	0.0%				21.4%				21.3%				0.0%				19.8%				
PHF	0.25				0.58				0.67				0.44				0.78				

By Movement	Northbound 8th St				Southbound 8th St				Eastbound Earley Industrial Way				Westbound Earley Industrial Way				Total
	L	T	R	Total	L	T	R	Total	L	T	R	Total	L	T	R	Total	
Volume	0	1	0	1	1	0	27	28	78	2	0	80	0	1	6	7	116
PHF	0.00	0.25	0.00	0.25	0.25	0.00	0.56	0.58	0.65	0.50	0.00	0.67	0.00	0.25	0.38	0.44	0.78

Rolling Hour Summary
4:00 PM to 6:00 PM

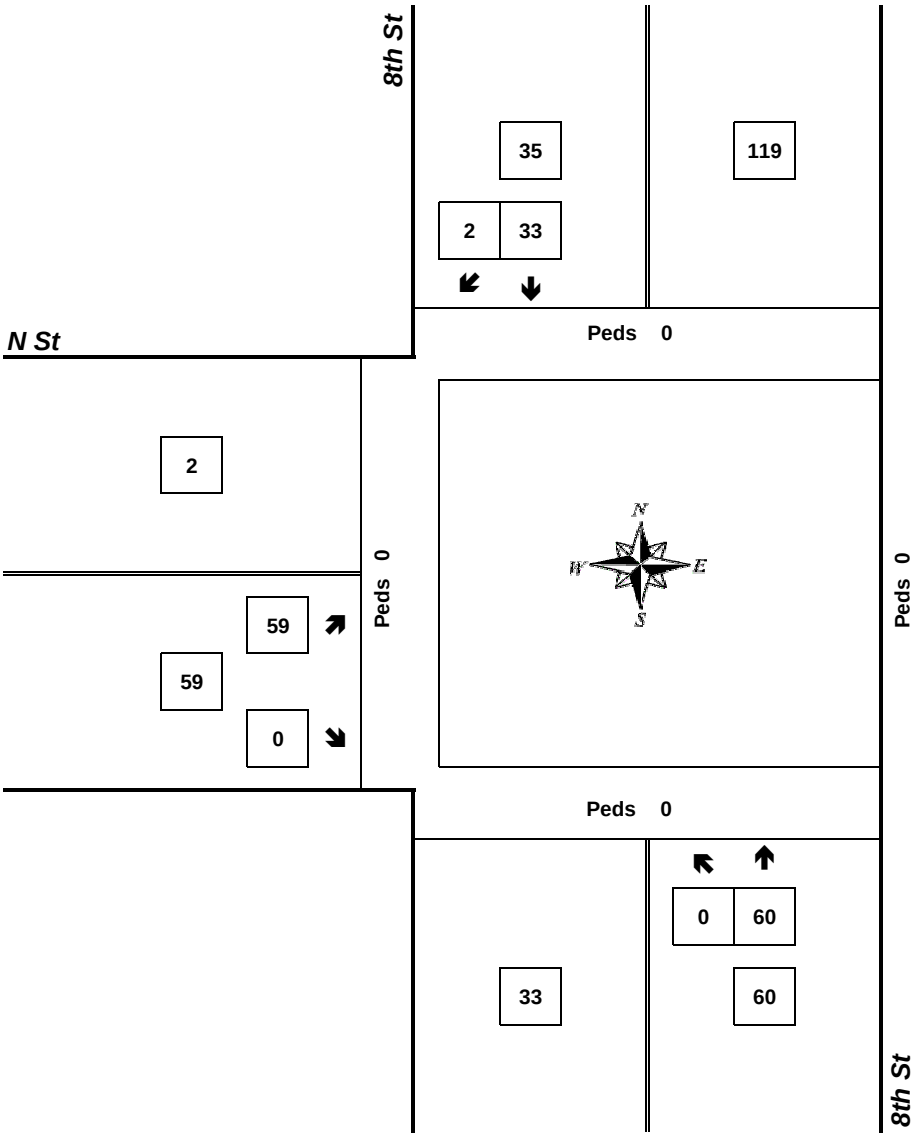
Interval Start Time	Northbound 8th St				Southbound 8th St				Eastbound Earley Industrial Way				Westbound Earley Industrial Way				Interval Total	Pedestrians Crosswalk			
	L	T	R	HV	L	T	R	HV	L	T	R	HV	L	T	R	HV		North	South	East	West
4:00 PM	0	0	0	0	1	0	32	7	65	2	0	14	0	1	2	0	103	0	0	0	0
4:15 PM	0	1	0	0	1	0	27	6	78	2	0	17	0	1	6	0	116	0	0	0	0
4:30 PM	0	1	0	0	1	0	21	2	79	1	0	16	0	0	6	0	109	0	0	0	0
4:45 PM	0	2	0	0	2	0	21	1	74	0	0	12	0	0	7	0	106	0	0	0	0
5:00 PM	0	2	0	0	3	0	20	2	67	0	0	9	0	0	7	0	99	0	0	0	0

Peak Hour Summary

Mark Skaggs
(206) 251-0300

8th St & N St

7:30 AM to 8:30 AM
Thursday, March 07, 2013

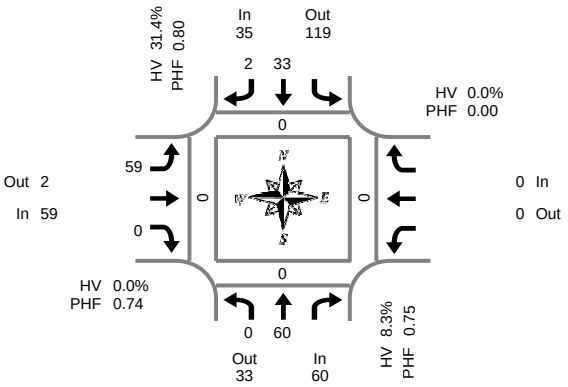


Approach	PHF	HV%	Volume
EB	0.74	0.0%	59
WB	0.00	0.0%	0
NB	0.75	8.3%	60
SB	0.80	31.4%	35
Intersection	0.88	10.4%	154

Count Period: 7:00 AM to 9:00 AM

Total Vehicle Summary

Mark Skaggs
(206) 251-0300



Peak Hour Summary
7:30 AM to 8:30 AM

8th St & N St

Thursday, March 07, 2013
7:00 AM to 9:00 AM

15-Minute Interval Summary
7:00 AM to 9:00 AM

Interval Start Time	Northbound 8th St				Southbound 8th St				Eastbound N St				Westbound N St				Interval Total	Pedestrians Crosswalk			
	L	T		HV		T	R	HV	L		R	HV						North	South	East	West
7:00 AM	0	5		1		1	1	1	7		0	0					14	0	0	0	1
7:15 AM	0	7		0		2	2	0	12		0	0					23	0	0	0	0
7:30 AM	0	20		0		8	0	5	16		0	0					44	0	0	0	0
7:45 AM	0	14		0		8	1	3	20		0	0					43	0	0	0	0
8:00 AM	0	13		2		7	0	1	10		0	0					30	0	0	0	0
8:15 AM	0	13		3		10	1	2	13		0	0					37	0	0	0	0
8:30 AM	0	17		2		3	3	0	7		0	0					30	0	0	0	0
8:45 AM	0	11		0		1	2	0	6		0	0					20	0	0	0	0
Total Survey	0	100		8		40	10	12	91		0	0					241	0	0	0	1

Peak Hour Summary
7:30 AM to 8:30 AM

By Approach	Northbound 8th St				Southbound 8th St				Eastbound N St				Westbound N St				Total	Pedestrians Crosswalk			
	In	Out	Total	HV	In	Out	Total	HV	In	Out	Total	HV	In	Out	Total			North	South	East	West
Volume	60	33	93	5	35	119	154	11	59	2	61	0	0	0	0		154	0	0	0	0
%HV	8.3%				31.4%				0.0%				0.0%				10.4%				
PHF	0.75				0.80				0.74				0.00				0.88				

By Movement	Northbound 8th St				Southbound 8th St				Eastbound N St				Westbound N St				Total
	L	T		Total		T	R	Total	L		R	Total				Total	
Volume	0	60		60		33	2	35	59		0	59				0	154
PHF	0.00	0.75		0.75		0.83	0.50	0.80	0.74		0.00	0.74				0.00	0.88

Rolling Hour Summary
7:00 AM to 9:00 AM

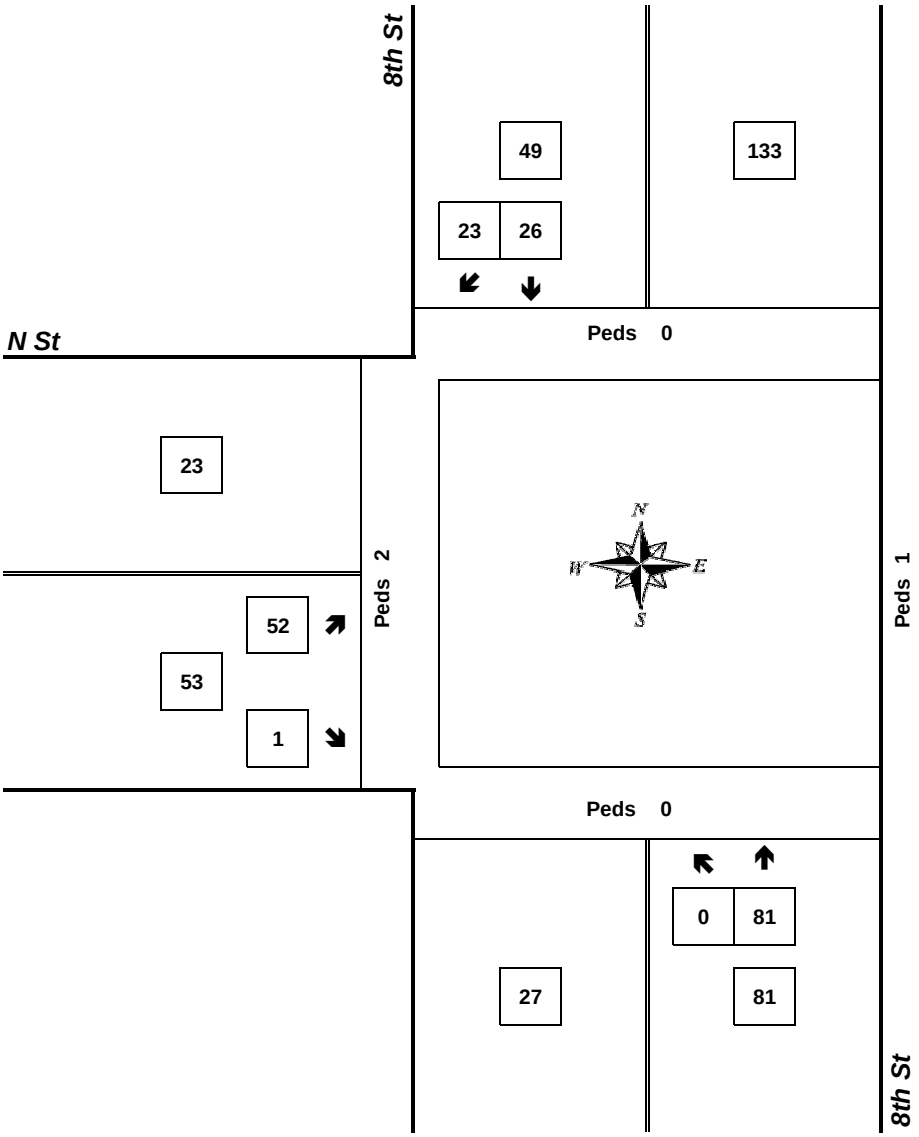
Interval Start Time	Northbound 8th St				Southbound 8th St				Eastbound N St				Westbound N St				Interval Total	Pedestrians Crosswalk			
	L	T		HV		T	R	HV	L		R	HV						North	South	East	West
7:00 AM	0	46		1		19	4	9	55		0	0					124	0	0	0	1
7:15 AM	0	54		2		25	3	9	58		0	0					140	0	0	0	0
7:30 AM	0	60		5		33	2	11	59		0	0					154	0	0	0	0
7:45 AM	0	57		7		28	5	6	50		0	0					140	0	0	0	0
8:00 AM	0	54		7		21	6	3	36		0	0					117	0	0	0	0

Peak Hour Summary

Mark Skaggs
(206) 251-0300

8th St & N St

5:00 PM to 6:00 PM
Thursday, March 07, 2013

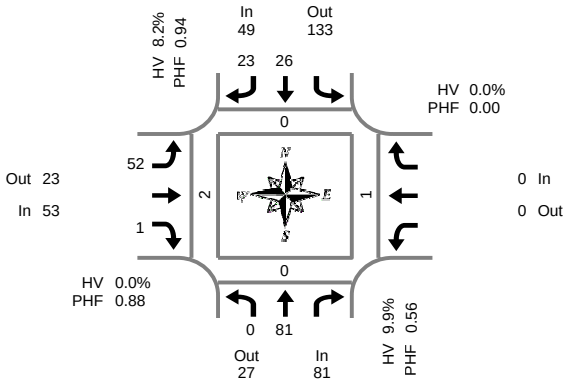


Approach	PHF	HV%	Volume
EB	0.88	0.0%	53
WB	0.00	0.0%	0
NB	0.56	9.9%	81
SB	0.94	8.2%	49
Intersection	0.76	6.6%	183

Count Period: 4:00 PM to 6:00 PM

Total Vehicle Summary

Mark Skaggs
(206) 251-0300



Peak Hour Summary
5:00 PM to 6:00 PM

8th St & N St

Thursday, March 07, 2013
4:00 PM to 6:00 PM

15-Minute Interval Summary
4:00 PM to 6:00 PM

Interval Start Time	Northbound 8th St				Southbound 8th St				Eastbound N St				Westbound N St				Interval Total	Pedestrians Crosswalk			
	L	T		HV		T	R	HV	L		R	HV						North	South	East	West
4:00 PM	0	21		1		5	4	2	8		0	0					38	0	0	0	0
4:15 PM	0	11		4		10	4	4	8		1	0					34	0	0	0	0
4:30 PM	0	21		6		10	3	2	9		0	0					43	0	0	0	0
4:45 PM	0	15		0		7	7	0	5		0	0					34	0	0	0	0
5:00 PM	0	36		6		3	9	0	11		1	0					60	0	0	0	0
5:15 PM	0	15		1		6	7	0	15		0	0					43	0	0	0	1
5:30 PM	0	17		0		9	3	2	15		0	0					44	0	0	0	1
5:45 PM	0	13		1		8	4	2	11		0	0					36	0	0	1	0
Total Survey	0	149		19		58	41	12	82		2	0					332	0	0	1	2

Peak Hour Summary
5:00 PM to 6:00 PM

By Approach	Northbound 8th St				Southbound 8th St				Eastbound N St				Westbound N St				Total	Pedestrians Crosswalk			
	In	Out	Total	HV	In	Out	Total	HV	In	Out	Total	HV	In	Out	Total			North	South	East	West
Volume	81	27	108	8	49	133	182	4	53	23	76	0	0	0	0		183	0	0	1	2
%HV	9.9%				8.2%				0.0%				0.0%				6.6%				
PHF	0.56				0.94				0.88				0.00				0.76				

By Movement	Northbound 8th St				Southbound 8th St				Eastbound N St				Westbound N St				Total
	L	T		Total		T	R	Total	L		R	Total				Total	
Volume	0	81		81		26	23	49	52		1	53				0	183
PHF	0.00	0.56		0.56		0.72	0.64	0.94	0.87		0.25	0.88				0.00	0.76

Rolling Hour Summary
4:00 PM to 6:00 PM

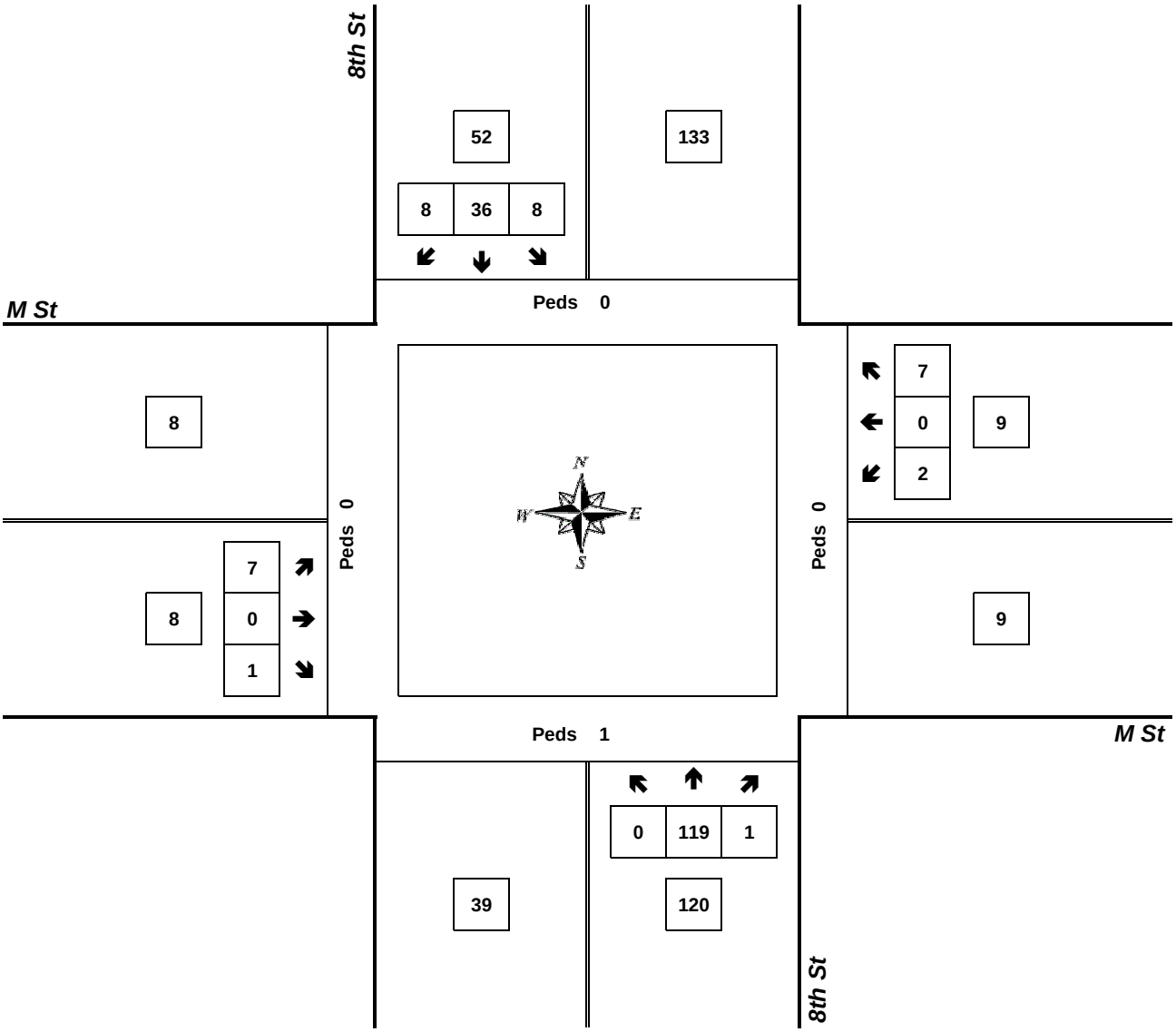
Interval Start Time	Northbound 8th St				Southbound 8th St				Eastbound N St				Westbound N St				Interval Total	Pedestrians Crosswalk			
	L	T		HV		T	R	HV	L		R	HV						North	South	East	West
4:00 PM	0	68		11		32	18	8	30		1	0					149	0	0	0	0
4:15 PM	0	83		16		30	23	6	33		2	0					171	0	0	0	0
4:30 PM	0	87		13		26	26	2	40		1	0					180	0	0	0	1
4:45 PM	0	83		7		25	26	2	46		1	0					181	0	0	0	2
5:00 PM	0	81		8		26	23	4	52		1	0					183	0	0	1	2

Peak Hour Summary

Mark Skaggs
(206) 251-0300

8th St & M St

7:30 AM to 8:30 AM
Thursday, March 07, 2013

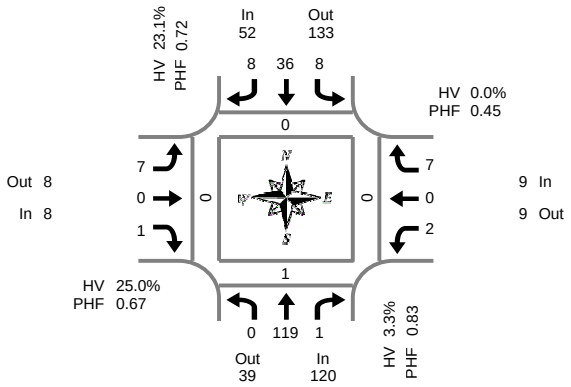


Approach	PHF	HV%	Volume
EB	0.67	25.0%	8
WB	0.45	0.0%	9
NB	0.83	3.3%	120
SB	0.72	23.1%	52
Intersection	0.89	9.5%	189

Count Period: 7:00 AM to 9:00 AM

Total Vehicle Summary

Mark Skaggs
(206) 251-0300



Peak Hour Summary
7:30 AM to 8:30 AM

8th St & M St

Thursday, March 07, 2013
7:00 AM to 9:00 AM

15-Minute Interval Summary
7:00 AM to 9:00 AM

Interval Start Time	Northbound 8th St				Southbound 8th St				Eastbound M St				Westbound M St				Interval Total	Pedestrians Crosswalk			
	L	T	R	HV	L	T	R	HV	L	T	R	HV	L	T	R	HV		North	South	East	West
7:00 AM	0	15	0	2	2	1	0	2	0	0	0	1	0	0	0	0	18	0	0	0	0
7:15 AM	1	18	0	0	0	5	2	0	3	0	0	0	0	0	0	0	29	0	0	0	0
7:30 AM	0	36	0	0	2	9	3	5	2	0	1	0	0	0	0	0	53	0	0	0	0
7:45 AM	0	33	1	0	1	9	0	3	0	0	0	1	0	0	0	0	44	0	0	0	0
8:00 AM	0	24	0	2	3	6	1	1	2	0	0	1	0	0	5	0	41	0	0	0	0
8:15 AM	0	26	0	2	2	12	4	3	3	0	0	0	2	0	2	0	51	0	1	0	0
8:30 AM	0	27	0	3	1	6	2	0	5	1	0	0	0	1	0	0	43	0	0	0	0
8:45 AM	0	19	1	0	0	4	6	0	2	1	0	0	0	0	1	0	34	0	0	0	0
Total Survey	1	198	2	9	11	52	18	14	17	2	1	3	2	1	8	0	313	0	1	0	0

Peak Hour Summary
7:30 AM to 8:30 AM

By Approach	Northbound 8th St				Southbound 8th St				Eastbound M St				Westbound M St				Total
	In	Out	Total	HV	In	Out	Total	HV	In	Out	Total	HV	In	Out	Total	HV	
Volume	120	39	159	4	52	133	185	12	8	8	16	2	9	9	18	0	189
%HV	3.3%				23.1%				25.0%				0.0%				9.5%
PHF	0.83				0.72				0.67				0.45				0.89

Pedestrians Crosswalk			
North	South	East	West
0	1	0	0

By Movement	Northbound 8th St				Southbound 8th St				Eastbound M St				Westbound M St				Total
	L	T	R	Total	L	T	R	Total	L	T	R	Total	L	T	R	Total	
Volume	0	119	1	120	8	36	8	52	7	0	1	8	2	0	7	9	189
PHF	0.00	0.83	0.25	0.83	0.67	0.75	0.50	0.72	0.58	0.00	0.25	0.67	0.25	0.00	0.35	0.45	0.89

Rolling Hour Summary
7:00 AM to 9:00 AM

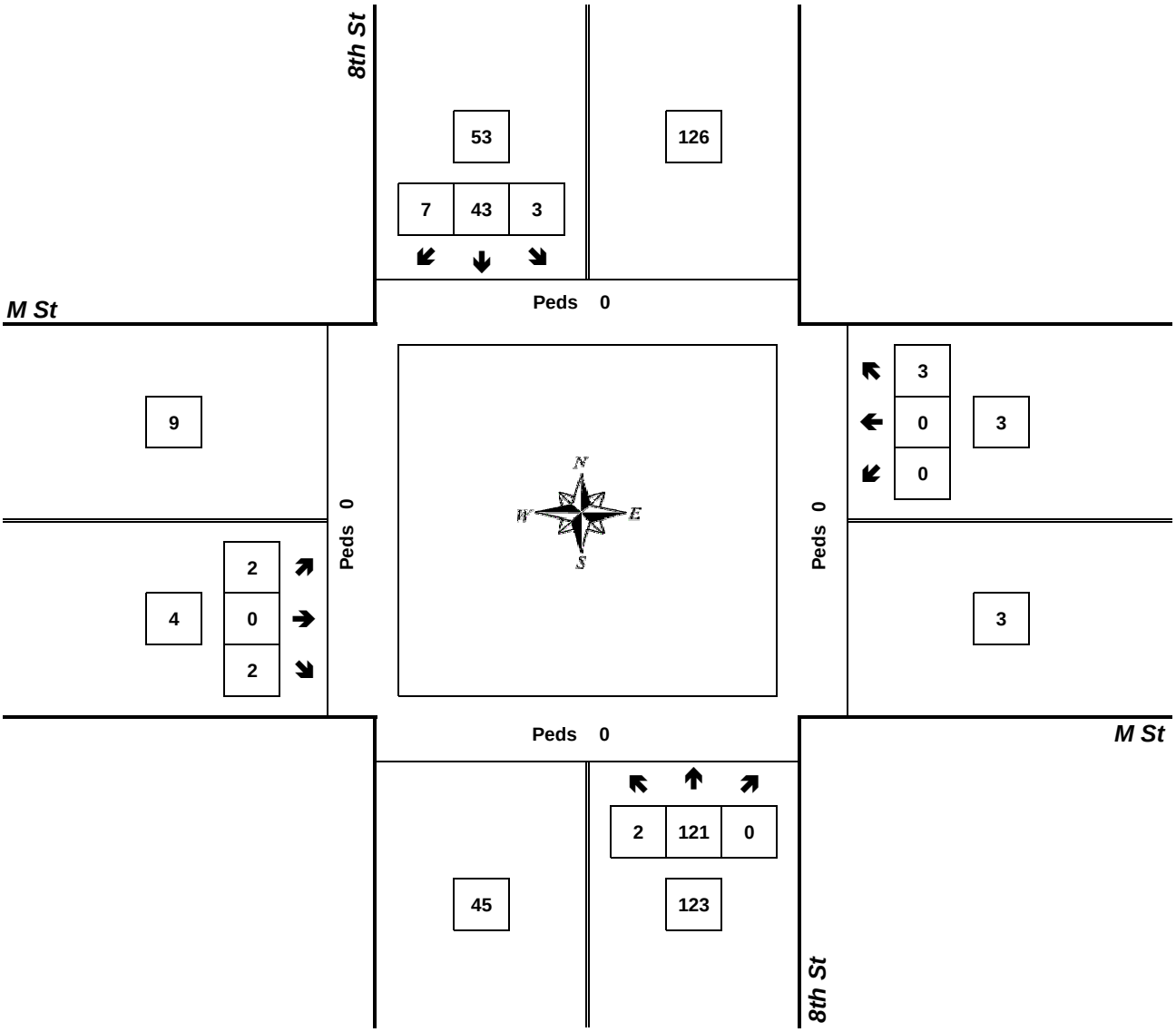
Interval Start Time	Northbound 8th St				Southbound 8th St				Eastbound M St				Westbound M St				Interval Total	Pedestrians Crosswalk			
	L	T	R	HV	L	T	R	HV	L	T	R	HV	L	T	R	HV		North	South	East	West
7:00 AM	1	102	1	2	5	24	5	10	5	0	1	2	0	0	0	0	144	0	0	0	0
7:15 AM	1	111	1	2	6	29	6	9	7	0	1	2	0	0	5	0	167	0	0	0	0
7:30 AM	0	119	1	4	8	36	8	12	7	0	1	2	2	0	7	0	189	0	1	0	0
7:45 AM	0	110	1	7	7	33	7	7	10	1	0	2	2	1	7	0	179	0	1	0	0
8:00 AM	0	96	1	7	6	28	13	4	12	2	0	1	2	1	8	0	169	0	1	0	0

Peak Hour Summary

Mark Skaggs
(206) 251-0300

8th St & M St

5:00 PM to 6:00 PM
Thursday, March 07, 2013

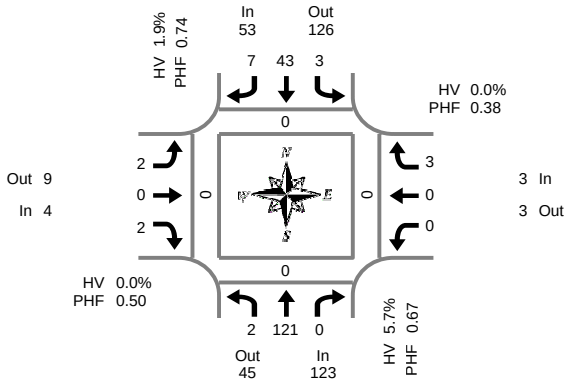


Approach	PHF	HV%	Volume
EB	0.50	0.0%	4
WB	0.38	0.0%	3
NB	0.67	5.7%	123
SB	0.74	1.9%	53
Intersection	0.73	4.4%	183

Count Period: 4:00 PM to 6:00 PM

Total Vehicle Summary

Mark Skaggs
(206) 251-0300



Peak Hour Summary
5:00 PM to 6:00 PM

8th St & M St

Thursday, March 07, 2013
4:00 PM to 6:00 PM

15-Minute Interval Summary
4:00 PM to 6:00 PM

Interval Start Time	Northbound 8th St				Southbound 8th St				Eastbound M St				Westbound M St				Interval Total	Pedestrians Crosswalk			
	L	T	R	HV	L	T	R	HV	L	T	R	HV	L	T	R	HV		North	South	East	West
4:00 PM	1	33	1	1	3	11	6	1	0	0	0	0	0	0	1	0	56	0	0	0	1
4:15 PM	0	25	0	4	1	17	3	4	4	0	1	0	0	0	3	0	54	0	0	0	0
4:30 PM	0	29	0	5	1	11	3	2	0	0	0	0	0	0	0	0	44	0	0	0	0
4:45 PM	0	10	0	0	1	8	2	0	2	0	0	0	1	0	0	0	24	0	0	0	0
5:00 PM	1	14	0	0	0	8	0	0	0	0	0	0	0	0	0	0	23	0	0	0	0
5:15 PM	1	45	0	6	2	10	2	0	0	0	1	0	0	0	2	0	63	0	0	0	0
5:30 PM	0	30	0	1	1	13	4	0	2	0	0	0	0	0	1	0	51	0	0	0	0
5:45 PM	0	32	0	0	0	12	1	1	0	0	1	0	0	0	0	0	46	0	0	0	0
Total Survey	3	218	1	17	9	90	21	8	8	0	3	0	1	0	7	0	361	0	0	0	1

Peak Hour Summary
5:00 PM to 6:00 PM

By Approach	Northbound 8th St				Southbound 8th St				Eastbound M St				Westbound M St				Total
	In	Out	Total	HV	In	Out	Total	HV	In	Out	Total	HV	In	Out	Total	HV	
Volume	123	45	168	7	53	126	179	1	4	9	13	0	3	3	6	0	183
%HV	5.7%				1.9%				0.0%				0.0%				4.4%
PHF	0.67				0.74				0.50				0.38				0.73

Pedestrians Crosswalk			
North	South	East	West
0	0	0	0

By Movement	Northbound 8th St				Southbound 8th St				Eastbound M St				Westbound M St				Total
	L	T	R	Total	L	T	R	Total	L	T	R	Total	L	T	R	Total	
Volume	2	121	0	123	3	43	7	53	2	0	2	4	0	0	3	3	183
PHF	0.50	0.67	0.00	0.67	0.38	0.83	0.44	0.74	0.25	0.00	0.50	0.50	0.00	0.00	0.38	0.38	0.73

Rolling Hour Summary
4:00 PM to 6:00 PM

Interval Start Time	Northbound 8th St				Southbound 8th St				Eastbound M St				Westbound M St				Interval Total	Pedestrians Crosswalk			
	L	T	R	HV	L	T	R	HV	L	T	R	HV	L	T	R	HV		North	South	East	West
4:00 PM	1	97	1	10	6	47	14	7	6	0	1	0	1	0	4	0	178	0	0	0	1
4:15 PM	1	78	0	9	3	44	8	6	6	0	1	0	1	0	3	0	145	0	0	0	0
4:30 PM	2	98	0	11	4	37	7	2	2	0	1	0	1	0	2	0	154	0	0	0	0
4:45 PM	2	99	0	7	4	39	8	0	4	0	1	0	1	0	3	0	161	0	0	0	0
5:00 PM	2	121	0	7	3	43	7	1	2	0	2	0	0	0	3	0	183	0	0	0	0

Appendix B: Intersection Analysis Results

Intersection	
Intersection Delay (sec/veh):	0.6

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Volume (vph)	10	220	105	5	10	5
Conflicting Peds.(#/hr)	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
Right Turn Channelized	None	None	None	None	None	None
Storage Length	200			100	250	0
Median Width		12	0		12	
Grade (%)		0%	0%		0%	
Peak Hour Factor	0.80	0.80	0.80	0.80	0.80	0.80
Heavy Vehicles(%)	10	10	10	10	10	10
Movement Flow Rate	12	275	131	6	12	6
Number of Lanes	1	1	1	1	1	1

Major/Minor		Major 1	Major 2			
Conflicting Flow Rate - All	137	0	0	0	435	69
Stage 1	-	-	-	-	134	-
Stage 2	-	-	-	-	301	-
Follow-up Headway	2.29	-	-	-	3.59	3.39
Pot Capacity-1 Maneuver	1399	-	-	-	564	972
Stage 1	-	-	-	-	873	-
Stage 2	-	-	-	-	733	-
Time blocked-Platoon(%)	0	-	-	-	0	0
Mov Capacity-1 Maneuver	1399	-	-	-	559	972
Mov Capacity-2 Maneuver	-	-	-	-	559	-
Stage 1	-	-	-	-	873	-
Stage 2	-	-	-	-	726	-

Approach	EB	WB	SB
HCM Control Delay (s)	0.3	0	10.6
HCM LOS	A	A	B

Lane	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (vph)					559	972
HCM Control Delay (s)	7.596	-	-	-	11.6	8.7
HCM Lane VC Ratio	0.009	-	-	-	0.022	0.006
HCM Lane LOS	A	-	-	-	B	A
HCM 95th Percentile Queue (veh)	0.027	-	-	-	0.069	0.019

Intersection	
Intersection Delay (sec/veh):	0.4

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Volume (vph)	190	35	5	110	5	5
Conflicting Peds.(#/hr)	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
Right Turn Channelized	None	None	None	None	None	None
Storage Length		450	150		0	0
Median Width	12			12	12	
Grade (%)	0%			0%	0%	
Peak Hour Factor	0.80	0.80	0.80	0.80	0.80	0.80
Heavy Vehicles(%)	10	10	10	10	10	10
Movement Flow Rate	237	44	6	137	6	6
Number of Lanes	1	1	1	1	1	0

Major/Minor	Major 1			Major 2		
Conflicting Flow Rate - All	0	0	282	0	410	141
Stage 1	-	-	-	-	260	-
Stage 2	-	-	-	-	150	-
Follow-up Headway	-	-	2.29	-	3.59	3.39
Pot Capacity-1 Maneuver	-	-	1236	-	583	886
Stage 1	-	-	-	-	765	-
Stage 2	-	-	-	-	859	-
Time blocked-Platoon(%)	-	-	0	-	0	0
Mov Capacity-1 Maneuver	-	-	1236	-	580	886
Mov Capacity-2 Maneuver	-	-	-	-	580	-
Stage 1	-	-	-	-	765	-
Stage 2	-	-	-	-	855	-

Approach	EB	WB	NB
HCM Control Delay (s)	0	0.3	10.2
HCM LOS	A	A	B

Lane	NBLn1	EBT	EBR	WBL	WBT
Capacity (vph)	701				
HCM Control Delay (s)	10.2	-	-	7.927	-
HCM Lane VC Ratio	0.018	-	-	0.005	-
HCM Lane LOS	B	-	-	A	-
HCM 95th Percentile Queue (veh)	0.054	-	-	0.015	-

Intersection	
Intersection Delay (sec/veh):	1.7

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Volume (vph)	20	180	110	100	45	5
Conflicting Peds.(#/hr)	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
Right Turn Channelized	None	None	None	None	None	None
Storage Length	125			0	0	0
Median Width		12	12		12	
Grade (%)		0%	0%		0%	
Peak Hour Factor	0.80	0.80	0.80	0.80	0.80	0.80
Heavy Vehicles(%)	10	10	10	10	10	10
Movement Flow Rate	25	225	137	125	56	6
Number of Lanes	1	1	1	0	1	0

Major/Minor	Major 1		Major 2			
Conflicting Flow Rate - All	263	0	0	0	476	201
Stage 1	-	-	-	-	201	-
Stage 2	-	-	-	-	275	-
Follow-up Headway	2.29	-	-	-	3.59	3.39
Pot Capacity-1 Maneuver	1258	-	-	-	538	832
Stage 1	-	-	-	-	821	-
Stage 2	-	-	-	-	753	-
Time blocked-Platoon(%)	2	-	-	-	2	2
Mov Capacity-1 Maneuver	1258	-	-	-	527	832
Mov Capacity-2 Maneuver	-	-	-	-	527	-
Stage 1	-	-	-	-	821	-
Stage 2	-	-	-	-	738	-

Approach	EB	WB	SB
HCM Control Delay (s)	0.8	0	12.4
HCM LOS	A	A	B

Lane	EBL	EBT	WBT	WBR	SBLn1
Capacity (vph)					547
HCM Control Delay (s)	7.92	-	-	-	12.4
HCM Lane VC Ratio	0.02	-	-	-	0.114
HCM Lane LOS	A	-	-	-	B
HCM 95th Percentile Queue (veh)	0.061	-	-	-	0.385

HCM 2010 Signalized Intersection Summary
4: Adams Street & SR 109

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	15	245	5	5	285	65	20	15	5	90	25	15
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Queue, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	0.99		0.99	0.99		0.99	0.99		0.99
Parking, Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow Rate	1727	1727	1727	1727	1727	1727	1727	1727	1727	1727	1727	1727
Lanes	0	1	0	0	1	0	0	1	0	0	1	0
Capacity, veh/h	109	632	12	94	540	122	324	215	58	374	95	41
Arriving On Green	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40
Sat Flow, veh/h	93.2	1417.7	31.1	23.4	1308.6	303.8	577.6	352.3	144.4	619.6	164.1	103.3
Grp Volume(v), veh/h	331.3	0.0	0.0	443.8	0.0	0.0	50.0	0.0	0.0	162.5	0.0	0.0
Grp Sat Flow(s),veh/h/ln	1645.7	0.0	0.0	1659.1	0.0	0.0	1155.2	0.0	0.0	895.0	0.0	0.0
Q Serve(g_s), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.7	0.0	0.0
Cycle Q Clear(g_c), s	5.7	0.0	0.0	8.7	0.0	0.0	0.7	0.0	0.0	4.6	0.0	0.0
Proportion In Lane	0.057		0.019	0.014		0.183	0.500		0.125	0.692		0.115
Lane Grp Cap(c), veh/h	753.4	0.0	0.0	754.9	0.0	0.0	597.1	0.0	0.0	510.3	0.0	0.0
V/C Ratio(X)	0.440	0.000	0.000	0.588	0.000	0.000	0.084	0.000	0.000	0.318	0.000	0.000
Avail Cap(c_a), veh/h	753.4	0.0	0.0	754.9	0.0	0.0	597.1	0.0	0.0	510.3	0.0	0.0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.000	0.000	0.000	1.000	0.000	0.000	1.000	0.000	0.000	1.000	0.000	0.000
Uniform Delay (d), s/veh	8.9	0.0	0.0	9.8	0.0	0.0	7.4	0.0	0.0	7.6	0.0	0.0
Incr Delay (d2), s/veh	1.9	0.0	0.0	3.3	0.0	0.0	0.3	0.0	0.0	1.6	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Lane Group Delay (d), s/veh	10.8	0.0	0.0	13.1	0.0	0.0	7.7	0.0	0.0	9.3	0.0	0.0
Lane Group LOS	B			B			A			A		
Approach Volume, veh/h		331			444			50			162	
Approach Delay, s/veh		10.8			13.1			7.7			9.3	
Approach LOS		B			B			A			A	

Timer				
Assigned Phase	4	8	2	6
Phase Duration (G+Y+Rc), s	20.00	20.00	20.00	20.00
Change Period (Y+Rc), s	4.00	4.00	4.00	4.00
Max Green Setting (Gmax), s	16.00	16.00	16.00	16.00
Max Q Clear Time (g_c+I1), s	7.72	10.68	2.73	6.60
Green Extension Time (p_c)	3.17	2.29	0.96	0.78

Intersection Summary	
HCM 2010 Control Delay	11.4
HCM 2010 Level of Service	B

Intersection	
Intersection Delay (sec/veh):	3.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Volume (vph)	5	5	5	5	5	5	5	15	5	5	40	5
Conflicting Peds.(#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
Right Turn Channelized	None	None	None	None	None	None	None	None	None	None	None	None
Storage Length	0		0	0		0	0		0	0		0
Median Width		0			0			0			0	
Grade (%)		0%			0%			0%			0%	
Peak Hour Factor	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80
Heavy Vehicles(%)	10	10	10	10	10	10	10	10	10	10	10	10
Movement Flow Rate	6	6	6	6	6	6	6	19	6	6	50	6
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Major/Minor		Minor 2			Minor 1			Major 1			Major 2	
Conflicting Flow Rate - All	105	102	53	105	102	22	56	0	0	25	0	0
Stage 1	65	65	-	34	34	-	-	-	-	-	-	-
Stage 2	40	37	-	71	68	-	-	-	-	-	-	-
Follow-up Headway	3.59	4.09	3.39	3.59	4.09	3.39	2.29	-	-	2.29	-	-
Pot Capacity-1 Maneuver	856	773	992	856	773	1032	1499	-	-	1539	-	-
Stage 1	926	825	-	962	851	-	-	-	-	-	-	-
Stage 2	955	849	-	919	823	-	-	-	-	-	-	-
Time blocked-Platoon(%)	0	0	0	0	0	0	0	-	-	0	-	-
Mov Capacity-1 Maneuver	840	767	992	840	767	1032	1499	-	-	1539	-	-
Mov Capacity-2 Maneuver	840	767	-	840	767	-	-	-	-	-	-	-
Stage 1	922	822	-	958	848	-	-	-	-	-	-	-
Stage 2	938	846	-	903	820	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay (s)	9.3	9.2	1.5	0.7
HCM LOS	A	A	A	A

Lane	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (vph)				857	866			
HCM Control Delay (s)	7.412	0	-	9.3	9.2	7.349	0	-
HCM Lane VC Ratio	0.004	-	-	0.022	0.022	0.004	-	-
HCM Lane LOS	A	A	-	A	A	A	A	-
HCM 95th Percentile Queue (veh)	0.013	-	-	0.067	0.066	0.012	-	-

Intersection	
Intersection Delay (sec/veh):	2.6

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Volume (vph)	10	5	10	5	5	30
Conflicting Peds.(#/hr)	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
Right Turn Channelized	None	None	None	None	None	None
Storage Length	0	0		0	0	
Median Width	12		0			0
Grade (%)	0%		0%			0%
Peak Hour Factor	0.80	0.80	0.80	0.80	0.80	0.80
Heavy Vehicles(%)	10	10	10	10	10	10
Movement Flow Rate	12	6	12	6	6	37
Number of Lanes	1	0	1	0	0	1

Major/Minor			Major 1			Major 2
Conflicting Flow Rate - All	66	16	0	0	19	0
Stage 1	16	-	-	-	-	-
Stage 2	50	-	-	-	-	-
Follow-up Headway	3.59	3.39	-	-	2.29	-
Pot Capacity-1 Maneuver	920	1040	-	-	1547	-
Stage 1	986	-	-	-	-	-
Stage 2	952	-	-	-	-	-
Time blocked-Platoon(%)	0	0	-	-	0	-
Mov Capacity-1 Maneuver	916	1040	-	-	1547	-
Mov Capacity-2 Maneuver	916	-	-	-	-	-
Stage 1	986	-	-	-	-	-
Stage 2	948	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay (s)	8.8	0	1
HCM LOS	A	A	A

Lane	NBT	NBR	WBLn1	SBL	SBT
Capacity (vph)			954		
HCM Control Delay (s)	-	-	8.8	7.337	-
HCM Lane VC Ratio	-	-	0.02	0.004	-
HCM Lane LOS	-	-	A	A	-
HCM 95th Percentile Queue (veh)	-	-	0.06	0.012	-

Intersection	
Intersection Delay (sec/veh):	4

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Volume (vph)	5	35	15	5	5	30
Conflicting Peds.(#/hr)	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
Right Turn Channelized	None	None	None	None	None	None
Storage Length	0	0		0	0	
Median Width	12		0			0
Grade (%)	0%		0%			0%
Peak Hour Factor	0.80	0.80	0.80	0.80	0.80	0.80
Heavy Vehicles(%)	10	10	10	10	10	10
Movement Flow Rate	6	44	19	6	6	37
Number of Lanes	1	0	1	0	0	1

Major/Minor			Major 1			Major 2
Conflicting Flow Rate - All	72	22	0	0	25	0
Stage 1	22	-	-	-	-	-
Stage 2	50	-	-	-	-	-
Follow-up Headway	3.59	3.39	-	-	2.29	-
Pot Capacity-1 Maneuver	913	1032	-	-	1539	-
Stage 1	980	-	-	-	-	-
Stage 2	952	-	-	-	-	-
Time blocked-Platoon(%)	0	0	-	-	0	-
Mov Capacity-1 Maneuver	909	1032	-	-	1539	-
Mov Capacity-2 Maneuver	909	-	-	-	-	-
Stage 1	980	-	-	-	-	-
Stage 2	948	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay (s)	8.7	0	1
HCM LOS	A	A	A

Lane	NBT	NBR	WBLn1	SBL	SBT
Capacity (vph)			1015		
HCM Control Delay (s)	-	-	8.7	7.349	-
HCM Lane VC Ratio	-	-	0.049	0.004	-
HCM Lane LOS	-	-	A	A	-
HCM 95th Percentile Queue (veh)	-	-	0.155	0.012	-

Intersection	
Intersection Delay (sec/veh):	7.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Volume (vph)	5	5	5	20	5	5	5	10	60	5	20	5
Conflicting Peds.(#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
Right Turn Channelized	None	None	None	None	None	None	None	None	None	None	None	None
Storage Length	0		0	0		0	0		0	0		0
Median Width		0			0			0			0	
Grade (%)		0%			0%			0%			0%	
Peak Hour Factor	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80
Heavy Vehicles(%)	10	10	10	10	10	10	10	10	10	10	10	10
Movement Flow Rate	6	6	6	25	6	6	6	12	75	6	25	6
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Major/Minor	Major 1			Major 2			Minor 1			Minor 2		
Conflicting Flow Rate - All	12	0	0	12	0	0	96	83	9	124	83	9
Stage 1	-	-	-	-	-	-	21	21	-	59	59	-
Stage 2	-	-	-	-	-	-	75	62	-	65	24	-
Follow-up Headway	2.29	-	-	2.29	-	-	3.59	4.09	3.39	3.59	4.09	3.39
Pot Capacity-1 Maneuver	1556	-	-	1556	-	-	868	792	1050	832	792	1050
Stage 1	-	-	-	-	-	-	977	862	-	933	830	-
Stage 2	-	-	-	-	-	-	915	828	-	926	860	-
Time blocked-Platoon(%)	0	-	-	0	-	-	0	0	0	0	0	0
Mov Capacity-1 Maneuver	1556	-	-	1556	-	-	829	776	1050	751	776	1050
Mov Capacity-2 Maneuver	-	-	-	-	-	-	829	776	-	751	776	-
Stage 1	-	-	-	-	-	-	973	859	-	929	817	-
Stage 2	-	-	-	-	-	-	868	815	-	844	857	-

Approach	EB	WB	NB	SB
HCM Control Delay (s)	2.4	4.9	9	9.7
HCM LOS	A	A	A	A

Lane	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (vph)	986							807
HCM Control Delay (s)	9	7.323	0	-	7.351	0	-	9.7
HCM Lane VC Ratio	0.095	0.004	-	-	0.016	-	-	0.046
HCM Lane LOS	A	A	A	-	A	A	-	A
HCM 95th Percentile Queue (veh)	0.314	0.012	-	-	0.049	-	-	0.146

Intersection	
Intersection Delay (sec/veh):	4.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Volume (vph)	10	5	5	5	5	5	5	10	5	5	25	10
Conflicting Peds.(#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
Right Turn Channelized	None	None	None	None	None	None	None	None	None	None	None	None
Storage Length	0		0	0		0	0		0	0		0
Median Width		0			0			0			0	
Grade (%)		0%			0%			0%			0%	
Peak Hour Factor	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80
Heavy Vehicles(%)	10	10	10	10	10	10	10	10	10	10	10	10
Movement Flow Rate	12	6	6	6	6	6	6	12	6	6	31	12
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Major/Minor	Minor 2			Minor 1			Major 1			Major 2		
Conflicting Flow Rate - All	84	81	38	84	84	16	44	0	0	19	0	0
Stage 1	50	50	-	28	28	-	-	-	-	-	-	-
Stage 2	34	31	-	56	56	-	-	-	-	-	-	-
Follow-up Headway	3.59	4.09	3.39	3.59	4.09	3.39	2.29	-	-	2.29	-	-
Pot Capacity-1 Maneuver	884	795	1012	884	791	1040	1514	-	-	1547	-	-
Stage 1	943	838	-	969	856	-	-	-	-	-	-	-
Stage 2	962	854	-	936	833	-	-	-	-	-	-	-
Time blocked-Platoon(%)	0	0	0	0	0	0	0	-	-	0	-	-
Mov Capacity-1 Maneuver	868	789	1012	868	785	1040	1514	-	-	1547	-	-
Mov Capacity-2 Maneuver	868	789	-	868	785	-	-	-	-	-	-	-
Stage 1	939	835	-	965	853	-	-	-	-	-	-	-
Stage 2	945	851	-	920	830	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay (s)	9.2	9.2	1.8	0.9
HCM LOS	A	A	A	A

Lane	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (vph)				877	886			
HCM Control Delay (s)	7.388	0	-	9.2	9.2	7.337	0	-
HCM Lane VC Ratio	0.004	-	-	0.029	0.021	0.004	-	-
HCM Lane LOS	A	A	-	A	A	A	A	-
HCM 95th Percentile Queue (veh)	0.012	-	-	0.088	0.065	0.012	-	-

Intersection	
Intersection Delay (sec/veh):	4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Volume (vph)	5	70	5	5	20	5	5	15	5	5	25	5
Conflicting Peds.(#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
Right Turn Channelized	None	None	None	None	None	None	None	None	None	None	None	None
Storage Length	0		0	0		0	0		0	0		0
Median Width		0			0			0			0	
Grade (%)		0%			0%			0%			0%	
Peak Hour Factor	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80
Heavy Vehicles(%)	10	10	10	10	10	10	10	10	10	10	10	10
Movement Flow Rate	6	87	6	6	25	6	6	19	6	6	31	6
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Major/Minor	Major 1			Major 2			Minor 1			Minor 2		
Conflicting Flow Rate - All	31	0	0	94	0	0	162	146	91	156	146	28
Stage 1	-	-	-	-	-	-	103	103	-	40	40	-
Stage 2	-	-	-	-	-	-	59	43	-	116	106	-
Follow-up Headway	2.29	-	-	2.29	-	-	3.59	4.09	3.39	3.59	4.09	3.39
Pot Capacity-1 Maneuver	1531	-	-	1451	-	-	785	731	945	793	731	1025
Stage 1	-	-	-	-	-	-	884	795	-	955	846	-
Stage 2	-	-	-	-	-	-	933	844	-	870	792	-
Time blocked-Platoon(%)	0	-	-	0	-	-	0	0	0	0	0	0
Mov Capacity-1 Maneuver	1531	-	-	1451	-	-	750	725	945	768	725	1025
Mov Capacity-2 Maneuver	-	-	-	-	-	-	750	725	-	768	725	-
Stage 1	-	-	-	-	-	-	880	792	-	951	843	-
Stage 2	-	-	-	-	-	-	889	841	-	840	789	-

Approach	EB	WB	NB	SB
HCM Control Delay (s)	0.5	1.2	9.9	10
HCM LOS	A	A	A	B

Lane	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (vph)	766							763
HCM Control Delay (s)	9.9	7.361	0	-	7.492	0	-	10
HCM Lane VC Ratio	0.041	0.004	-	-	0.004	-	-	0.057
HCM Lane LOS	A	A	A	-	A	A	-	B
HCM 95th Percentile Queue (veh)	0.127	0.012	-	-	0.013	-	-	0.182

Intersection	
Intersection Delay (sec/veh):	7.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Volume (vph)	55	5	5	5	5	5	5	5	5	5	5	30
Conflicting Peds.(#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
Right Turn Channelized	None	None	None	None	None	None	None	None	None	None	None	None
Storage Length	0		0	0		0	0		0	0		0
Median Width		0			0			0			0	
Grade (%)		0%			0%			0%			0%	
Peak Hour Factor	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80
Heavy Vehicles(%)	10	10	10	10	10	10	10	10	10	10	10	10
Movement Flow Rate	69	6	6	6	6	6	6	6	6	6	6	37
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Major/Minor	Major 1			Major 2			Minor 1			Minor 2		
Conflicting Flow Rate - All	12	0	0	12	0	0	190	171	9	174	171	9
Stage 1	-	-	-	-	-	-	147	147	-	21	21	-
Stage 2	-	-	-	-	-	-	43	24	-	153	150	-
Follow-up Headway	2.29	-	-	2.29	-	-	3.59	4.09	3.39	3.59	4.09	3.39
Pot Capacity-1 Maneuver	1556	-	-	1556	-	-	753	708	1050	771	708	1050
Stage 1	-	-	-	-	-	-	837	760	-	977	862	-
Stage 2	-	-	-	-	-	-	951	860	-	831	758	-
Time blocked-Platoon(%)	0	-	-	0	-	-	0	0	0	0	0	0
Mov Capacity-1 Maneuver	1556	-	-	1556	-	-	694	673	1050	733	673	1050
Mov Capacity-2 Maneuver	-	-	-	-	-	-	694	673	-	733	673	-
Stage 1	-	-	-	-	-	-	799	726	-	933	859	-
Stage 2	-	-	-	-	-	-	907	857	-	782	724	-

Approach	EB	WB	NB	SB
HCM Control Delay (s)	6.3	2.4	9.8	9.1
HCM LOS	A	A	A	A

Lane	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (vph)	773							934
HCM Control Delay (s)	9.8	7.421	0	-	7.323	0	-	9.1
HCM Lane VC Ratio	0.024	0.044	-	-	0.004	-	-	0.054
HCM Lane LOS	A	A	A	-	A	A	-	A
HCM 95th Percentile Queue (veh)	0.075	0.139	-	-	0.012	-	-	0.169

Intersection	
Intersection Delay (sec/veh):	3.9

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Volume (vph)	60	5	5	60	35	5
Conflicting Peds.(#/hr)	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
Right Turn Channelized	None	None	None	None	None	None
Storage Length	0	0	0			0
Median Width	12			0	0	
Grade (%)	0%			0%	0%	
Peak Hour Factor	0.80	0.80	0.80	0.80	0.80	0.80
Heavy Vehicles(%)	10	10	10	10	10	10
Movement Flow Rate	75	6	6	75	44	6
Number of Lanes	1	0	0	1	1	0

Major/Minor				Major 1	Major 2	
Conflicting Flow Rate - All	134	47	50	0	0	0
Stage 1	47	-	-	-	-	-
Stage 2	87	-	-	-	-	-
Follow-up Headway	3.59	3.39	2.29	-	-	-
Pot Capacity-1 Maneuver	841	1000	1507	-	-	-
Stage 1	955	-	-	-	-	-
Stage 2	917	-	-	-	-	-
Time blocked-Platoon(%)	0	0	0	-	-	-
Mov Capacity-1 Maneuver	838	1000	1507	-	-	-
Mov Capacity-2 Maneuver	838	-	-	-	-	-
Stage 1	955	-	-	-	-	-
Stage 2	913	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay (s)	9.7	0.6	0
HCM LOS	A	A	A

Lane	NBL	NBT	EBLn1	SBT	SBR
Capacity (vph)			849		
HCM Control Delay (s)	7.399	-	9.7	-	-
HCM Lane VC Ratio	0.004	-	0.096	-	-
HCM Lane LOS	A	-	A	-	-
HCM 95th Percentile Queue (veh)	0.012	-	0.316	-	-

Intersection	
Intersection Delay (sec/veh):	2.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Volume (vph)	10	5	5	5	5	10	5	120	5	10	40	10
Conflicting Peds.(#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
Right Turn Channelized	None	None	None	None	None	None	None	None	None	None	None	None
Storage Length	0		0	0		0	0		0	0		0
Median Width		0			0			0			0	
Grade (%)		0%			0%			0%			0%	
Peak Hour Factor	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80
Heavy Vehicles(%)	10	10	10	10	10	10	10	10	10	10	10	10
Movement Flow Rate	12	6	6	6	6	12	6	150	6	12	50	12
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Major/Minor		Minor 2			Minor 1			Major 1			Major 2	
Conflicting Flow Rate - All	258	251	57	254	254	153	63	0	0	156	0	0
Stage 1	83	83	-	165	165	-	-	-	-	-	-	-
Stage 2	175	168	-	89	89	-	-	-	-	-	-	-
Follow-up Headway	3.59	4.09	3.39	3.59	4.09	3.39	2.29	-	-	2.29	-	-
Pot Capacity-1 Maneuver	679	639	987	683	636	872	1490	-	-	1377	-	-
Stage 1	906	811	-	819	747	-	-	-	-	-	-	-
Stage 2	808	745	-	899	806	-	-	-	-	-	-	-
Time blocked-Platoon(%)	0	0	0	0	0	0	0	-	-	0	-	-
Mov Capacity-1 Maneuver	657	630	987	666	627	872	1490	-	-	1377	-	-
Mov Capacity-2 Maneuver	657	630	-	666	627	-	-	-	-	-	-	-
Stage 1	902	803	-	816	744	-	-	-	-	-	-	-
Stage 2	787	742	-	877	798	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay (s)	10.3	10	0.3	1.3
HCM LOS	B	B	A	A

Lane	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (vph)				709	742			
HCM Control Delay (s)	7.426	0	-	10.3	10	7.638	0	-
HCM Lane VC Ratio	0.004	-	-	0.035	0.034	0.009	-	-
HCM Lane LOS	A	A	-	B	B	A	A	-
HCM 95th Percentile Queue (veh)	0.013	-	-	0.11	0.104	0.027	-	-

Intersection	
Intersection Delay (sec/veh):	0.6

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Volume (vph)	10	185	300	10	10	10
Conflicting Peds.(#/hr)	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
Right Turn Channelized	None	None	None	None	None	None
Storage Length	200			100	250	0
Median Width		12	0		12	
Grade (%)		0%	0%		0%	
Peak Hour Factor	0.80	0.80	0.80	0.80	0.80	0.80
Heavy Vehicles(%)	10	10	10	10	10	10
Movement Flow Rate	12	231	375	12	12	12
Number of Lanes	1	1	1	1	1	1

Major/Minor	Major 1		Major 2			
Conflicting Flow Rate - All	388	0	0	0	639	195
Stage 1	-	-	-	-	382	-
Stage 2	-	-	-	-	257	-
Follow-up Headway	2.29	-	-	-	3.59	3.39
Pot Capacity-1 Maneuver	1128	-	-	-	428	826
Stage 1	-	-	-	-	673	-
Stage 2	-	-	-	-	768	-
Time blocked-Platoon(%)	0	-	-	-	0	0
Mov Capacity-1 Maneuver	1128	-	-	-	423	826
Mov Capacity-2 Maneuver	-	-	-	-	423	-
Stage 1	-	-	-	-	673	-
Stage 2	-	-	-	-	759	-

Approach	EB	WB	SB
HCM Control Delay (s)	0.4	0	11.6
HCM LOS	A	A	B

Lane	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (vph)					423	826
HCM Control Delay (s)	8.227	-	-	-	13.8	9.4
HCM Lane VC Ratio	0.011	-	-	-	0.03	0.015
HCM Lane LOS	A	-	-	-	B	A
HCM 95th Percentile Queue (veh)	0.034	-	-	-	0.091	0.046

Intersection	
Intersection Delay (sec/veh):	0.8

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Volume (vph)	180	20	15	295	15	10
Conflicting Peds.(#/hr)	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
Right Turn Channelized	None	None	None	None	None	None
Storage Length		450	150		0	0
Median Width	12			12	12	
Grade (%)	0%			0%	0%	
Peak Hour Factor	0.80	0.80	0.80	0.80	0.80	0.80
Heavy Vehicles(%)	10	10	10	10	10	10
Movement Flow Rate	225	25	19	369	19	12
Number of Lanes	1	1	1	1	1	0

Major/Minor	Major 1			Major 2		
Conflicting Flow Rate - All	0	0	250	0	645	126
Stage 1	-	-	-	-	238	-
Stage 2	-	-	-	-	407	-
Follow-up Headway	-	-	2.29	-	3.59	3.39
Pot Capacity-1 Maneuver	-	-	1270	-	424	903
Stage 1	-	-	-	-	783	-
Stage 2	-	-	-	-	655	-
Time blocked-Platoon(%)	-	-	0	-	0	0
Mov Capacity-1 Maneuver	-	-	1270	-	418	903
Mov Capacity-2 Maneuver	-	-	-	-	418	-
Stage 1	-	-	-	-	783	-
Stage 2	-	-	-	-	645	-

Approach	EB	WB	NB
HCM Control Delay (s)	0	0.4	12.2
HCM LOS	A	A	B

Lane	NBLn1	EBT	EBR	WBL	WBT
Capacity (vph)	532				
HCM Control Delay (s)	12.2	-	-	7.877	-
HCM Lane VC Ratio	0.059	-	-	0.015	-
HCM Lane LOS	B	-	-	A	-
HCM 95th Percentile Queue (veh)	0.187	-	-	0.045	-

Intersection	
Intersection Delay (sec/veh):	1.5

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Volume (vph)	5	180	310	20	50	10
Conflicting Peds.(#/hr)	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
Right Turn Channelized	None	None	None	None	None	None
Storage Length	125			0	0	0
Median Width		12	12		12	
Grade (%)		0%	0%		0%	
Peak Hour Factor	0.80	0.80	0.80	0.80	0.80	0.80
Heavy Vehicles(%)	10	10	10	10	10	10
Movement Flow Rate	6	225	387	25	62	12
Number of Lanes	1	1	1	0	1	0

Major/Minor	Major 1		Major 2			
Conflicting Flow Rate - All	413	0	0	0	638	401
Stage 1	-	-	-	-	401	-
Stage 2	-	-	-	-	237	-
Follow-up Headway	2.29	-	-	-	3.59	3.39
Pot Capacity-1 Maneuver	1109	-	-	-	450	700
Stage 1	-	-	-	-	692	-
Stage 2	-	-	-	-	784	-
Time blocked-Platoon(%)	17	-	-	-	17	17
Mov Capacity-1 Maneuver	1109	-	-	-	448	700
Mov Capacity-2 Maneuver	-	-	-	-	448	-
Stage 1	-	-	-	-	692	-
Stage 2	-	-	-	-	780	-

Approach	EB	WB	SB
HCM Control Delay (s)	0.2	0	14
HCM LOS	A	A	B

Lane	EBL	EBT	WBT	WBR	SBLn1
Capacity (vph)					477
HCM Control Delay (s)	8.265	-	-	-	14
HCM Lane VC Ratio	0.006	-	-	-	0.157
HCM Lane LOS	A	-	-	-	B
HCM 95th Percentile Queue (veh)	0.017	-	-	-	0.554

HCM 2010 Signalized Intersection Summary
4: Adams Street & SR 109

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	10	250	5	10	370	35	10	5	20	40	10	15
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Queue, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	0.99		0.99	0.99		0.99	0.99		0.99
Parking, Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow Rate	1727	1727	1727	1727	1727	1727	1727	1727	1727	1727	1727	1727
Lanes	0	1	0	0	1	0	0	1	0	0	1	0
Capacity, veh/h	102	648	13	98	608	56	207	124	286	348	90	88
Arriving On Green	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40
Sat Flow, veh/h	63.1	1492.6	31.6	40.3	1450.5	141.2	357.6	161.3	715.2	585.3	137.9	219.5
Grp Volume(v), veh/h	331.3	0.0	0.0	518.8	0.0	0.0	43.8	0.0	0.0	81.3	0.0	0.0
Grp Sat Flow(s),veh/h/ln	1673.3	0.0	0.0	1673.8	0.0	0.0	1251.5	0.0	0.0	951.1	0.0	0.0
Q Serve(g_s), s	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	5.7	0.0	0.0	10.5	0.0	0.0	0.7	0.0	0.0	1.2	0.0	0.0
Proportion In Lane	0.038		0.019	0.024		0.084	0.286		0.571	0.615		0.231
Lane Grp Cap(c), veh/h	762.7	0.0	0.0	761.7	0.0	0.0	616.3	0.0	0.0	525.8	0.0	0.0
V/C Ratio(X)	0.434	0.000	0.000	0.681	0.000	0.000	0.071	0.000	0.000	0.155	0.000	0.000
Avail Cap(c_a), veh/h	762.7	0.0	0.0	761.7	0.0	0.0	616.3	0.0	0.0	525.8	0.0	0.0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.000	0.000	0.000	1.000	0.000	0.000	1.000	0.000	0.000	1.000	0.000	0.000
Uniform Delay (d), s/veh	8.9	0.0	0.0	10.4	0.0	0.0	7.4	0.0	0.0	7.6	0.0	0.0
Incr Delay (d2), s/veh	1.8	0.0	0.0	4.9	0.0	0.0	0.2	0.0	0.0	0.6	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Lane Group Delay (d), s/veh	10.7	0.0	0.0	15.2	0.0	0.0	7.6	0.0	0.0	8.2	0.0	0.0
Lane Group LOS	B			B			A			A		
Approach Volume, veh/h		331			519			44			81	
Approach Delay, s/veh		10.7			15.2			7.6			8.2	
Approach LOS		B			B			A			A	

Timer				
Assigned Phase	4	8	2	6
Phase Duration (G+Y+Rc), s	20.00	20.00	20.00	20.00
Change Period (Y+Rc), s	4.00	4.00	4.00	4.00
Max Green Setting (Gmax), s	16.00	16.00	16.00	16.00
Max Q Clear Time (g_c+I1), s	7.72	12.55	2.69	3.24
Green Extension Time (p_c)	3.49	1.75	0.49	0.47

Intersection Summary	
HCM 2010 Control Delay	12.8
HCM 2010 Level of Service	B

Intersection	
Intersection Delay (sec/veh):	3.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Volume (vph)	5	5	5	5	5	5	5	20	5	5	35	5
Conflicting Peds.(#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
Right Turn Channelized	None	None	None	None	None	None	None	None	None	None	None	None
Storage Length	0		0	0		0	0		0	0		0
Median Width		0			0			0			0	
Grade (%)		0%			0%			0%			0%	
Peak Hour Factor	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80
Heavy Vehicles(%)	10	10	10	10	10	10	10	10	10	10	10	10
Movement Flow Rate	6	6	6	6	6	6	6	25	6	6	44	6
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Major/Minor		Minor 2			Minor 1			Major 1			Major 2	
Conflicting Flow Rate - All	105	102	47	105	102	28	50	0	0	31	0	0
Stage 1	59	59	-	40	40	-	-	-	-	-	-	-
Stage 2	46	43	-	65	62	-	-	-	-	-	-	-
Follow-up Headway	3.59	4.09	3.39	3.59	4.09	3.39	2.29	-	-	2.29	-	-
Pot Capacity-1 Maneuver	856	773	1000	856	773	1025	1507	-	-	1531	-	-
Stage 1	933	830	-	955	846	-	-	-	-	-	-	-
Stage 2	948	844	-	926	828	-	-	-	-	-	-	-
Time blocked-Platoon(%)	0	0	0	0	0	0	0	-	-	0	-	-
Mov Capacity-1 Maneuver	840	767	1000	840	767	1025	1507	-	-	1531	-	-
Mov Capacity-2 Maneuver	840	767	-	840	767	-	-	-	-	-	-	-
Stage 1	929	827	-	951	843	-	-	-	-	-	-	-
Stage 2	931	841	-	910	825	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay (s)	9.3	9.3	1.2	0.8
HCM LOS	A	A	A	A

Lane	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (vph)				859	865			
HCM Control Delay (s)	7.399	0	-	9.3	9.3	7.361	0	-
HCM Lane VC Ratio	0.004	-	-	0.022	0.022	0.004	-	-
HCM Lane LOS	A	A	-	A	A	A	A	-
HCM 95th Percentile Queue (veh)	0.012	-	-	0.067	0.066	0.012	-	-

Intersection	
Intersection Delay (sec/veh):	1.9

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Volume (vph)	5	5	15	5	5	30
Conflicting Peds.(#/hr)	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
Right Turn Channelized	None	None	None	None	None	None
Storage Length	0	0		0	0	
Median Width	12		0			0
Grade (%)	0%		0%			0%
Peak Hour Factor	0.80	0.80	0.80	0.80	0.80	0.80
Heavy Vehicles(%)	10	10	10	10	10	10
Movement Flow Rate	6	6	19	6	6	37
Number of Lanes	1	0	1	0	0	1

Major/Minor			Major 1			Major 2
Conflicting Flow Rate - All	72	22	0	0	25	0
Stage 1	22	-	-	-	-	-
Stage 2	50	-	-	-	-	-
Follow-up Headway	3.59	3.39	-	-	2.29	-
Pot Capacity-1 Maneuver	913	1032	-	-	1539	-
Stage 1	980	-	-	-	-	-
Stage 2	952	-	-	-	-	-
Time blocked-Platoon(%)	0	0	-	-	0	-
Mov Capacity-1 Maneuver	909	1032	-	-	1539	-
Mov Capacity-2 Maneuver	909	-	-	-	-	-
Stage 1	980	-	-	-	-	-
Stage 2	948	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay (s)	8.8	0	1
HCM LOS	A	A	A

Lane	NBT	NBR	WBLn1	SBL	SBT
Capacity (vph)			967		
HCM Control Delay (s)	-	-	8.8	7.349	-
HCM Lane VC Ratio	-	-	0.013	0.004	-
HCM Lane LOS	-	-	A	A	-
HCM 95th Percentile Queue (veh)	-	-	0.039	0.012	-

Intersection	
Intersection Delay (sec/veh):	2.2

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Volume (vph)	5	5	10	5	5	25
Conflicting Peds.(#/hr)	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
Right Turn Channelized	None	None	None	None	None	None
Storage Length	0	0		0	0	
Median Width	12		0			0
Grade (%)	0%		0%			0%
Peak Hour Factor	0.80	0.80	0.80	0.80	0.80	0.80
Heavy Vehicles(%)	10	10	10	10	10	10
Movement Flow Rate	6	6	12	6	6	31
Number of Lanes	1	0	1	0	0	1

Major/Minor			Major 1			Major 2
Conflicting Flow Rate - All	59	16	0	0	19	0
Stage 1	16	-	-	-	-	-
Stage 2	43	-	-	-	-	-
Follow-up Headway	3.59	3.39	-	-	2.29	-
Pot Capacity-1 Maneuver	928	1040	-	-	1547	-
Stage 1	986	-	-	-	-	-
Stage 2	959	-	-	-	-	-
Time blocked-Platoon(%)	0	0	-	-	0	-
Mov Capacity-1 Maneuver	924	1040	-	-	1547	-
Mov Capacity-2 Maneuver	924	-	-	-	-	-
Stage 1	986	-	-	-	-	-
Stage 2	955	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay (s)	8.7	0	1.2
HCM LOS	A	A	A

Lane	NBT	NBR	WBLn1	SBL	SBT
Capacity (vph)			979		
HCM Control Delay (s)	-	-	8.7	7.337	-
HCM Lane VC Ratio	-	-	0.013	0.004	-
HCM Lane LOS	-	-	A	A	-
HCM 95th Percentile Queue (veh)	-	-	0.039	0.012	-

Intersection	
Intersection Delay (sec/veh):	7.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Volume (vph)	5	5	5	25	5	5	5	10	75	5	15	5
Conflicting Peds.(#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
Right Turn Channelized	None	None	None	None	None	None	None	None	None	None	None	None
Storage Length	0		0	0		0	0		0	0		0
Median Width		0			0			0			0	
Grade (%)		0%			0%			0%			0%	
Peak Hour Factor	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80
Heavy Vehicles(%)	10	10	10	10	10	10	10	10	10	10	10	10
Movement Flow Rate	6	6	6	31	6	6	6	12	94	6	19	6
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Major/Minor	Major 1			Major 2			Minor 1			Minor 2		
Conflicting Flow Rate - All	12	0	0	12	0	0	105	95	9	146	95	9
Stage 1	-	-	-	-	-	-	21	21	-	71	71	-
Stage 2	-	-	-	-	-	-	84	74	-	75	24	-
Follow-up Headway	2.29	-	-	2.29	-	-	3.59	4.09	3.39	3.59	4.09	3.39
Pot Capacity-1 Maneuver	1556	-	-	1556	-	-	856	780	1050	805	780	1050
Stage 1	-	-	-	-	-	-	977	862	-	919	820	-
Stage 2	-	-	-	-	-	-	905	818	-	915	860	-
Time blocked-Platoon(%)	0	-	-	0	-	-	0	0	0	0	0	0
Mov Capacity-1 Maneuver	1556	-	-	1556	-	-	820	761	1050	711	761	1050
Mov Capacity-2 Maneuver	-	-	-	-	-	-	820	761	-	711	761	-
Stage 1	-	-	-	-	-	-	973	859	-	915	804	-
Stage 2	-	-	-	-	-	-	861	802	-	818	857	-

Approach	EB	WB	NB	SB
HCM Control Delay (s)	2.4	5.3	9.1	9.7
HCM LOS	A	A	A	A

Lane	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (vph)	993							794
HCM Control Delay (s)	9.1	7.323	0	-	7.361	0	-	9.7
HCM Lane VC Ratio	0.113	0.004	-	-	0.02	-	-	0.039
HCM Lane LOS	A	A	A	-	A	A	-	A
HCM 95th Percentile Queue (veh)	0.382	0.012	-	-	0.061	-	-	0.123

Intersection	
Intersection Delay (sec/veh):	4.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Volume (vph)	5	5	5	5	5	5	5	10	5	5	20	5
Conflicting Peds.(#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
Right Turn Channelized	None	None	None	None	None	None	None	None	None	None	None	None
Storage Length	0		0	0		0	0		0	0		0
Median Width		0			0			0			0	
Grade (%)		0%			0%			0%			0%	
Peak Hour Factor	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80
Heavy Vehicles(%)	10	10	10	10	10	10	10	10	10	10	10	10
Movement Flow Rate	6	6	6	6	6	6	6	12	6	6	25	6
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Major/Minor		Minor 2			Minor 1			Major 1			Major 2	
Conflicting Flow Rate - All	74	71	28	74	71	16	31	0	0	19	0	0
Stage 1	40	40	-	28	28	-	-	-	-	-	-	-
Stage 2	34	31	-	46	43	-	-	-	-	-	-	-
Follow-up Headway	3.59	4.09	3.39	3.59	4.09	3.39	2.29	-	-	2.29	-	-
Pot Capacity-1 Maneuver	897	804	1025	897	804	1040	1531	-	-	1547	-	-
Stage 1	955	846	-	969	856	-	-	-	-	-	-	-
Stage 2	962	854	-	948	844	-	-	-	-	-	-	-
Time blocked-Platoon(%)	0	0	0	0	0	0	0	-	-	0	-	-
Mov Capacity-1 Maneuver	881	798	1025	881	798	1040	1531	-	-	1547	-	-
Mov Capacity-2 Maneuver	881	798	-	881	798	-	-	-	-	-	-	-
Stage 1	951	843	-	965	853	-	-	-	-	-	-	-
Stage 2	945	851	-	931	841	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay (s)	9.1	9.1	1.8	1.2
HCM LOS	A	A	A	A

Lane	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (vph)				892	896			
HCM Control Delay (s)	7.361	0	-	9.1	9.1	7.337	0	-
HCM Lane VC Ratio	0.004	-	-	0.021	0.021	0.004	-	-
HCM Lane LOS	A	A	-	A	A	A	A	-
HCM 95th Percentile Queue (veh)	0.012	-	-	0.064	0.064	0.012	-	-

Intersection	
Intersection Delay (sec/veh):	4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Volume (vph)	5	45	5	5	25	5	5	10	5	5	20	5
Conflicting Peds.(#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
Right Turn Channelized	None	None	None	None	None	None	None	None	None	None	None	None
Storage Length	0		0	0		0	0		0	0		0
Median Width		0			0			0			0	
Grade (%)		0%			0%			0%			0%	
Peak Hour Factor	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80
Heavy Vehicles(%)	10	10	10	10	10	10	10	10	10	10	10	10
Movement Flow Rate	6	56	6	6	31	6	6	12	6	6	25	6
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Major/Minor	Major 1			Major 2			Minor 1			Minor 2		
Conflicting Flow Rate - All	37	0	0	62	0	0	133	120	59	127	120	34
Stage 1	-	-	-	-	-	-	71	71	-	46	46	-
Stage 2	-	-	-	-	-	-	62	49	-	81	74	-
Follow-up Headway	2.29	-	-	2.29	-	-	3.59	4.09	3.39	3.59	4.09	3.39
Pot Capacity-1 Maneuver	1523	-	-	1491	-	-	821	756	985	828	756	1017
Stage 1	-	-	-	-	-	-	919	820	-	948	841	-
Stage 2	-	-	-	-	-	-	929	839	-	908	818	-
Time blocked-Platoon(%)	0	-	-	0	-	-	0	0	0	0	0	0
Mov Capacity-1 Maneuver	1523	-	-	1491	-	-	790	750	985	807	750	1017
Mov Capacity-2 Maneuver	-	-	-	-	-	-	790	750	-	807	750	-
Stage 1	-	-	-	-	-	-	915	817	-	944	838	-
Stage 2	-	-	-	-	-	-	892	836	-	885	815	-

Approach	EB	WB	NB	SB
HCM Control Delay (s)	0.7	1.1	9.6	9.8
HCM LOS	A	A	A	A

Lane	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (vph)	808							794
HCM Control Delay (s)	9.6	7.373	0	-	7.425	0	-	9.8
HCM Lane VC Ratio	0.031	0.004	-	-	0.004	-	-	0.047
HCM Lane LOS	A	A	A	-	A	A	-	A
HCM 95th Percentile Queue (veh)	0.096	0.012	-	-	0.013	-	-	0.148

Intersection	
Intersection Delay (sec/veh):	7.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Volume (vph)	80	5	5	5	5	10	5	5	5	5	5	30
Conflicting Peds.(#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
Right Turn Channelized	None	None	None	None	None	None	None	None	None	None	None	None
Storage Length	0		0	0		0	0		0	0		0
Median Width		0			0			0			0	
Grade (%)		0%			0%			0%			0%	
Peak Hour Factor	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80
Heavy Vehicles(%)	10	10	10	10	10	10	10	10	10	10	10	10
Movement Flow Rate	100	6	6	6	6	12	6	6	6	6	6	37
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Major/Minor	Major 1			Major 2			Minor 1			Minor 2		
Conflicting Flow Rate - All	19	0	0	12	0	0	256	240	9	240	237	13
Stage 1	-	-	-	-	-	-	209	209	-	25	25	-
Stage 2	-	-	-	-	-	-	47	31	-	215	212	-
Follow-up Headway	2.29	-	-	2.29	-	-	3.59	4.09	3.39	3.59	4.09	3.39
Pot Capacity-1 Maneuver	1547	-	-	1556	-	-	681	648	1050	698	651	1044
Stage 1	-	-	-	-	-	-	775	714	-	973	859	-
Stage 2	-	-	-	-	-	-	947	854	-	769	712	-
Time blocked-Platoon(%)	0	-	-	0	-	-	0	0	0	0	0	0
Mov Capacity-1 Maneuver	1547	-	-	1556	-	-	617	603	1050	652	606	1044
Mov Capacity-2 Maneuver	-	-	-	-	-	-	617	603	-	652	606	-
Stage 1	-	-	-	-	-	-	725	668	-	910	856	-
Stage 2	-	-	-	-	-	-	903	851	-	708	666	-

Approach	EB	WB	NB	SB
HCM Control Delay (s)	6.7	1.8	10.2	9.3
HCM LOS	A	A	B	A

Lane	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (vph)	709							896
HCM Control Delay (s)	10.2	7.488	0	-	7.323	0	-	9.3
HCM Lane VC Ratio	0.026	0.065	-	-	0.004	-	-	0.056
HCM Lane LOS	B	A	A	-	A	A	-	A
HCM 95th Percentile Queue (veh)	0.081	0.207	-	-	0.012	-	-	0.177

Intersection	
Intersection Delay (sec/veh):	3.1

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Volume (vph)	55	5	5	85	30	25
Conflicting Peds.(#/hr)	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
Right Turn Channelized	None	None	None	None	None	None
Storage Length	0	0	0			0
Median Width	12			0	0	
Grade (%)	0%			0%	0%	
Peak Hour Factor	0.80	0.80	0.80	0.80	0.80	0.80
Heavy Vehicles(%)	10	10	10	10	10	10
Movement Flow Rate	69	6	6	106	37	31
Number of Lanes	1	0	0	1	1	0

Major/Minor				Major 1	Major 2	
Conflicting Flow Rate - All	172	54	69	0	0	0
Stage 1	54	-	-	-	-	-
Stage 2	118	-	-	-	-	-
Follow-up Headway	3.59	3.39	2.29	-	-	-
Pot Capacity-1 Maneuver	800	991	1483	-	-	-
Stage 1	948	-	-	-	-	-
Stage 2	888	-	-	-	-	-
Time blocked-Platoon(%)	0	0	0	-	-	-
Mov Capacity-1 Maneuver	797	991	1483	-	-	-
Mov Capacity-2 Maneuver	797	-	-	-	-	-
Stage 1	948	-	-	-	-	-
Stage 2	884	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay (s)	9.9	0.4	0
HCM LOS	A	A	A

Lane	NBL	NBT	EBLn1	SBT	SBR
Capacity (vph)			810		
HCM Control Delay (s)	7.438	-	9.9	-	-
HCM Lane VC Ratio	0.004	-	0.093	-	-
HCM Lane LOS	A	-	A	-	-
HCM 95th Percentile Queue (veh)	0.013	-	0.305	-	-

Intersection	
Intersection Delay (sec/veh):	1.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Volume (vph)	5	5	5	5	5	5	5	125	5	5	45	10
Conflicting Peds.(#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
Right Turn Channelized	None	None	None	None	None	None	None	None	None	None	None	None
Storage Length	0		0	0		0	0		0	0		0
Median Width		0			0			0			0	
Grade (%)		0%			0%			0%			0%	
Peak Hour Factor	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80
Heavy Vehicles(%)	10	10	10	10	10	10	10	10	10	10	10	10
Movement Flow Rate	6	6	6	6	6	6	6	156	6	6	56	12
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Major/Minor	Minor 2			Minor 1			Major 1			Major 2		
Conflicting Flow Rate - All	252	249	63	252	252	159	69	0	0	162	0	0
Stage 1	75	75	-	171	171	-	-	-	-	-	-	-
Stage 2	177	174	-	81	81	-	-	-	-	-	-	-
Follow-up Headway	3.59	4.09	3.39	3.59	4.09	3.39	2.29	-	-	2.29	-	-
Pot Capacity-1 Maneuver	685	641	980	685	638	866	1483	-	-	1370	-	-
Stage 1	915	818	-	812	742	-	-	-	-	-	-	-
Stage 2	806	740	-	908	812	-	-	-	-	-	-	-
Time blocked-Platoon(%)	0	0	0	0	0	0	0	-	-	0	-	-
Mov Capacity-1 Maneuver	670	635	980	671	632	866	1483	-	-	1370	-	-
Mov Capacity-2 Maneuver	670	635	-	671	632	-	-	-	-	-	-	-
Stage 1	911	814	-	809	739	-	-	-	-	-	-	-
Stage 2	790	737	-	891	808	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay (s)	10	10.2	0.3	0.6
HCM LOS	B	B	A	A

Lane	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (vph)				734	710			
HCM Control Delay (s)	7.438	0	-	10	10.2	7.64	0	-
HCM Lane VC Ratio	0.004	-	-	0.026	0.026	0.005	-	-
HCM Lane LOS	A	A	-	B	B	A	A	-
HCM 95th Percentile Queue (veh)	0.013	-	-	0.079	0.081	0.014	-	-

Intersection	
Intersection Delay (sec/veh):	0.6

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Volume (vph)	10	225	105	5	10	5
Conflicting Peds.(#/hr)	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
Right Turn Channelized	None	None	None	None	None	None
Storage Length	200			100	250	0
Median Width		12	0		12	
Grade (%)		0%	0%		0%	
Peak Hour Factor	0.80	0.80	0.80	0.80	0.80	0.80
Heavy Vehicles(%)	10	10	10	10	10	10
Movement Flow Rate	12	281	131	6	12	6
Number of Lanes	1	1	1	1	1	1

Major/Minor		Major 1	Major 2			
Conflicting Flow Rate - All	137	0	0	0	441	69
Stage 1	-	-	-	-	134	-
Stage 2	-	-	-	-	307	-
Follow-up Headway	2.29	-	-	-	3.59	3.39
Pot Capacity-1 Maneuver	1399	-	-	-	559	972
Stage 1	-	-	-	-	873	-
Stage 2	-	-	-	-	728	-
Time blocked-Platoon(%)	0	-	-	-	0	0
Mov Capacity-1 Maneuver	1399	-	-	-	554	972
Mov Capacity-2 Maneuver	-	-	-	-	554	-
Stage 1	-	-	-	-	873	-
Stage 2	-	-	-	-	721	-

Approach	EB	WB	SB
HCM Control Delay (s)	0.3	0	10.6
HCM LOS	A	A	B

Lane	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (vph)					554	972
HCM Control Delay (s)	7.596	-	-	-	11.6	8.7
HCM Lane VC Ratio	0.009	-	-	-	0.023	0.006
HCM Lane LOS	A	-	-	-	B	A
HCM 95th Percentile Queue (veh)	0.027	-	-	-	0.069	0.019

Intersection	
Intersection Delay (sec/veh):	0.5

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Volume (vph)	190	35	10	110	5	5
Conflicting Peds.(#/hr)	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
Right Turn Channelized	None	None	None	None	None	None
Storage Length		450	150		0	0
Median Width	12			12	12	
Grade (%)	0%			0%	0%	
Peak Hour Factor	0.80	0.80	0.80	0.80	0.80	0.80
Heavy Vehicles(%)	10	10	10	10	10	10
Movement Flow Rate	237	44	12	137	6	6
Number of Lanes	1	1	1	1	1	0

Major/Minor	Major 1			Major 2		
Conflicting Flow Rate - All	0	0	282	0	424	141
Stage 1	-	-	-	-	260	-
Stage 2	-	-	-	-	164	-
Follow-up Headway	-	-	2.29	-	3.59	3.39
Pot Capacity-1 Maneuver	-	-	1236	-	572	886
Stage 1	-	-	-	-	765	-
Stage 2	-	-	-	-	846	-
Time blocked-Platoon(%)	-	-	0	-	0	0
Mov Capacity-1 Maneuver	-	-	1236	-	566	886
Mov Capacity-2 Maneuver	-	-	-	-	566	-
Stage 1	-	-	-	-	765	-
Stage 2	-	-	-	-	837	-

Approach	EB	WB	NB
HCM Control Delay (s)	0	0.7	10.3
HCM LOS	A	A	B

Lane	NBLn1	EBT	EBR	WBL	WBT
Capacity (vph)	691				
HCM Control Delay (s)	10.3	-	-	7.942	-
HCM Lane VC Ratio	0.018	-	-	0.01	-
HCM Lane LOS	B	-	-	A	-
HCM 95th Percentile Queue (veh)	0.055	-	-	0.031	-

Intersection	
Intersection Delay (sec/veh):	1.8

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Volume (vph)	20	180	110	105	45	10
Conflicting Peds.(#/hr)	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
Right Turn Channelized	None	None	None	None	None	None
Storage Length	125			0	0	0
Median Width		12	12		12	
Grade (%)		0%	0%		0%	
Peak Hour Factor	0.80	0.80	0.80	0.80	0.80	0.80
Heavy Vehicles(%)	10	10	10	10	10	10
Movement Flow Rate	25	225	137	131	56	12
Number of Lanes	1	1	1	0	1	0

Major/Minor	Major 1		Major 2			
Conflicting Flow Rate - All	269	0	0	0	479	204
Stage 1	-	-	-	-	204	-
Stage 2	-	-	-	-	275	-
Follow-up Headway	2.29	-	-	-	3.59	3.39
Pot Capacity-1 Maneuver	1251	-	-	-	536	828
Stage 1	-	-	-	-	818	-
Stage 2	-	-	-	-	753	-
Time blocked-Platoon(%)	2	-	-	-	2	2
Mov Capacity-1 Maneuver	1251	-	-	-	525	828
Mov Capacity-2 Maneuver	-	-	-	-	525	-
Stage 1	-	-	-	-	818	-
Stage 2	-	-	-	-	738	-

Approach	EB	WB	SB
HCM Control Delay (s)	0.8	0	12.3
HCM LOS	A	A	B

Lane	EBL	EBT	WBT	WBR	SBLn1
Capacity (vph)					562
HCM Control Delay (s)	7.936	-	-	-	12.3
HCM Lane VC Ratio	0.02	-	-	-	0.122
HCM Lane LOS	A	-	-	-	B
HCM 95th Percentile Queue (veh)	0.061	-	-	-	0.415

HCM 2010 Signalized Intersection Summary
4: Adams Street & SR 109

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	15	250	5	5	290	65	20	15	5	90	25	15
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Queue, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	0.99		0.99	0.99		0.99	0.99		0.99
Parking, Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow Rate	1727	1727	1727	1727	1727	1727	1727	1727	1727	1727	1727	1727
Lanes	0	1	0	0	1	0	0	1	0	0	1	0
Capacity, veh/h	109	633	12	94	542	120	324	215	58	374	95	41
Arriving On Green	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40
Sat Flow, veh/h	91.5	1421.8	30.5	23.1	1313.9	299.7	577.6	352.3	144.4	619.6	164.1	103.3
Grp Volume(v), veh/h	337.5	0.0	0.0	450.0	0.0	0.0	50.0	0.0	0.0	162.5	0.0	0.0
Grp Sat Flow(s),veh/h/ln	1646.7	0.0	0.0	1660.0	0.0	0.0	1155.2	0.0	0.0	895.0	0.0	0.0
Q Serve(g_s), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.7	0.0	0.0
Cycle Q Clear(g_c), s	5.9	0.0	0.0	8.8	0.0	0.0	0.7	0.0	0.0	4.6	0.0	0.0
Proportion In Lane	0.056		0.019	0.014		0.181	0.500		0.125	0.692		0.115
Lane Grp Cap(c), veh/h	753.7	0.0	0.0	755.2	0.0	0.0	597.1	0.0	0.0	510.3	0.0	0.0
V/C Ratio(X)	0.448	0.000	0.000	0.596	0.000	0.000	0.084	0.000	0.000	0.318	0.000	0.000
Avail Cap(c_a), veh/h	753.7	0.0	0.0	755.2	0.0	0.0	597.1	0.0	0.0	510.3	0.0	0.0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.000	0.000	0.000	1.000	0.000	0.000	1.000	0.000	0.000	1.000	0.000	0.000
Uniform Delay (d), s/veh	9.0	0.0	0.0	9.9	0.0	0.0	7.4	0.0	0.0	7.6	0.0	0.0
Incr Delay (d2), s/veh	1.9	0.0	0.0	3.4	0.0	0.0	0.3	0.0	0.0	1.6	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Lane Group Delay (d), s/veh	10.9	0.0	0.0	13.3	0.0	0.0	7.7	0.0	0.0	9.3	0.0	0.0
Lane Group LOS	B			B			A			A		
Approach Volume, veh/h		338			450			50			162	
Approach Delay, s/veh		10.9			13.3			7.7			9.3	
Approach LOS		B			B			A			A	

Timer				
Assigned Phase	4	8	2	6
Phase Duration (G+Y+Rc), s	20.00	20.00	20.00	20.00
Change Period (Y+Rc), s	4.00	4.00	4.00	4.00
Max Green Setting (Gmax), s	16.00	16.00	16.00	16.00
Max Q Clear Time (g_c+I1), s	7.85	10.84	2.73	6.60
Green Extension Time (p_c)	3.19	2.27	0.96	0.78

Intersection Summary	
HCM 2010 Control Delay	11.5
HCM 2010 Level of Service	B

Intersection	
Intersection Delay (sec/veh):	3.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Volume (vph)	5	5	5	5	5	5	5	15	5	5	40	5
Conflicting Peds.(#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
Right Turn Channelized	None	None	None	None	None	None	None	None	None	None	None	None
Storage Length	0		0	0		0	0		0	0		0
Median Width		0			0			0			0	
Grade (%)		0%			0%			0%			0%	
Peak Hour Factor	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80
Heavy Vehicles(%)	10	10	10	10	10	10	10	10	10	10	10	10
Movement Flow Rate	6	6	6	6	6	6	6	19	6	6	50	6
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Major/Minor		Minor 2			Minor 1			Major 1			Major 2	
Conflicting Flow Rate - All	105	102	53	105	102	22	56	0	0	25	0	0
Stage 1	65	65	-	34	34	-	-	-	-	-	-	-
Stage 2	40	37	-	71	68	-	-	-	-	-	-	-
Follow-up Headway	3.59	4.09	3.39	3.59	4.09	3.39	2.29	-	-	2.29	-	-
Pot Capacity-1 Maneuver	856	773	992	856	773	1032	1499	-	-	1539	-	-
Stage 1	926	825	-	962	851	-	-	-	-	-	-	-
Stage 2	955	849	-	919	823	-	-	-	-	-	-	-
Time blocked-Platoon(%)	0	0	0	0	0	0	0	-	-	0	-	-
Mov Capacity-1 Maneuver	840	767	992	840	767	1032	1499	-	-	1539	-	-
Mov Capacity-2 Maneuver	840	767	-	840	767	-	-	-	-	-	-	-
Stage 1	922	822	-	958	848	-	-	-	-	-	-	-
Stage 2	938	846	-	903	820	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay (s)	9.3	9.2	1.5	0.7
HCM LOS	A	A	A	A

Lane	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (vph)				857	866			
HCM Control Delay (s)	7.412	0	-	9.3	9.2	7.349	0	-
HCM Lane VC Ratio	0.004	-	-	0.022	0.022	0.004	-	-
HCM Lane LOS	A	A	-	A	A	A	A	-
HCM 95th Percentile Queue (veh)	0.013	-	-	0.067	0.066	0.012	-	-

Intersection	
Intersection Delay (sec/veh):	2.4

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Volume (vph)	10	5	10	5	5	35
Conflicting Peds.(#/hr)	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
Right Turn Channelized	None	None	None	None	None	None
Storage Length	0	0		0	0	
Median Width	12		0			0
Grade (%)	0%		0%			0%
Peak Hour Factor	0.80	0.80	0.80	0.80	0.80	0.80
Heavy Vehicles(%)	10	10	10	10	10	10
Movement Flow Rate	12	6	12	6	6	44
Number of Lanes	1	0	1	0	0	1

Major/Minor			Major 1			Major 2
Conflicting Flow Rate - All	72	16	0	0	19	0
Stage 1	16	-	-	-	-	-
Stage 2	56	-	-	-	-	-
Follow-up Headway	3.59	3.39	-	-	2.29	-
Pot Capacity-1 Maneuver	913	1040	-	-	1547	-
Stage 1	986	-	-	-	-	-
Stage 2	947	-	-	-	-	-
Time blocked-Platoon(%)	0	0	-	-	0	-
Mov Capacity-1 Maneuver	909	1040	-	-	1547	-
Mov Capacity-2 Maneuver	909	-	-	-	-	-
Stage 1	986	-	-	-	-	-
Stage 2	943	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay (s)	8.9	0	0.9
HCM LOS	A	A	A

Lane	NBT	NBR	WBLn1	SBL	SBT
Capacity (vph)			949		
HCM Control Delay (s)	-	-	8.9	7.337	-
HCM Lane VC Ratio	-	-	0.02	0.004	-
HCM Lane LOS	-	-	A	A	-
HCM 95th Percentile Queue (veh)	-	-	0.06	0.012	-

Intersection	
Intersection Delay (sec/veh):	3.7

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Volume (vph)	5	35	20	5	5	35
Conflicting Peds.(#/hr)	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
Right Turn Channelized	None	None	None	None	None	None
Storage Length	0	0		0	0	
Median Width	12		0			0
Grade (%)	0%		0%			0%
Peak Hour Factor	0.80	0.80	0.80	0.80	0.80	0.80
Heavy Vehicles(%)	10	10	10	10	10	10
Movement Flow Rate	6	44	25	6	6	44
Number of Lanes	1	0	1	0	0	1

Major/Minor			Major 1		Major 2	
Conflicting Flow Rate - All	84	28	0	0	31	0
Stage 1	28	-	-	-	-	-
Stage 2	56	-	-	-	-	-
Follow-up Headway	3.59	3.39	-	-	2.29	-
Pot Capacity-1 Maneuver	898	1025	-	-	1531	-
Stage 1	974	-	-	-	-	-
Stage 2	947	-	-	-	-	-
Time blocked-Platoon(%)	0	0	-	-	0	-
Mov Capacity-1 Maneuver	894	1025	-	-	1531	-
Mov Capacity-2 Maneuver	894	-	-	-	-	-
Stage 1	974	-	-	-	-	-
Stage 2	943	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay (s)	8.8	0	0.9
HCM LOS	A	A	A

Lane	NBT	NBR	WBLn1	SBL	SBT
Capacity (vph)			1007		
HCM Control Delay (s)	-	-	8.8	7.361	-
HCM Lane VC Ratio	-	-	0.05	0.004	-
HCM Lane LOS	-	-	A	A	-
HCM 95th Percentile Queue (veh)	-	-	0.157	0.012	-

Intersection	
Intersection Delay (sec/veh):	7.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Volume (vph)	5	5	5	20	5	5	5	10	65	5	20	5
Conflicting Peds.(#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
Right Turn Channelized	None	None	None	None	None	None	None	None	None	None	None	None
Storage Length	0		0	0		0	0		0	0		0
Median Width		0			0			0			0	
Grade (%)		0%			0%			0%			0%	
Peak Hour Factor	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80
Heavy Vehicles(%)	10	10	10	10	10	10	10	10	10	10	10	10
Movement Flow Rate	6	6	6	25	6	6	6	12	81	6	25	6
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Major/Minor	Major 1			Major 2			Minor 1			Minor 2		
Conflicting Flow Rate - All	12	0	0	12	0	0	96	83	9	127	83	9
Stage 1	-	-	-	-	-	-	21	21	-	59	59	-
Stage 2	-	-	-	-	-	-	75	62	-	68	24	-
Follow-up Headway	2.29	-	-	2.29	-	-	3.59	4.09	3.39	3.59	4.09	3.39
Pot Capacity-1 Maneuver	1556	-	-	1556	-	-	868	792	1050	828	792	1050
Stage 1	-	-	-	-	-	-	977	862	-	933	830	-
Stage 2	-	-	-	-	-	-	915	828	-	923	860	-
Time blocked-Platoon(%)	0	-	-	0	-	-	0	0	0	0	0	0
Mov Capacity-1 Maneuver	1556	-	-	1556	-	-	829	776	1050	743	776	1050
Mov Capacity-2 Maneuver	-	-	-	-	-	-	829	776	-	743	776	-
Stage 1	-	-	-	-	-	-	973	859	-	929	817	-
Stage 2	-	-	-	-	-	-	868	815	-	836	857	-

Approach	EB	WB	NB	SB
HCM Control Delay (s)	2.4	4.9	9	9.7
HCM LOS	A	A	A	A

Lane	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (vph)	990							805
HCM Control Delay (s)	9	7.323	0	-	7.351	0	-	9.7
HCM Lane VC Ratio	0.101	0.004	-	-	0.016	-	-	0.047
HCM Lane LOS	A	A	A	-	A	A	-	A
HCM 95th Percentile Queue (veh)	0.336	0.012	-	-	0.049	-	-	0.146

Intersection	
Intersection Delay (sec/veh):	4.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Volume (vph)	10	5	5	5	5	5	5	10	5	5	25	10
Conflicting Peds.(#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
Right Turn Channelized	None	None	None	None	None	None	None	None	None	None	None	None
Storage Length	0		0	0		0	0		0	0		0
Median Width		0			0			0			0	
Grade (%)		0%			0%			0%			0%	
Peak Hour Factor	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80
Heavy Vehicles(%)	10	10	10	10	10	10	10	10	10	10	10	10
Movement Flow Rate	12	6	6	6	6	6	6	12	6	6	31	12
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Major/Minor	Minor 2			Minor 1			Major 1			Major 2		
Conflicting Flow Rate - All	84	81	38	84	84	16	44	0	0	19	0	0
Stage 1	50	50	-	28	28	-	-	-	-	-	-	-
Stage 2	34	31	-	56	56	-	-	-	-	-	-	-
Follow-up Headway	3.59	4.09	3.39	3.59	4.09	3.39	2.29	-	-	2.29	-	-
Pot Capacity-1 Maneuver	884	795	1012	884	791	1040	1514	-	-	1547	-	-
Stage 1	943	838	-	969	856	-	-	-	-	-	-	-
Stage 2	962	854	-	936	833	-	-	-	-	-	-	-
Time blocked-Platoon(%)	0	0	0	0	0	0	0	-	-	0	-	-
Mov Capacity-1 Maneuver	868	789	1012	868	785	1040	1514	-	-	1547	-	-
Mov Capacity-2 Maneuver	868	789	-	868	785	-	-	-	-	-	-	-
Stage 1	939	835	-	965	853	-	-	-	-	-	-	-
Stage 2	945	851	-	920	830	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay (s)	9.2	9.2	1.8	0.9
HCM LOS	A	A	A	A

Lane	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (vph)				877	886			
HCM Control Delay (s)	7.388	0	-	9.2	9.2	7.337	0	-
HCM Lane VC Ratio	0.004	-	-	0.029	0.021	0.004	-	-
HCM Lane LOS	A	A	-	A	A	A	A	-
HCM 95th Percentile Queue (veh)	0.012	-	-	0.088	0.065	0.012	-	-

Intersection	
Intersection Delay (sec/veh):	4.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Volume (vph)	5	70	5	5	20	5	5	15	5	5	25	10
Conflicting Peds.(#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
Right Turn Channelized	None	None	None	None	None	None	None	None	None	None	None	None
Storage Length	0		0	0		0	0		0	0		0
Median Width		0			0			0			0	
Grade (%)		0%			0%			0%			0%	
Peak Hour Factor	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80
Heavy Vehicles(%)	10	10	10	10	10	10	10	10	10	10	10	10
Movement Flow Rate	6	87	6	6	25	6	6	19	6	6	31	12
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Major/Minor	Major 1			Major 2			Minor 1			Minor 2		
Conflicting Flow Rate - All	31	0	0	94	0	0	165	146	91	156	146	28
Stage 1	-	-	-	-	-	-	103	103	-	40	40	-
Stage 2	-	-	-	-	-	-	62	43	-	116	106	-
Follow-up Headway	2.29	-	-	2.29	-	-	3.59	4.09	3.39	3.59	4.09	3.39
Pot Capacity-1 Maneuver	1531	-	-	1451	-	-	782	731	945	793	731	1025
Stage 1	-	-	-	-	-	-	884	795	-	955	846	-
Stage 2	-	-	-	-	-	-	929	844	-	870	792	-
Time blocked-Platoon(%)	0	-	-	0	-	-	0	0	0	0	0	0
Mov Capacity-1 Maneuver	1531	-	-	1451	-	-	743	725	945	768	725	1025
Mov Capacity-2 Maneuver	-	-	-	-	-	-	743	725	-	768	725	-
Stage 1	-	-	-	-	-	-	880	792	-	951	843	-
Stage 2	-	-	-	-	-	-	880	841	-	840	789	-

Approach	EB	WB	NB	SB
HCM Control Delay (s)	0.5	1.2	9.9	9.9
HCM LOS	A	A	A	A

Lane	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (vph)	764							788
HCM Control Delay (s)	9.9	7.361	0	-	7.492	0	-	9.9
HCM Lane VC Ratio	0.041	0.004	-	-	0.004	-	-	0.063
HCM Lane LOS	A	A	A	-	A	A	-	A
HCM 95th Percentile Queue (veh)	0.128	0.012	-	-	0.013	-	-	0.203

Intersection	
Intersection Delay (sec/veh):	7.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Volume (vph)	55	5	5	5	5	5	5	5	5	10	5	30
Conflicting Peds.(#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
Right Turn Channelized	None	None	None	None	None	None	None	None	None	None	None	None
Storage Length	0		0	0		0	0		0	0		0
Median Width		0			0			0			0	
Grade (%)		0%			0%			0%			0%	
Peak Hour Factor	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80
Heavy Vehicles(%)	10	10	10	10	10	10	10	10	10	10	10	10
Movement Flow Rate	69	6	6	6	6	6	6	6	6	12	6	37
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Major/Minor	Major 1			Major 2			Minor 1			Minor 2		
Conflicting Flow Rate - All	12	0	0	12	0	0	190	171	9	174	171	9
Stage 1	-	-	-	-	-	-	147	147	-	21	21	-
Stage 2	-	-	-	-	-	-	43	24	-	153	150	-
Follow-up Headway	2.29	-	-	2.29	-	-	3.59	4.09	3.39	3.59	4.09	3.39
Pot Capacity-1 Maneuver	1556	-	-	1556	-	-	753	708	1050	771	708	1050
Stage 1	-	-	-	-	-	-	837	760	-	977	862	-
Stage 2	-	-	-	-	-	-	951	860	-	831	758	-
Time blocked-Platoon(%)	0	-	-	0	-	-	0	0	0	0	0	0
Mov Capacity-1 Maneuver	1556	-	-	1556	-	-	694	673	1050	733	673	1050
Mov Capacity-2 Maneuver	-	-	-	-	-	-	694	673	-	733	673	-
Stage 1	-	-	-	-	-	-	799	726	-	933	859	-
Stage 2	-	-	-	-	-	-	907	857	-	782	724	-

Approach	EB	WB	NB	SB
HCM Control Delay (s)	6.3	2.4	9.8	9.2
HCM LOS	A	A	A	A

Lane	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (vph)	773							906
HCM Control Delay (s)	9.8	7.421	0	-	7.323	0	-	9.2
HCM Lane VC Ratio	0.024	0.044	-	-	0.004	-	-	0.062
HCM Lane LOS	A	A	A	-	A	A	-	A
HCM 95th Percentile Queue (veh)	0.075	0.139	-	-	0.012	-	-	0.198

Intersection	
Intersection Delay (sec/veh):	3.8

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Volume (vph)	60	5	5	65	35	5
Conflicting Peds.(#/hr)	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
Right Turn Channelized	None	None	None	None	None	None
Storage Length	0	0	0			0
Median Width	12			0	0	
Grade (%)	0%			0%	0%	
Peak Hour Factor	0.80	0.80	0.80	0.80	0.80	0.80
Heavy Vehicles(%)	10	10	10	10	10	10
Movement Flow Rate	75	6	6	81	44	6
Number of Lanes	1	0	0	1	1	0

Major/Minor				Major 1	Major 2	
Conflicting Flow Rate - All	140	47	50	0	0	0
Stage 1	47	-	-	-	-	-
Stage 2	93	-	-	-	-	-
Follow-up Headway	3.59	3.39	2.29	-	-	-
Pot Capacity-1 Maneuver	834	1000	1507	-	-	-
Stage 1	955	-	-	-	-	-
Stage 2	911	-	-	-	-	-
Time blocked-Platoon(%)	0	0	0	-	-	-
Mov Capacity-1 Maneuver	831	1000	1507	-	-	-
Mov Capacity-2 Maneuver	831	-	-	-	-	-
Stage 1	955	-	-	-	-	-
Stage 2	907	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay (s)	9.7	0.5	0
HCM LOS	A	A	A

Lane	NBL	NBT	EBLn1	SBT	SBR
Capacity (vph)			842		
HCM Control Delay (s)	7.399	-	9.7	-	-
HCM Lane VC Ratio	0.004	-	0.096	-	-
HCM Lane LOS	A	-	A	-	-
HCM 95th Percentile Queue (veh)	0.012	-	0.319	-	-

Intersection	
Intersection Delay (sec/veh):	2.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Volume (vph)	10	5	5	5	5	10	5	120	5	10	40	10
Conflicting Peds.(#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
Right Turn Channelized	None	None	None	None	None	None	None	None	None	None	None	None
Storage Length	0		0	0		0	0		0	0		0
Median Width		0			0			0			0	
Grade (%)		0%			0%			0%			0%	
Peak Hour Factor	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80
Heavy Vehicles(%)	10	10	10	10	10	10	10	10	10	10	10	10
Movement Flow Rate	12	6	6	6	6	12	6	150	6	12	50	12
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Major/Minor		Minor 2			Minor 1			Major 1			Major 2	
Conflicting Flow Rate - All	258	251	57	254	254	153	63	0	0	156	0	0
Stage 1	83	83	-	165	165	-	-	-	-	-	-	-
Stage 2	175	168	-	89	89	-	-	-	-	-	-	-
Follow-up Headway	3.59	4.09	3.39	3.59	4.09	3.39	2.29	-	-	2.29	-	-
Pot Capacity-1 Maneuver	679	639	987	683	636	872	1490	-	-	1377	-	-
Stage 1	906	811	-	819	747	-	-	-	-	-	-	-
Stage 2	808	745	-	899	806	-	-	-	-	-	-	-
Time blocked-Platoon(%)	0	0	0	0	0	0	0	-	-	0	-	-
Mov Capacity-1 Maneuver	657	630	987	666	627	872	1490	-	-	1377	-	-
Mov Capacity-2 Maneuver	657	630	-	666	627	-	-	-	-	-	-	-
Stage 1	902	803	-	816	744	-	-	-	-	-	-	-
Stage 2	787	742	-	877	798	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay (s)	10.3	10	0.3	1.3
HCM LOS	B	B	A	A

Lane	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (vph)				709	742			
HCM Control Delay (s)	7.426	0	-	10.3	10	7.638	0	-
HCM Lane VC Ratio	0.004	-	-	0.035	0.034	0.009	-	-
HCM Lane LOS	A	A	-	B	B	A	A	-
HCM 95th Percentile Queue (veh)	0.013	-	-	0.11	0.104	0.027	-	-

Intersection	
Intersection Delay (sec/veh):	0.6

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Volume (vph)	10	185	305	10	10	10
Conflicting Peds.(#/hr)	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
Right Turn Channelized	None	None	None	None	None	None
Storage Length	200			100	250	0
Median Width		12	0		12	
Grade (%)		0%	0%		0%	
Peak Hour Factor	0.80	0.80	0.80	0.80	0.80	0.80
Heavy Vehicles(%)	10	10	10	10	10	10
Movement Flow Rate	12	231	381	12	12	12
Number of Lanes	1	1	1	1	1	1

Major/Minor	Major 1		Major 2			
Conflicting Flow Rate - All	394	0	0	0	645	198
Stage 1	-	-	-	-	388	-
Stage 2	-	-	-	-	257	-
Follow-up Headway	2.29	-	-	-	3.59	3.39
Pot Capacity-1 Maneuver	1122	-	-	-	424	823
Stage 1	-	-	-	-	668	-
Stage 2	-	-	-	-	768	-
Time blocked-Platoon(%)	0	-	-	-	0	0
Mov Capacity-1 Maneuver	1122	-	-	-	419	823
Mov Capacity-2 Maneuver	-	-	-	-	419	-
Stage 1	-	-	-	-	668	-
Stage 2	-	-	-	-	759	-

Approach	EB	WB	SB
HCM Control Delay (s)	0.4	0	11.7
HCM LOS	A	A	B

Lane	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (vph)					419	823
HCM Control Delay (s)	8.245	-	-	-	13.9	9.4
HCM Lane VC Ratio	0.011	-	-	-	0.03	0.015
HCM Lane LOS	A	-	-	-	B	A
HCM 95th Percentile Queue (veh)	0.034	-	-	-	0.092	0.046

Intersection	
Intersection Delay (sec/veh):	0.9

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Volume (vph)	180	20	15	300	15	15
Conflicting Peds.(#/hr)	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
Right Turn Channelized	None	None	None	None	None	None
Storage Length		450	150		0	0
Median Width	12			12	12	
Grade (%)	0%			0%	0%	
Peak Hour Factor	0.80	0.80	0.80	0.80	0.80	0.80
Heavy Vehicles(%)	10	10	10	10	10	10
Movement Flow Rate	225	25	19	375	19	19
Number of Lanes	1	1	1	1	1	0

Major/Minor	Major 1			Major 2		
Conflicting Flow Rate - All	0	0	250	0	651	126
Stage 1	-	-	-	-	238	-
Stage 2	-	-	-	-	413	-
Follow-up Headway	-	-	2.29	-	3.59	3.39
Pot Capacity-1 Maneuver	-	-	1270	-	421	903
Stage 1	-	-	-	-	783	-
Stage 2	-	-	-	-	651	-
Time blocked-Platoon(%)	-	-	0	-	0	0
Mov Capacity-1 Maneuver	-	-	1270	-	415	903
Mov Capacity-2 Maneuver	-	-	-	-	415	-
Stage 1	-	-	-	-	783	-
Stage 2	-	-	-	-	641	-

Approach	EB	WB	NB
HCM Control Delay (s)	0	0.4	11.8
HCM LOS	A	A	B

Lane	NBLn1	EBT	EBR	WBL	WBT
Capacity (vph)	569				
HCM Control Delay (s)	11.8	-	-	7.877	-
HCM Lane VC Ratio	0.066	-	-	0.015	-
HCM Lane LOS	B	-	-	A	-
HCM 95th Percentile Queue (veh)	0.211	-	-	0.045	-

Intersection	
Intersection Delay (sec/veh):	1.5

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Volume (vph)	5	185	315	20	50	10
Conflicting Peds.(#/hr)	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
Right Turn Channelized	None	None	None	None	None	None
Storage Length	125			0	0	0
Median Width		12	12		12	
Grade (%)		0%	0%		0%	
Peak Hour Factor	0.80	0.80	0.80	0.80	0.80	0.80
Heavy Vehicles(%)	10	10	10	10	10	10
Movement Flow Rate	6	231	394	25	62	12
Number of Lanes	1	1	1	0	1	0

Major/Minor	Major 1		Major 2			
Conflicting Flow Rate - All	419	0	0	0	650	407
Stage 1	-	-	-	-	407	-
Stage 2	-	-	-	-	243	-
Follow-up Headway	2.29	-	-	-	3.59	3.39
Pot Capacity-1 Maneuver	1117	-	-	-	459	744
Stage 1	-	-	-	-	714	-
Stage 2	-	-	-	-	779	-
Time blocked-Platoon(%)	24	-	-	-	24	24
Mov Capacity-1 Maneuver	1117	-	-	-	457	744
Mov Capacity-2 Maneuver	-	-	-	-	457	-
Stage 1	-	-	-	-	714	-
Stage 2	-	-	-	-	775	-

Approach	EB	WB	SB
HCM Control Delay (s)	0.2	0	13.7
HCM LOS	A	A	B

Lane	EBL	EBT	WBT	WBR	SBLn1
Capacity (vph)					488
HCM Control Delay (s)	8.241	-	-	-	13.7
HCM Lane VC Ratio	0.006	-	-	-	0.154
HCM Lane LOS	A	-	-	-	B
HCM 95th Percentile Queue (veh)	0.017	-	-	-	0.539

HCM 2010 Signalized Intersection Summary
4: Adams Street & SR 109

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	10	250	10	15	370	35	10	10	20	45	10	15
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Queue, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	0.99		0.99	0.99		0.99	0.99		0.99
Parking, Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow Rate	1727	1727	1727	1727	1727	1727	1727	1727	1727	1727	1727	1727
Lanes	0	1	0	0	1	0	0	1	0	0	1	0
Capacity, veh/h	101	636	25	102	598	55	190	184	262	356	83	79
Arriving On Green	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40
Sat Flow, veh/h	61.9	1462.1	61.9	59.1	1403.1	138.0	327.7	294.6	655.4	595.8	125.2	198.6
Grp Volume(v), veh/h	337.5	0.0	0.0	525.0	0.0	0.0	50.0	0.0	0.0	87.5	0.0	0.0
Grp Sat Flow(s),veh/h/ln	1671.0	0.0	0.0	1656.1	0.0	0.0	1310.9	0.0	0.0	926.7	0.0	0.0
Q Serve(g_s), s	0.0	0.0	0.0	1.2	0.0	0.0	0.0	0.0	0.0	0.4	0.0	0.0
Cycle Q Clear(g_c), s	5.9	0.0	0.0	10.8	0.0	0.0	0.8	0.0	0.0	1.6	0.0	0.0
Proportion In Lane	0.037		0.037	0.036		0.083	0.250		0.500	0.643		0.214
Lane Grp Cap(c), veh/h	761.7	0.0	0.0	755.7	0.0	0.0	636.9	0.0	0.0	518.5	0.0	0.0
V/C Ratio(X)	0.443	0.000	0.000	0.695	0.000	0.000	0.079	0.000	0.000	0.169	0.000	0.000
Avail Cap(c_a), veh/h	761.7	0.0	0.0	755.7	0.0	0.0	636.9	0.0	0.0	518.5	0.0	0.0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.000	0.000	0.000	1.000	0.000	0.000	1.000	0.000	0.000	1.000	0.000	0.000
Uniform Delay (d), s/veh	9.0	0.0	0.0	10.4	0.0	0.0	7.4	0.0	0.0	7.6	0.0	0.0
Incr Delay (d2), s/veh	1.9	0.0	0.0	5.2	0.0	0.0	0.2	0.0	0.0	0.7	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Lane Group Delay (d), s/veh	10.8	0.0	0.0	15.6	0.0	0.0	7.7	0.0	0.0	8.3	0.0	0.0
Lane Group LOS	B			B			A			A		
Approach Volume, veh/h		338			525			50			88	
Approach Delay, s/veh		10.8			15.6			7.7			8.3	
Approach LOS		B			B			A			A	

Timer				
Assigned Phase	4	8	2	6
Phase Duration (G+Y+Rc), s	20.00	20.00	20.00	20.00
Change Period (Y+Rc), s	4.00	4.00	4.00	4.00
Max Green Setting (Gmax), s	16.00	16.00	16.00	16.00
Max Q Clear Time (g_c+I1), s	7.88	12.84	2.78	3.56
Green Extension Time (p_c)	3.51	1.65	0.55	0.53

Intersection Summary	
HCM 2010 Control Delay	13.0
HCM 2010 Level of Service	B

Intersection	
Intersection Delay (sec/veh):	3.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Volume (vph)	5	5	5	5	5	5	5	20	5	5	35	5
Conflicting Peds.(#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
Right Turn Channelized	None	None	None	None	None	None	None	None	None	None	None	None
Storage Length	0		0	0		0	0		0	0		0
Median Width		0			0			0			0	
Grade (%)		0%			0%			0%			0%	
Peak Hour Factor	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80
Heavy Vehicles(%)	10	10	10	10	10	10	10	10	10	10	10	10
Movement Flow Rate	6	6	6	6	6	6	6	25	6	6	44	6
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Major/Minor		Minor 2			Minor 1			Major 1			Major 2	
Conflicting Flow Rate - All	105	102	47	105	102	28	50	0	0	31	0	0
Stage 1	59	59	-	40	40	-	-	-	-	-	-	-
Stage 2	46	43	-	65	62	-	-	-	-	-	-	-
Follow-up Headway	3.59	4.09	3.39	3.59	4.09	3.39	2.29	-	-	2.29	-	-
Pot Capacity-1 Maneuver	856	773	1000	856	773	1025	1507	-	-	1531	-	-
Stage 1	933	830	-	955	846	-	-	-	-	-	-	-
Stage 2	948	844	-	926	828	-	-	-	-	-	-	-
Time blocked-Platoon(%)	0	0	0	0	0	0	0	-	-	0	-	-
Mov Capacity-1 Maneuver	840	767	1000	840	767	1025	1507	-	-	1531	-	-
Mov Capacity-2 Maneuver	840	767	-	840	767	-	-	-	-	-	-	-
Stage 1	929	827	-	951	843	-	-	-	-	-	-	-
Stage 2	931	841	-	910	825	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay (s)	9.3	9.3	1.2	0.8
HCM LOS	A	A	A	A

Lane	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (vph)				859	865			
HCM Control Delay (s)	7.399	0	-	9.3	9.3	7.361	0	-
HCM Lane VC Ratio	0.004	-	-	0.022	0.022	0.004	-	-
HCM Lane LOS	A	A	-	A	A	A	A	-
HCM 95th Percentile Queue (veh)	0.012	-	-	0.067	0.066	0.012	-	-

Intersection	
Intersection Delay (sec/veh):	1.7

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Volume (vph)	5	5	15	10	5	35
Conflicting Peds.(#/hr)	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
Right Turn Channelized	None	None	None	None	None	None
Storage Length	0	0		0	0	
Median Width	12		0			0
Grade (%)	0%		0%			0%
Peak Hour Factor	0.80	0.80	0.80	0.80	0.80	0.80
Heavy Vehicles(%)	10	10	10	10	10	10
Movement Flow Rate	6	6	19	12	6	44
Number of Lanes	1	0	1	0	0	1

Major/Minor			Major 1		Major 2	
Conflicting Flow Rate - All	82	26	0	0	32	0
Stage 1	26	-	-	-	-	-
Stage 2	56	-	-	-	-	-
Follow-up Headway	3.59	3.39	-	-	2.29	-
Pot Capacity-1 Maneuver	901	1027	-	-	1530	-
Stage 1	976	-	-	-	-	-
Stage 2	947	-	-	-	-	-
Time blocked-Platoon(%)	0	0	-	-	0	-
Mov Capacity-1 Maneuver	897	1027	-	-	1530	-
Mov Capacity-2 Maneuver	897	-	-	-	-	-
Stage 1	976	-	-	-	-	-
Stage 2	943	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay (s)	8.8	0	0.9
HCM LOS	A	A	A

Lane	NBT	NBR	WBLn1	SBL	SBT
Capacity (vph)			958		
HCM Control Delay (s)	-	-	8.8	7.363	-
HCM Lane VC Ratio	-	-	0.013	0.004	-
HCM Lane LOS	-	-	A	A	-
HCM 95th Percentile Queue (veh)	-	-	0.04	0.012	-

Intersection	
Intersection Delay (sec/veh):	2.3

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Volume (vph)	5	5	15	5	10	30
Conflicting Peds.(#/hr)	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
Right Turn Channelized	None	None	None	None	None	None
Storage Length	0	0		0	0	
Median Width	12		0			0
Grade (%)	0%		0%			0%
Peak Hour Factor	0.80	0.80	0.80	0.80	0.80	0.80
Heavy Vehicles(%)	10	10	10	10	10	10
Movement Flow Rate	6	6	19	6	12	37
Number of Lanes	1	0	1	0	0	1

Major/Minor			Major 1			Major 2
Conflicting Flow Rate - All	86	22	0	0	25	0
Stage 1	22	-	-	-	-	-
Stage 2	64	-	-	-	-	-
Follow-up Headway	3.59	3.39	-	-	2.29	-
Pot Capacity-1 Maneuver	896	1032	-	-	1539	-
Stage 1	980	-	-	-	-	-
Stage 2	939	-	-	-	-	-
Time blocked-Platoon(%)	0	0	-	-	0	-
Mov Capacity-1 Maneuver	888	1032	-	-	1539	-
Mov Capacity-2 Maneuver	888	-	-	-	-	-
Stage 1	980	-	-	-	-	-
Stage 2	931	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay (s)	8.8	0	1.8
HCM LOS	A	A	A

Lane	NBT	NBR	WBLn1	SBL	SBT
Capacity (vph)			955		
HCM Control Delay (s)	-	-	8.8	7.358	-
HCM Lane VC Ratio	-	-	0.013	0.008	-
HCM Lane LOS	-	-	A	A	-
HCM 95th Percentile Queue (veh)	-	-	0.04	0.025	-

Intersection	
Intersection Delay (sec/veh):	7.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Volume (vph)	5	5	5	25	5	5	5	10	75	5	20	5
Conflicting Peds.(#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
Right Turn Channelized	None	None	None	None	None	None	None	None	None	None	None	None
Storage Length	0		0	0		0	0		0	0		0
Median Width		0			0			0			0	
Grade (%)		0%			0%			0%			0%	
Peak Hour Factor	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80
Heavy Vehicles(%)	10	10	10	10	10	10	10	10	10	10	10	10
Movement Flow Rate	6	6	6	31	6	6	6	12	94	6	25	6
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Major/Minor	Major 1			Major 2			Minor 1			Minor 2		
Conflicting Flow Rate - All	12	0	0	12	0	0	108	95	9	146	95	9
Stage 1	-	-	-	-	-	-	21	21	-	71	71	-
Stage 2	-	-	-	-	-	-	87	74	-	75	24	-
Follow-up Headway	2.29	-	-	2.29	-	-	3.59	4.09	3.39	3.59	4.09	3.39
Pot Capacity-1 Maneuver	1556	-	-	1556	-	-	852	780	1050	805	780	1050
Stage 1	-	-	-	-	-	-	977	862	-	919	820	-
Stage 2	-	-	-	-	-	-	901	818	-	915	860	-
Time blocked-Platoon(%)	0	-	-	0	-	-	0	0	0	0	0	0
Mov Capacity-1 Maneuver	1556	-	-	1556	-	-	811	761	1050	711	761	1050
Mov Capacity-2 Maneuver	-	-	-	-	-	-	811	761	-	711	761	-
Stage 1	-	-	-	-	-	-	973	859	-	915	804	-
Stage 2	-	-	-	-	-	-	850	802	-	818	857	-

Approach	EB	WB	NB	SB
HCM Control Delay (s)	2.4	5.3	9.1	9.8
HCM LOS	A	A	A	A

Lane	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (vph)	992							788
HCM Control Delay (s)	9.1	7.323	0	-	7.361	0	-	9.8
HCM Lane VC Ratio	0.113	0.004	-	-	0.02	-	-	0.048
HCM Lane LOS	A	A	A	-	A	A	-	A
HCM 95th Percentile Queue (veh)	0.382	0.012	-	-	0.061	-	-	0.15

Intersection	
Intersection Delay (sec/veh):	4.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Volume (vph)	5	5	5	5	5	5	5	10	5	5	25	5
Conflicting Peds.(#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
Right Turn Channelized	None	None	None	None	None	None	None	None	None	None	None	None
Storage Length	0		0	0		0	0		0	0		0
Median Width		0			0			0			0	
Grade (%)		0%			0%			0%			0%	
Peak Hour Factor	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80
Heavy Vehicles(%)	10	10	10	10	10	10	10	10	10	10	10	10
Movement Flow Rate	6	6	6	6	6	6	6	12	6	6	31	6
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Major/Minor		Minor 2			Minor 1			Major 1			Major 2	
Conflicting Flow Rate - All	80	77	34	80	77	16	37	0	0	19	0	0
Stage 1	46	46	-	28	28	-	-	-	-	-	-	-
Stage 2	34	31	-	52	49	-	-	-	-	-	-	-
Follow-up Headway	3.59	4.09	3.39	3.59	4.09	3.39	2.29	-	-	2.29	-	-
Pot Capacity-1 Maneuver	889	798	1017	889	798	1040	1523	-	-	1547	-	-
Stage 1	948	841	-	969	856	-	-	-	-	-	-	-
Stage 2	962	854	-	941	839	-	-	-	-	-	-	-
Time blocked-Platoon(%)	0	0	0	0	0	0	0	-	-	0	-	-
Mov Capacity-1 Maneuver	873	792	1017	873	792	1040	1523	-	-	1547	-	-
Mov Capacity-2 Maneuver	873	792	-	873	792	-	-	-	-	-	-	-
Stage 1	944	838	-	965	853	-	-	-	-	-	-	-
Stage 2	945	851	-	925	836	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay (s)	9.2	9.1	1.8	1
HCM LOS	A	A	A	A

Lane	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (vph)				885	890			
HCM Control Delay (s)	7.373	0	-	9.2	9.1	7.337	0	-
HCM Lane VC Ratio	0.004	-	-	0.021	0.021	0.004	-	-
HCM Lane LOS	A	A	-	A	A	A	A	-
HCM 95th Percentile Queue (veh)	0.012	-	-	0.065	0.065	0.012	-	-

Intersection	
Intersection Delay (sec/veh):	4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Volume (vph)	5	45	5	5	30	5	5	10	10	5	20	5
Conflicting Peds.(#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
Right Turn Channelized	None	None	None	None	None	None	None	None	None	None	None	None
Storage Length	0		0	0		0	0		0	0		0
Median Width		0			0			0			0	
Grade (%)		0%			0%			0%			0%	
Peak Hour Factor	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80
Heavy Vehicles(%)	10	10	10	10	10	10	10	10	10	10	10	10
Movement Flow Rate	6	56	6	6	37	6	6	12	12	6	25	6
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Major/Minor	Major 1			Major 2			Minor 1			Minor 2		
Conflicting Flow Rate - All	44	0	0	62	0	0	140	127	59	137	127	41
Stage 1	-	-	-	-	-	-	71	71	-	53	53	-
Stage 2	-	-	-	-	-	-	69	56	-	84	74	-
Follow-up Headway	2.29	-	-	2.29	-	-	3.59	4.09	3.39	3.59	4.09	3.39
Pot Capacity-1 Maneuver	1514	-	-	1491	-	-	812	749	985	816	749	1008
Stage 1	-	-	-	-	-	-	919	820	-	940	835	-
Stage 2	-	-	-	-	-	-	921	833	-	905	818	-
Time blocked-Platoon(%)	0	-	-	0	-	-	0	0	0	0	0	0
Mov Capacity-1 Maneuver	1514	-	-	1491	-	-	781	743	985	790	743	1008
Mov Capacity-2 Maneuver	-	-	-	-	-	-	781	743	-	790	743	-
Stage 1	-	-	-	-	-	-	915	817	-	936	832	-
Stage 2	-	-	-	-	-	-	884	830	-	876	815	-

Approach	EB	WB	NB	SB
HCM Control Delay (s)	0.7	0.9	9.5	9.8
HCM LOS	A	A	A	A

Lane	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (vph)	833							785
HCM Control Delay (s)	9.5	7.388	0	-	7.425	0	-	9.8
HCM Lane VC Ratio	0.038	0.004	-	-	0.004	-	-	0.048
HCM Lane LOS	A	A	A	-	A	A	-	A
HCM 95th Percentile Queue (veh)	0.117	0.012	-	-	0.013	-	-	0.15

Intersection	
Intersection Delay (sec/veh):	7.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Volume (vph)	80	5	5	5	5	10	5	5	5	5	5	30
Conflicting Peds.(#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
Right Turn Channelized	None	None	None	None	None	None	None	None	None	None	None	None
Storage Length	0		0	0		0	0		0	0		0
Median Width		0			0			0			0	
Grade (%)		0%			0%			0%			0%	
Peak Hour Factor	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80
Heavy Vehicles(%)	10	10	10	10	10	10	10	10	10	10	10	10
Movement Flow Rate	100	6	6	6	6	12	6	6	6	6	6	37
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Major/Minor	Major 1			Major 2			Minor 1			Minor 2		
Conflicting Flow Rate - All	19	0	0	12	0	0	256	240	9	240	237	13
Stage 1	-	-	-	-	-	-	209	209	-	25	25	-
Stage 2	-	-	-	-	-	-	47	31	-	215	212	-
Follow-up Headway	2.29	-	-	2.29	-	-	3.59	4.09	3.39	3.59	4.09	3.39
Pot Capacity-1 Maneuver	1547	-	-	1556	-	-	681	648	1050	698	651	1044
Stage 1	-	-	-	-	-	-	775	714	-	973	859	-
Stage 2	-	-	-	-	-	-	947	854	-	769	712	-
Time blocked-Platoon(%)	0	-	-	0	-	-	0	0	0	0	0	0
Mov Capacity-1 Maneuver	1547	-	-	1556	-	-	617	603	1050	652	606	1044
Mov Capacity-2 Maneuver	-	-	-	-	-	-	617	603	-	652	606	-
Stage 1	-	-	-	-	-	-	725	668	-	910	856	-
Stage 2	-	-	-	-	-	-	903	851	-	708	666	-

Approach	EB	WB	NB	SB
HCM Control Delay (s)	6.7	1.8	10.2	9.3
HCM LOS	A	A	B	A

Lane	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (vph)	709							896
HCM Control Delay (s)	10.2	7.488	0	-	7.323	0	-	9.3
HCM Lane VC Ratio	0.026	0.065	-	-	0.004	-	-	0.056
HCM Lane LOS	B	A	A	-	A	A	-	A
HCM 95th Percentile Queue (veh)	0.081	0.207	-	-	0.012	-	-	0.177

Intersection	
Intersection Delay (sec/veh):	3.1

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Volume (vph)	55	5	5	85	30	25
Conflicting Peds.(#/hr)	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
Right Turn Channelized	None	None	None	None	None	None
Storage Length	0	0	0			0
Median Width	12			0	0	
Grade (%)	0%			0%	0%	
Peak Hour Factor	0.80	0.80	0.80	0.80	0.80	0.80
Heavy Vehicles(%)	10	10	10	10	10	10
Movement Flow Rate	69	6	6	106	37	31
Number of Lanes	1	0	0	1	1	0

Major/Minor				Major 1	Major 2	
Conflicting Flow Rate - All	172	54	69	0	0	0
Stage 1	54	-	-	-	-	-
Stage 2	118	-	-	-	-	-
Follow-up Headway	3.59	3.39	2.29	-	-	-
Pot Capacity-1 Maneuver	800	991	1483	-	-	-
Stage 1	948	-	-	-	-	-
Stage 2	888	-	-	-	-	-
Time blocked-Platoon(%)	0	0	0	-	-	-
Mov Capacity-1 Maneuver	797	991	1483	-	-	-
Mov Capacity-2 Maneuver	797	-	-	-	-	-
Stage 1	948	-	-	-	-	-
Stage 2	884	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay (s)	9.9	0.4	0
HCM LOS	A	A	A

Lane	NBL	NBT	EBLn1	SBT	SBR
Capacity (vph)			810		
HCM Control Delay (s)	7.438	-	9.9	-	-
HCM Lane VC Ratio	0.004	-	0.093	-	-
HCM Lane LOS	A	-	A	-	-
HCM 95th Percentile Queue (veh)	0.013	-	0.305	-	-

Intersection	
Intersection Delay (sec/veh):	1.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Volume (vph)	5	5	5	5	5	5	5	125	5	5	45	10
Conflicting Peds.(#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
Right Turn Channelized	None	None	None	None	None	None	None	None	None	None	None	None
Storage Length	0		0	0		0	0		0	0		0
Median Width		0			0			0			0	
Grade (%)		0%			0%			0%			0%	
Peak Hour Factor	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80
Heavy Vehicles(%)	10	10	10	10	10	10	10	10	10	10	10	10
Movement Flow Rate	6	6	6	6	6	6	6	156	6	6	56	12
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Major/Minor		Minor 2			Minor 1			Major 1			Major 2	
Conflicting Flow Rate - All	252	249	63	252	252	159	69	0	0	162	0	0
Stage 1	75	75	-	171	171	-	-	-	-	-	-	-
Stage 2	177	174	-	81	81	-	-	-	-	-	-	-
Follow-up Headway	3.59	4.09	3.39	3.59	4.09	3.39	2.29	-	-	2.29	-	-
Pot Capacity-1 Maneuver	685	641	980	685	638	866	1483	-	-	1370	-	-
Stage 1	915	818	-	812	742	-	-	-	-	-	-	-
Stage 2	806	740	-	908	812	-	-	-	-	-	-	-
Time blocked-Platoon(%)	0	0	0	0	0	0	0	-	-	0	-	-
Mov Capacity-1 Maneuver	670	635	980	671	632	866	1483	-	-	1370	-	-
Mov Capacity-2 Maneuver	670	635	-	671	632	-	-	-	-	-	-	-
Stage 1	911	814	-	809	739	-	-	-	-	-	-	-
Stage 2	790	737	-	891	808	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay (s)	10	10.2	0.3	0.6
HCM LOS	B	B	A	A

Lane	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (vph)				734	710			
HCM Control Delay (s)	7.438	0	-	10	10.2	7.64	0	-
HCM Lane VC Ratio	0.004	-	-	0.026	0.026	0.005	-	-
HCM Lane LOS	A	A	-	B	B	A	A	-
HCM 95th Percentile Queue (veh)	0.013	-	-	0.079	0.081	0.014	-	-

Intersection	
Intersection Delay (sec/veh):	0.6

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Volume (vph)	10	245	120	5	10	5
Conflicting Peds.(#/hr)	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
Right Turn Channelized	None	None	None	None	None	None
Storage Length	200			100	250	0
Median Width		12	0		12	
Grade (%)		0%	0%		0%	
Peak Hour Factor	0.80	0.80	0.80	0.80	0.80	0.80
Heavy Vehicles(%)	10	10	10	10	10	10
Movement Flow Rate	12	306	150	6	12	6
Number of Lanes	1	1	1	1	1	1

Major/Minor		Major 1	Major 2			
Conflicting Flow Rate - All	156	0	0	0	485	78
Stage 1	-	-	-	-	153	-
Stage 2	-	-	-	-	332	-
Follow-up Headway	2.29	-	-	-	3.59	3.39
Pot Capacity-1 Maneuver	1377	-	-	-	527	961
Stage 1	-	-	-	-	856	-
Stage 2	-	-	-	-	709	-
Time blocked-Platoon(%)	0	-	-	-	0	0
Mov Capacity-1 Maneuver	1377	-	-	-	522	961
Mov Capacity-2 Maneuver	-	-	-	-	522	-
Stage 1	-	-	-	-	856	-
Stage 2	-	-	-	-	702	-

Approach	EB	WB	SB
HCM Control Delay (s)	0.3	0	11
HCM LOS	A	A	B

Lane	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (vph)					522	961
HCM Control Delay (s)	7.638	-	-	-	12.1	8.8
HCM Lane VC Ratio	0.009	-	-	-	0.024	0.007
HCM Lane LOS	A	-	-	-	B	A
HCM 95th Percentile Queue (veh)	0.027	-	-	-	0.074	0.02

Intersection	
Intersection Delay (sec/veh):	0.5

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Volume (vph)	210	40	10	120	5	5
Conflicting Peds.(#/hr)	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
Right Turn Channelized	None	None	None	None	None	None
Storage Length		450	150		0	0
Median Width	12			12	12	
Grade (%)	0%			0%	0%	
Peak Hour Factor	0.80	0.80	0.80	0.80	0.80	0.80
Heavy Vehicles(%)	10	10	10	10	10	10
Movement Flow Rate	262	50	12	150	6	6
Number of Lanes	1	1	1	1	1	0

Major/Minor	Major 1			Major 2		
Conflicting Flow Rate - All	0	0	313	0	464	157
Stage 1	-	-	-	-	288	-
Stage 2	-	-	-	-	176	-
Follow-up Headway	-	-	2.29	-	3.59	3.39
Pot Capacity-1 Maneuver	-	-	1203	-	542	868
Stage 1	-	-	-	-	743	-
Stage 2	-	-	-	-	836	-
Time blocked-Platoon(%)	-	-	0	-	0	0
Mov Capacity-1 Maneuver	-	-	1203	-	536	868
Mov Capacity-2 Maneuver	-	-	-	-	536	-
Stage 1	-	-	-	-	743	-
Stage 2	-	-	-	-	827	-

Approach	EB	WB	NB
HCM Control Delay (s)	0	0.6	10.5
HCM LOS	A	A	B

Lane	NBLn1	EBT	EBR	WBL	WBT
Capacity (vph)	663				
HCM Control Delay (s)	10.5	-	-	8.024	-
HCM Lane VC Ratio	0.019	-	-	0.01	-
HCM Lane LOS	B	-	-	A	-
HCM 95th Percentile Queue (veh)	0.058	-	-	0.031	-

Intersection	
Intersection Delay (sec/veh):	1.8

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Volume (vph)	20	200	125	115	50	10
Conflicting Peds.(#/hr)	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
Right Turn Channelized	None	None	None	None	None	None
Storage Length	125			0	0	0
Median Width		12	12		12	
Grade (%)		0%	0%		0%	
Peak Hour Factor	0.80	0.80	0.80	0.80	0.80	0.80
Heavy Vehicles(%)	10	10	10	10	10	10
Movement Flow Rate	25	250	156	144	62	12
Number of Lanes	1	1	1	0	1	0

Major/Minor	Major 1		Major 2			
Conflicting Flow Rate - All	300	0	0	0	528	228
Stage 1	-	-	-	-	228	-
Stage 2	-	-	-	-	300	-
Follow-up Headway	2.29	-	-	-	3.59	3.39
Pot Capacity-1 Maneuver	1218	-	-	-	500	803
Stage 1	-	-	-	-	797	-
Stage 2	-	-	-	-	734	-
Time blocked-Platoon(%)	2	-	-	-	2	2
Mov Capacity-1 Maneuver	1218	-	-	-	490	803
Mov Capacity-2 Maneuver	-	-	-	-	490	-
Stage 1	-	-	-	-	797	-
Stage 2	-	-	-	-	719	-

Approach	EB	WB	SB
HCM Control Delay (s)	0.7	0	13
HCM LOS	A	A	B

Lane	EBL	EBT	WBT	WBR	SBLn1
Capacity (vph)					524
HCM Control Delay (s)	8.018	-	-	-	13
HCM Lane VC Ratio	0.021	-	-	-	0.143
HCM Lane LOS	A	-	-	-	B
HCM 95th Percentile Queue (veh)	0.063	-	-	-	0.497

HCM 2010 Signalized Intersection Summary
4: Adams Street & SR 109

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	15	275	5	5	320	75	25	15	5	100	25	15
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Queue, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	0.99		0.99	0.99		0.99	0.99		0.99
Parking, Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow Rate	1727	1727	1727	1727	1727	1727	1727	1727	1727	1727	1727	1727
Lanes	0	1	0	0	1	0	0	1	0	0	1	0
Capacity, veh/h	107	639	11	93	537	124	360	192	52	381	87	38
Arriving On Green	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40
Sat Flow, veh/h	84.3	1437.8	28.1	20.7	1305.7	311.0	643.8	296.9	128.8	626.7	149.6	94.0
Grp Volume(v), veh/h	368.8	0.0	0.0	500.0	0.0	0.0	56.3	0.0	0.0	175.0	0.0	0.0
Grp Sat Flow(s),veh/h/ln	1657.3	0.0	0.0	1658.8	0.0	0.0	1158.9	0.0	0.0	877.3	0.0	0.0
Q Serve(g_s), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.5	0.0	0.0
Cycle Q Clear(g_c), s	6.5	0.0	0.0	10.3	0.0	0.0	0.8	0.0	0.0	5.3	0.0	0.0
Proportion In Lane	0.051		0.017	0.012		0.187	0.556		0.111	0.714		0.107
Lane Grp Cap(c), veh/h	757.5	0.0	0.0	754.6	0.0	0.0	603.6	0.0	0.0	505.2	0.0	0.0
V/C Ratio(X)	0.487	0.000	0.000	0.663	0.000	0.000	0.093	0.000	0.000	0.346	0.000	0.000
Avail Cap(c_a), veh/h	757.5	0.0	0.0	754.6	0.0	0.0	603.6	0.0	0.0	505.2	0.0	0.0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.000	0.000	0.000	1.000	0.000	0.000	1.000	0.000	0.000	1.000	0.000	0.000
Uniform Delay (d), s/veh	9.2	0.0	0.0	10.3	0.0	0.0	7.4	0.0	0.0	7.6	0.0	0.0
Incr Delay (d2), s/veh	2.2	0.0	0.0	4.5	0.0	0.0	0.3	0.0	0.0	1.9	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Lane Group Delay (d), s/veh	11.4	0.0	0.0	14.8	0.0	0.0	7.8	0.0	0.0	9.5	0.0	0.0
Lane Group LOS	B			B			A			A		
Approach Volume, veh/h		369			500			56			175	
Approach Delay, s/veh		11.4			14.8			7.8			9.5	
Approach LOS		B			B			A			A	

Timer				
Assigned Phase	4	8	2	6
Phase Duration (G+Y+Rc), s	20.00	20.00	20.00	20.00
Change Period (Y+Rc), s	4.00	4.00	4.00	4.00
Max Green Setting (Gmax), s	16.00	16.00	16.00	16.00
Max Q Clear Time (g_c+I1), s	8.54	12.26	2.82	7.30
Green Extension Time (p_c)	3.32	1.92	1.08	0.83

Intersection Summary	
HCM 2010 Control Delay	12.5
HCM 2010 Level of Service	B

Intersection	
Intersection Delay (sec/veh):	3.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Volume (vph)	5	5	5	5	5	5	5	15	5	5	40	5
Conflicting Peds.(#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
Right Turn Channelized	None	None	None	None	None	None	None	None	None	None	None	None
Storage Length	0		0	0		0	0		0	0		0
Median Width		0			0			0			0	
Grade (%)		0%			0%			0%			0%	
Peak Hour Factor	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80
Heavy Vehicles(%)	10	10	10	10	10	10	10	10	10	10	10	10
Movement Flow Rate	6	6	6	6	6	6	6	19	6	6	50	6
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Major/Minor		Minor 2			Minor 1			Major 1			Major 2	
Conflicting Flow Rate - All	105	102	53	105	102	22	56	0	0	25	0	0
Stage 1	65	65	-	34	34	-	-	-	-	-	-	-
Stage 2	40	37	-	71	68	-	-	-	-	-	-	-
Follow-up Headway	3.59	4.09	3.39	3.59	4.09	3.39	2.29	-	-	2.29	-	-
Pot Capacity-1 Maneuver	856	773	992	856	773	1032	1499	-	-	1539	-	-
Stage 1	926	825	-	962	851	-	-	-	-	-	-	-
Stage 2	955	849	-	919	823	-	-	-	-	-	-	-
Time blocked-Platoon(%)	0	0	0	0	0	0	0	-	-	0	-	-
Mov Capacity-1 Maneuver	840	767	992	840	767	1032	1499	-	-	1539	-	-
Mov Capacity-2 Maneuver	840	767	-	840	767	-	-	-	-	-	-	-
Stage 1	922	822	-	958	848	-	-	-	-	-	-	-
Stage 2	938	846	-	903	820	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay (s)	9.3	9.2	1.5	0.7
HCM LOS	A	A	A	A

Lane	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (vph)				857	866			
HCM Control Delay (s)	7.412	0	-	9.3	9.2	7.349	0	-
HCM Lane VC Ratio	0.004	-	-	0.022	0.022	0.004	-	-
HCM Lane LOS	A	A	-	A	A	A	A	-
HCM 95th Percentile Queue (veh)	0.013	-	-	0.067	0.066	0.012	-	-

Intersection	
Intersection Delay (sec/veh):	2.4

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Volume (vph)	10	5	10	5	5	35
Conflicting Peds.(#/hr)	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
Right Turn Channelized	None	None	None	None	None	None
Storage Length	0	0		0	0	
Median Width	12		0			0
Grade (%)	0%		0%			0%
Peak Hour Factor	0.80	0.80	0.80	0.80	0.80	0.80
Heavy Vehicles(%)	10	10	10	10	10	10
Movement Flow Rate	12	6	12	6	6	44
Number of Lanes	1	0	1	0	0	1

Major/Minor			Major 1			Major 2
Conflicting Flow Rate - All	72	16	0	0	19	0
Stage 1	16	-	-	-	-	-
Stage 2	56	-	-	-	-	-
Follow-up Headway	3.59	3.39	-	-	2.29	-
Pot Capacity-1 Maneuver	913	1040	-	-	1547	-
Stage 1	986	-	-	-	-	-
Stage 2	947	-	-	-	-	-
Time blocked-Platoon(%)	0	0	-	-	0	-
Mov Capacity-1 Maneuver	909	1040	-	-	1547	-
Mov Capacity-2 Maneuver	909	-	-	-	-	-
Stage 1	986	-	-	-	-	-
Stage 2	943	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay (s)	8.9	0	0.9
HCM LOS	A	A	A

Lane	NBT	NBR	WBLn1	SBL	SBT
Capacity (vph)			949		
HCM Control Delay (s)	-	-	8.9	7.337	-
HCM Lane VC Ratio	-	-	0.02	0.004	-
HCM Lane LOS	-	-	A	A	-
HCM 95th Percentile Queue (veh)	-	-	0.06	0.012	-

Intersection	
Intersection Delay (sec/veh):	3.7

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Volume (vph)	5	35	20	5	5	35
Conflicting Peds.(#/hr)	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
Right Turn Channelized	None	None	None	None	None	None
Storage Length	0	0		0	0	
Median Width	12		0			0
Grade (%)	0%		0%			0%
Peak Hour Factor	0.80	0.80	0.80	0.80	0.80	0.80
Heavy Vehicles(%)	10	10	10	10	10	10
Movement Flow Rate	6	44	25	6	6	44
Number of Lanes	1	0	1	0	0	1

Major/Minor			Major 1			Major 2
Conflicting Flow Rate - All	84	28	0	0	31	0
Stage 1	28	-	-	-	-	-
Stage 2	56	-	-	-	-	-
Follow-up Headway	3.59	3.39	-	-	2.29	-
Pot Capacity-1 Maneuver	898	1025	-	-	1531	-
Stage 1	974	-	-	-	-	-
Stage 2	947	-	-	-	-	-
Time blocked-Platoon(%)	0	0	-	-	0	-
Mov Capacity-1 Maneuver	894	1025	-	-	1531	-
Mov Capacity-2 Maneuver	894	-	-	-	-	-
Stage 1	974	-	-	-	-	-
Stage 2	943	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay (s)	8.8	0	0.9
HCM LOS	A	A	A

Lane	NBT	NBR	WBLn1	SBL	SBT
Capacity (vph)			1007		
HCM Control Delay (s)	-	-	8.8	7.361	-
HCM Lane VC Ratio	-	-	0.05	0.004	-
HCM Lane LOS	-	-	A	A	-
HCM 95th Percentile Queue (veh)	-	-	0.157	0.012	-

Intersection	
Intersection Delay (sec/veh):	7.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Volume (vph)	5	5	5	20	5	5	5	10	70	5	25	5
Conflicting Peds.(#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
Right Turn Channelized	None	None	None	None	None	None	None	None	None	None	None	None
Storage Length	0		0	0		0	0		0	0		0
Median Width		0			0			0			0	
Grade (%)		0%			0%			0%			0%	
Peak Hour Factor	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80
Heavy Vehicles(%)	10	10	10	10	10	10	10	10	10	10	10	10
Movement Flow Rate	6	6	6	25	6	6	6	12	87	6	31	6
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Major/Minor	Major 1			Major 2			Minor 1			Minor 2		
Conflicting Flow Rate - All	12	0	0	12	0	0	99	83	9	131	83	9
Stage 1	-	-	-	-	-	-	21	21	-	59	59	-
Stage 2	-	-	-	-	-	-	78	62	-	72	24	-
Follow-up Headway	2.29	-	-	2.29	-	-	3.59	4.09	3.39	3.59	4.09	3.39
Pot Capacity-1 Maneuver	1556	-	-	1556	-	-	864	792	1050	823	792	1050
Stage 1	-	-	-	-	-	-	977	862	-	933	830	-
Stage 2	-	-	-	-	-	-	911	828	-	918	860	-
Time blocked-Platoon(%)	0	-	-	0	-	-	0	0	0	0	0	0
Mov Capacity-1 Maneuver	1556	-	-	1556	-	-	820	776	1050	734	776	1050
Mov Capacity-2 Maneuver	-	-	-	-	-	-	820	776	-	734	776	-
Stage 1	-	-	-	-	-	-	973	859	-	929	817	-
Stage 2	-	-	-	-	-	-	857	815	-	826	857	-

Approach	EB	WB	NB	SB
HCM Control Delay (s)	2.4	4.9	9.1	9.8
HCM LOS	A	A	A	A

Lane	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (vph)	992							799
HCM Control Delay (s)	9.1	7.323	0	-	7.351	0	-	9.8
HCM Lane VC Ratio	0.107	0.004	-	-	0.016	-	-	0.055
HCM Lane LOS	A	A	A	-	A	A	-	A
HCM 95th Percentile Queue (veh)	0.359	0.012	-	-	0.049	-	-	0.173

Intersection	
Intersection Delay (sec/veh):	4.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Volume (vph)	10	5	5	5	5	5	5	10	5	5	25	10
Conflicting Peds.(#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
Right Turn Channelized	None	None	None	None	None	None	None	None	None	None	None	None
Storage Length	0		0	0		0	0		0	0		0
Median Width		0			0			0			0	
Grade (%)		0%			0%			0%			0%	
Peak Hour Factor	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80
Heavy Vehicles(%)	10	10	10	10	10	10	10	10	10	10	10	10
Movement Flow Rate	12	6	6	6	6	6	6	12	6	6	31	12
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Major/Minor	Minor 2			Minor 1			Major 1			Major 2		
Conflicting Flow Rate - All	84	81	38	84	84	16	44	0	0	19	0	0
Stage 1	50	50	-	28	28	-	-	-	-	-	-	-
Stage 2	34	31	-	56	56	-	-	-	-	-	-	-
Follow-up Headway	3.59	4.09	3.39	3.59	4.09	3.39	2.29	-	-	2.29	-	-
Pot Capacity-1 Maneuver	884	795	1012	884	791	1040	1514	-	-	1547	-	-
Stage 1	943	838	-	969	856	-	-	-	-	-	-	-
Stage 2	962	854	-	936	833	-	-	-	-	-	-	-
Time blocked-Platoon(%)	0	0	0	0	0	0	0	-	-	0	-	-
Mov Capacity-1 Maneuver	868	789	1012	868	785	1040	1514	-	-	1547	-	-
Mov Capacity-2 Maneuver	868	789	-	868	785	-	-	-	-	-	-	-
Stage 1	939	835	-	965	853	-	-	-	-	-	-	-
Stage 2	945	851	-	920	830	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay (s)	9.2	9.2	1.8	0.9
HCM LOS	A	A	A	A

Lane	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (vph)				877	886			
HCM Control Delay (s)	7.388	0	-	9.2	9.2	7.337	0	-
HCM Lane VC Ratio	0.004	-	-	0.029	0.021	0.004	-	-
HCM Lane LOS	A	A	-	A	A	A	A	-
HCM 95th Percentile Queue (veh)	0.012	-	-	0.088	0.065	0.012	-	-

Intersection	
Intersection Delay (sec/veh):	4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Volume (vph)	5	75	5	5	20	5	5	15	5	5	25	10
Conflicting Peds.(#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
Right Turn Channelized	None	None	None	None	None	None	None	None	None	None	None	None
Storage Length	0		0	0		0	0		0	0		0
Median Width		0			0			0			0	
Grade (%)		0%			0%			0%			0%	
Peak Hour Factor	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80
Heavy Vehicles(%)	10	10	10	10	10	10	10	10	10	10	10	10
Movement Flow Rate	6	94	6	6	25	6	6	19	6	6	31	12
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Major/Minor	Major 1			Major 2			Minor 1			Minor 2		
Conflicting Flow Rate - All	31	0	0	100	0	0	171	152	97	162	152	28
Stage 1	-	-	-	-	-	-	109	109	-	40	40	-
Stage 2	-	-	-	-	-	-	62	43	-	122	112	-
Follow-up Headway	2.29	-	-	2.29	-	-	3.59	4.09	3.39	3.59	4.09	3.39
Pot Capacity-1 Maneuver	1531	-	-	1444	-	-	775	725	938	785	725	1025
Stage 1	-	-	-	-	-	-	877	790	-	955	846	-
Stage 2	-	-	-	-	-	-	929	844	-	863	788	-
Time blocked-Platoon(%)	0	-	-	0	-	-	0	0	0	0	0	0
Mov Capacity-1 Maneuver	1531	-	-	1444	-	-	736	719	938	760	719	1025
Mov Capacity-2 Maneuver	-	-	-	-	-	-	736	719	-	760	719	-
Stage 1	-	-	-	-	-	-	873	787	-	951	843	-
Stage 2	-	-	-	-	-	-	880	841	-	833	785	-

Approach	EB	WB	NB	SB
HCM Control Delay (s)	0.4	1.3	10	9.9
HCM LOS	A	A	B	A

Lane	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (vph)	758							783
HCM Control Delay (s)	10	7.361	0	-	7.504	0	-	9.9
HCM Lane VC Ratio	0.041	0.004	-	-	0.004	-	-	0.064
HCM Lane LOS	B	A	A	-	A	A	-	A
HCM 95th Percentile Queue (veh)	0.129	0.012	-	-	0.013	-	-	0.204

Intersection	
Intersection Delay (sec/veh):	7.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Volume (vph)	60	5	5	5	5	5	5	5	5	10	5	35
Conflicting Peds.(#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
Right Turn Channelized	None	None	None	None	None	None	None	None	None	None	None	None
Storage Length	0		0	0		0	0		0	0		0
Median Width		0			0			0			0	
Grade (%)		0%			0%			0%			0%	
Peak Hour Factor	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80
Heavy Vehicles(%)	10	10	10	10	10	10	10	10	10	10	10	10
Movement Flow Rate	75	6	6	6	6	6	6	6	6	12	6	44
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Major/Minor	Major 1			Major 2			Minor 1			Minor 2		
Conflicting Flow Rate - All	12	0	0	12	0	0	205	183	9	186	183	9
Stage 1	-	-	-	-	-	-	159	159	-	21	21	-
Stage 2	-	-	-	-	-	-	46	24	-	165	162	-
Follow-up Headway	2.29	-	-	2.29	-	-	3.59	4.09	3.39	3.59	4.09	3.39
Pot Capacity-1 Maneuver	1556	-	-	1556	-	-	736	697	1050	757	697	1050
Stage 1	-	-	-	-	-	-	825	751	-	977	862	-
Stage 2	-	-	-	-	-	-	948	860	-	819	749	-
Time blocked-Platoon(%)	0	-	-	0	-	-	0	0	0	0	0	0
Mov Capacity-1 Maneuver	1556	-	-	1556	-	-	672	660	1050	717	660	1050
Mov Capacity-2 Maneuver	-	-	-	-	-	-	672	660	-	717	660	-
Stage 1	-	-	-	-	-	-	785	714	-	929	859	-
Stage 2	-	-	-	-	-	-	898	857	-	767	712	-

Approach	EB	WB	NB	SB
HCM Control Delay (s)	6.4	2.4	9.9	9.2
HCM LOS	A	A	A	A

Lane	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (vph)	758							911
HCM Control Delay (s)	9.9	7.431	0	-	7.323	0	-	9.2
HCM Lane VC Ratio	0.025	0.048	-	-	0.004	-	-	0.069
HCM Lane LOS	A	A	A	-	A	A	-	A
HCM 95th Percentile Queue (veh)	0.076	0.152	-	-	0.012	-	-	0.221

Intersection	
Intersection Delay (sec/veh):	4

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Volume (vph)	70	5	5	70	40	5
Conflicting Peds.(#/hr)	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
Right Turn Channelized	None	None	None	None	None	None
Storage Length	0	0	0			0
Median Width	12			0	0	
Grade (%)	0%			0%	0%	
Peak Hour Factor	0.80	0.80	0.80	0.80	0.80	0.80
Heavy Vehicles(%)	10	10	10	10	10	10
Movement Flow Rate	87	6	6	87	50	6
Number of Lanes	1	0	0	1	1	0

Major/Minor				Major 1	Major 2	
Conflicting Flow Rate - All	153	53	56	0	0	0
Stage 1	53	-	-	-	-	-
Stage 2	100	-	-	-	-	-
Follow-up Headway	3.59	3.39	2.29	-	-	-
Pot Capacity-1 Maneuver	820	992	1499	-	-	-
Stage 1	949	-	-	-	-	-
Stage 2	904	-	-	-	-	-
Time blocked-Platoon(%)	0	0	0	-	-	-
Mov Capacity-1 Maneuver	817	992	1499	-	-	-
Mov Capacity-2 Maneuver	817	-	-	-	-	-
Stage 1	949	-	-	-	-	-
Stage 2	900	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay (s)	9.9	0.5	0
HCM LOS	A	A	A

Lane	NBL	NBT	EBLn1	SBT	SBR
Capacity (vph)			827		
HCM Control Delay (s)	7.412	-	9.9	-	-
HCM Lane VC Ratio	0.004	-	0.113	-	-
HCM Lane LOS	A	-	A	-	-
HCM 95th Percentile Queue (veh)	0.013	-	0.382	-	-

Intersection	
Intersection Delay (sec/veh):	2.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Volume (vph)	10	5	5	5	5	10	5	135	5	10	40	10
Conflicting Peds.(#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
Right Turn Channelized	None	None	None	None	None	None	None	None	None	None	None	None
Storage Length	0		0	0		0	0		0	0		0
Median Width		0			0			0			0	
Grade (%)		0%			0%			0%			0%	
Peak Hour Factor	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80
Heavy Vehicles(%)	10	10	10	10	10	10	10	10	10	10	10	10
Movement Flow Rate	12	6	6	6	6	12	6	169	6	12	50	12
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Major/Minor	Minor 2			Minor 1			Major 1			Major 2		
Conflicting Flow Rate - All	277	270	57	273	273	172	63	0	0	175	0	0
Stage 1	83	83	-	184	184	-	-	-	-	-	-	-
Stage 2	194	187	-	89	89	-	-	-	-	-	-	-
Follow-up Headway	3.59	4.09	3.39	3.59	4.09	3.39	2.29	-	-	2.29	-	-
Pot Capacity-1 Maneuver	659	623	987	664	621	851	1490	-	-	1354	-	-
Stage 1	906	811	-	800	733	-	-	-	-	-	-	-
Stage 2	790	730	-	899	806	-	-	-	-	-	-	-
Time blocked-Platoon(%)	0	0	0	0	0	0	0	-	-	0	-	-
Mov Capacity-1 Maneuver	637	614	987	648	612	851	1490	-	-	1354	-	-
Mov Capacity-2 Maneuver	637	614	-	648	612	-	-	-	-	-	-	-
Stage 1	902	803	-	797	730	-	-	-	-	-	-	-
Stage 2	769	727	-	877	798	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay (s)	10.4	10.2	0.3	1.3
HCM LOS	B	B	A	A

Lane	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (vph)				692	724			
HCM Control Delay (s)	7.426	0	-	10.4	10.2	7.684	0	-
HCM Lane VC Ratio	0.004	-	-	0.036	0.035	0.009	-	-
HCM Lane LOS	A	A	-	B	B	A	A	-
HCM 95th Percentile Queue (veh)	0.013	-	-	0.112	0.107	0.028	-	-

Intersection	
Intersection Delay (sec/veh):	0.6

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Volume (vph)	10	205	335	10	10	10
Conflicting Peds.(#/hr)	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
Right Turn Channelized	None	None	None	None	None	None
Storage Length	200			100	250	0
Median Width		12	0		12	
Grade (%)		0%	0%		0%	
Peak Hour Factor	0.80	0.80	0.80	0.80	0.80	0.80
Heavy Vehicles(%)	10	10	10	10	10	10
Movement Flow Rate	12	256	419	12	12	12
Number of Lanes	1	1	1	1	1	1

Major/Minor	Major 1		Major 2			
Conflicting Flow Rate - All	432	0	0	0	708	217
Stage 1	-	-	-	-	426	-
Stage 2	-	-	-	-	282	-
Follow-up Headway	2.29	-	-	-	3.59	3.39
Pot Capacity-1 Maneuver	1086	-	-	-	389	803
Stage 1	-	-	-	-	642	-
Stage 2	-	-	-	-	748	-
Time blocked-Platoon(%)	0	-	-	-	0	0
Mov Capacity-1 Maneuver	1086	-	-	-	384	803
Mov Capacity-2 Maneuver	-	-	-	-	384	-
Stage 1	-	-	-	-	642	-
Stage 2	-	-	-	-	739	-

Approach	EB	WB	SB
HCM Control Delay (s)	0.4	0	12.2
HCM LOS	A	A	B

Lane	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (vph)					384	803
HCM Control Delay (s)	8.354	-	-	-	14.7	9.6
HCM Lane VC Ratio	0.012	-	-	-	0.033	0.016
HCM Lane LOS	A	-	-	-	B	A
HCM 95th Percentile Queue (veh)	0.035	-	-	-	0.101	0.047

Intersection	
Intersection Delay (sec/veh):	1

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Volume (vph)	200	20	20	330	20	15
Conflicting Peds.(#/hr)	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
Right Turn Channelized	None	None	None	None	None	None
Storage Length		450	150		0	0
Median Width	12			12	12	
Grade (%)	0%			0%	0%	
Peak Hour Factor	0.80	0.80	0.80	0.80	0.80	0.80
Heavy Vehicles(%)	10	10	10	10	10	10
Movement Flow Rate	250	25	25	412	25	19
Number of Lanes	1	1	1	1	1	0

Major/Minor	Major 1			Major 2		
Conflicting Flow Rate - All	0	0	275	0	726	138
Stage 1	-	-	-	-	263	-
Stage 2	-	-	-	-	463	-
Follow-up Headway	-	-	2.29	-	3.59	3.39
Pot Capacity-1 Maneuver	-	-	1243	-	380	889
Stage 1	-	-	-	-	763	-
Stage 2	-	-	-	-	617	-
Time blocked-Platoon(%)	-	-	0	-	0	0
Mov Capacity-1 Maneuver	-	-	1243	-	372	889
Mov Capacity-2 Maneuver	-	-	-	-	372	-
Stage 1	-	-	-	-	763	-
Stage 2	-	-	-	-	605	-

Approach	EB	WB	NB
HCM Control Delay (s)	0	0.5	13
HCM LOS	A	A	B

Lane	NBLn1	EBT	EBR	WBL	WBT
Capacity (vph)	495				
HCM Control Delay (s)	13	-	-	7.956	-
HCM Lane VC Ratio	0.088	-	-	0.02	-
HCM Lane LOS	B	-	-	A	-
HCM 95th Percentile Queue (veh)	0.289	-	-	0.062	-

Intersection	
Intersection Delay (sec/veh):	1.6

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Volume (vph)	5	200	345	25	55	10
Conflicting Peds.(#/hr)	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
Right Turn Channelized	None	None	None	None	None	None
Storage Length	125			0	0	0
Median Width		12	12		12	
Grade (%)		0%	0%		0%	
Peak Hour Factor	0.80	0.80	0.80	0.80	0.80	0.80
Heavy Vehicles(%)	10	10	10	10	10	10
Movement Flow Rate	6	250	431	31	69	12
Number of Lanes	1	1	1	0	1	0

Major/Minor		Major 1	Major 2			
Conflicting Flow Rate - All	462	0	0	0	709	447
Stage 1	-	-	-	-	447	-
Stage 2	-	-	-	-	262	-
Follow-up Headway	2.29	-	-	-	3.59	3.39
Pot Capacity-1 Maneuver	1065	-	-	-	414	695
Stage 1	-	-	-	-	676	-
Stage 2	-	-	-	-	764	-
Time blocked-Platoon(%)	24	-	-	-	24	24
Mov Capacity-1 Maneuver	1065	-	-	-	412	695
Mov Capacity-2 Maneuver	-	-	-	-	412	-
Stage 1	-	-	-	-	676	-
Stage 2	-	-	-	-	760	-

Approach	EB	WB	SB
HCM Control Delay (s)	0.2	0	15
HCM LOS	A	A	C

Lane	EBL	EBT	WBT	WBR	SBLn1
Capacity (vph)					440
HCM Control Delay (s)	8.4	-	-	-	15
HCM Lane VC Ratio	0.006	-	-	-	0.185
HCM Lane LOS	A	-	-	-	C
HCM 95th Percentile Queue (veh)	0.018	-	-	-	0.669

HCM 2010 Signalized Intersection Summary
4: Adams Street & SR 109

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	10	275	10	15	410	35	10	10	20	45	10	15
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Queue, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	0.99		0.99	0.99		0.99	0.99		0.99
Parking, Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow Rate	1727	1727	1727	1727	1727	1727	1727	1727	1727	1727	1727	1727
Lanes	0	1	0	0	1	0	0	1	0	0	1	0
Capacity, veh/h	101	645	23	101	605	51	190	184	262	356	83	79
Arriving On Green	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40
Sat Flow, veh/h	57.2	1477.3	57.2	54.2	1426.5	126.4	327.7	294.6	655.4	595.8	125.2	198.6
Grp Volume(v), veh/h	368.8	0.0	0.0	575.0	0.0	0.0	50.0	0.0	0.0	87.5	0.0	0.0
Grp Sat Flow(s),veh/h/ln	1688.6	0.0	0.0	1660.7	0.0	0.0	1310.9	0.0	0.0	926.7	0.0	0.0
Q Serve(g_s), s	0.0	0.0	0.0	2.9	0.0	0.0	0.0	0.0	0.0	0.4	0.0	0.0
Cycle Q Clear(g_c), s	6.6	0.0	0.0	12.5	0.0	0.0	0.8	0.0	0.0	1.6	0.0	0.0
Proportion In Lane	0.034		0.034	0.033		0.076	0.250		0.500	0.643		0.214
Lane Grp Cap(c), veh/h	768.5	0.0	0.0	757.2	0.0	0.0	636.9	0.0	0.0	518.5	0.0	0.0
V/C Ratio(X)	0.480	0.000	0.000	0.759	0.000	0.000	0.079	0.000	0.000	0.169	0.000	0.000
Avail Cap(c_a), veh/h	768.5	0.0	0.0	757.2	0.0	0.0	636.9	0.0	0.0	518.5	0.0	0.0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.000	0.000	0.000	1.000	0.000	0.000	1.000	0.000	0.000	1.000	0.000	0.000
Uniform Delay (d), s/veh	9.2	0.0	0.0	10.7	0.0	0.0	7.4	0.0	0.0	7.6	0.0	0.0
Incr Delay (d2), s/veh	2.1	0.0	0.0	7.0	0.0	0.0	0.2	0.0	0.0	0.7	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Lane Group Delay (d), s/veh	11.3	0.0	0.0	17.7	0.0	0.0	7.7	0.0	0.0	8.3	0.0	0.0
Lane Group LOS	B			B			A			A		
Approach Volume, veh/h		369			575			50			88	
Approach Delay, s/veh		11.3			17.7			7.7			8.3	
Approach LOS		B			B			A			A	

Timer				
Assigned Phase	4	8	2	6
Phase Duration (G+Y+Rc), s	20.00	20.00	20.00	20.00
Change Period (Y+Rc), s	4.00	4.00	4.00	4.00
Max Green Setting (Gmax), s	16.00	16.00	16.00	16.00
Max Q Clear Time (g_c+I1), s	8.57	14.51	2.78	3.56
Green Extension Time (p_c)	3.60	0.90	0.55	0.53

Intersection Summary	
HCM 2010 Control Delay	14.3
HCM 2010 Level of Service	B

Intersection	
Intersection Delay (sec/veh):	3.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Volume (vph)	5	5	5	5	5	5	5	20	5	5	40	5
Conflicting Peds.(#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
Right Turn Channelized	None	None	None	None	None	None	None	None	None	None	None	None
Storage Length	0		0	0		0	0		0	0		0
Median Width		0			0			0			0	
Grade (%)		0%			0%			0%			0%	
Peak Hour Factor	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80
Heavy Vehicles(%)	10	10	10	10	10	10	10	10	10	10	10	10
Movement Flow Rate	6	6	6	6	6	6	6	25	6	6	50	6
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Major/Minor		Minor 2			Minor 1			Major 1			Major 2	
Conflicting Flow Rate - All	111	108	53	111	108	28	56	0	0	31	0	0
Stage 1	65	65	-	40	40	-	-	-	-	-	-	-
Stage 2	46	43	-	71	68	-	-	-	-	-	-	-
Follow-up Headway	3.59	4.09	3.39	3.59	4.09	3.39	2.29	-	-	2.29	-	-
Pot Capacity-1 Maneuver	848	767	992	848	767	1025	1499	-	-	1531	-	-
Stage 1	926	825	-	955	846	-	-	-	-	-	-	-
Stage 2	948	844	-	919	823	-	-	-	-	-	-	-
Time blocked-Platoon(%)	0	0	0	0	0	0	0	-	-	0	-	-
Mov Capacity-1 Maneuver	832	761	992	832	761	1025	1499	-	-	1531	-	-
Mov Capacity-2 Maneuver	832	761	-	832	761	-	-	-	-	-	-	-
Stage 1	922	822	-	951	843	-	-	-	-	-	-	-
Stage 2	931	841	-	903	820	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay (s)	9.3	9.3	1.2	0.7
HCM LOS	A	A	A	A

Lane	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (vph)				851	859			
HCM Control Delay (s)	7.412	0	-	9.3	9.3	7.361	0	-
HCM Lane VC Ratio	0.004	-	-	0.022	0.022	0.004	-	-
HCM Lane LOS	A	A	-	A	A	A	A	-
HCM 95th Percentile Queue (veh)	0.013	-	-	0.068	0.067	0.012	-	-

Intersection	
Intersection Delay (sec/veh):	1.7

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Volume (vph)	5	5	15	10	5	35
Conflicting Peds.(#/hr)	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
Right Turn Channelized	None	None	None	None	None	None
Storage Length	0	0		0	0	
Median Width	12		0			0
Grade (%)	0%		0%			0%
Peak Hour Factor	0.80	0.80	0.80	0.80	0.80	0.80
Heavy Vehicles(%)	10	10	10	10	10	10
Movement Flow Rate	6	6	19	12	6	44
Number of Lanes	1	0	1	0	0	1

Major/Minor			Major 1			Major 2
Conflicting Flow Rate - All	82	26	0	0	32	0
Stage 1	26	-	-	-	-	-
Stage 2	56	-	-	-	-	-
Follow-up Headway	3.59	3.39	-	-	2.29	-
Pot Capacity-1 Maneuver	901	1027	-	-	1530	-
Stage 1	976	-	-	-	-	-
Stage 2	947	-	-	-	-	-
Time blocked-Platoon(%)	0	0	-	-	0	-
Mov Capacity-1 Maneuver	897	1027	-	-	1530	-
Mov Capacity-2 Maneuver	897	-	-	-	-	-
Stage 1	976	-	-	-	-	-
Stage 2	943	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay (s)	8.8	0	0.9
HCM LOS	A	A	A

Lane	NBT	NBR	WBLn1	SBL	SBT
Capacity (vph)			958		
HCM Control Delay (s)	-	-	8.8	7.363	-
HCM Lane VC Ratio	-	-	0.013	0.004	-
HCM Lane LOS	-	-	A	A	-
HCM 95th Percentile Queue (veh)	-	-	0.04	0.012	-

Intersection	
Intersection Delay (sec/veh):	2.7

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Volume (vph)	5	10	15	5	10	30
Conflicting Peds.(#/hr)	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
Right Turn Channelized	None	None	None	None	None	None
Storage Length	0	0		0	0	
Median Width	12		0			0
Grade (%)	0%		0%			0%
Peak Hour Factor	0.80	0.80	0.80	0.80	0.80	0.80
Heavy Vehicles(%)	10	10	10	10	10	10
Movement Flow Rate	6	12	19	6	12	37
Number of Lanes	1	0	1	0	0	1

Major/Minor			Major 1			Major 2
Conflicting Flow Rate - All	86	22	0	0	25	0
Stage 1	22	-	-	-	-	-
Stage 2	64	-	-	-	-	-
Follow-up Headway	3.59	3.39	-	-	2.29	-
Pot Capacity-1 Maneuver	896	1032	-	-	1539	-
Stage 1	980	-	-	-	-	-
Stage 2	939	-	-	-	-	-
Time blocked-Platoon(%)	0	0	-	-	0	-
Mov Capacity-1 Maneuver	888	1032	-	-	1539	-
Mov Capacity-2 Maneuver	888	-	-	-	-	-
Stage 1	980	-	-	-	-	-
Stage 2	931	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay (s)	8.7	0	1.8
HCM LOS	A	A	A

Lane	NBT	NBR	WBLn1	SBL	SBT
Capacity (vph)			979		
HCM Control Delay (s)	-	-	8.7	7.358	-
HCM Lane VC Ratio	-	-	0.019	0.008	-
HCM Lane LOS	-	-	A	A	-
HCM 95th Percentile Queue (veh)	-	-	0.059	0.025	-

Intersection	
Intersection Delay (sec/veh):	7.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Volume (vph)	5	5	5	25	5	5	5	10	80	5	20	5
Conflicting Peds.(#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
Right Turn Channelized	None	None	None	None	None	None	None	None	None	None	None	None
Storage Length	0		0	0		0	0		0	0		0
Median Width		0			0			0			0	
Grade (%)		0%			0%			0%			0%	
Peak Hour Factor	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80
Heavy Vehicles(%)	10	10	10	10	10	10	10	10	10	10	10	10
Movement Flow Rate	6	6	6	31	6	6	6	12	100	6	25	6
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Major/Minor	Major 1			Major 2			Minor 1			Minor 2		
Conflicting Flow Rate - All	12	0	0	12	0	0	108	95	9	149	95	9
Stage 1	-	-	-	-	-	-	21	21	-	71	71	-
Stage 2	-	-	-	-	-	-	87	74	-	78	24	-
Follow-up Headway	2.29	-	-	2.29	-	-	3.59	4.09	3.39	3.59	4.09	3.39
Pot Capacity-1 Maneuver	1556	-	-	1556	-	-	852	780	1050	801	780	1050
Stage 1	-	-	-	-	-	-	977	862	-	919	820	-
Stage 2	-	-	-	-	-	-	901	818	-	911	860	-
Time blocked-Platoon(%)	0	-	-	0	-	-	0	0	0	0	0	0
Mov Capacity-1 Maneuver	1556	-	-	1556	-	-	811	761	1050	703	761	1050
Mov Capacity-2 Maneuver	-	-	-	-	-	-	811	761	-	703	761	-
Stage 1	-	-	-	-	-	-	973	859	-	915	804	-
Stage 2	-	-	-	-	-	-	850	802	-	809	857	-

Approach	EB	WB	NB	SB
HCM Control Delay (s)	2.4	5.3	9.1	9.8
HCM LOS	A	A	A	A

Lane	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (vph)	995							786
HCM Control Delay (s)	9.1	7.323	0	-	7.361	0	-	9.8
HCM Lane VC Ratio	0.119	0.004	-	-	0.02	-	-	0.048
HCM Lane LOS	A	A	A	-	A	A	-	A
HCM 95th Percentile Queue (veh)	0.405	0.012	-	-	0.061	-	-	0.15

Intersection	
Intersection Delay (sec/veh):	4.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Volume (vph)	5	5	5	5	5	5	5	10	5	5	25	5
Conflicting Peds.(#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
Right Turn Channelized	None	None	None	None	None	None	None	None	None	None	None	None
Storage Length	0		0	0		0	0		0	0		0
Median Width		0			0			0			0	
Grade (%)		0%			0%			0%			0%	
Peak Hour Factor	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80
Heavy Vehicles(%)	10	10	10	10	10	10	10	10	10	10	10	10
Movement Flow Rate	6	6	6	6	6	6	6	12	6	6	31	6
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Major/Minor	Minor 2			Minor 1			Major 1			Major 2		
Conflicting Flow Rate - All	80	77	34	80	77	16	37	0	0	19	0	0
Stage 1	46	46	-	28	28	-	-	-	-	-	-	-
Stage 2	34	31	-	52	49	-	-	-	-	-	-	-
Follow-up Headway	3.59	4.09	3.39	3.59	4.09	3.39	2.29	-	-	2.29	-	-
Pot Capacity-1 Maneuver	889	798	1017	889	798	1040	1523	-	-	1547	-	-
Stage 1	948	841	-	969	856	-	-	-	-	-	-	-
Stage 2	962	854	-	941	839	-	-	-	-	-	-	-
Time blocked-Platoon(%)	0	0	0	0	0	0	0	-	-	0	-	-
Mov Capacity-1 Maneuver	873	792	1017	873	792	1040	1523	-	-	1547	-	-
Mov Capacity-2 Maneuver	873	792	-	873	792	-	-	-	-	-	-	-
Stage 1	944	838	-	965	853	-	-	-	-	-	-	-
Stage 2	945	851	-	925	836	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay (s)	9.2	9.1	1.8	1
HCM LOS	A	A	A	A

Lane	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (vph)				885	890			
HCM Control Delay (s)	7.373	0	-	9.2	9.1	7.337	0	-
HCM Lane VC Ratio	0.004	-	-	0.021	0.021	0.004	-	-
HCM Lane LOS	A	A	-	A	A	A	A	-
HCM 95th Percentile Queue (veh)	0.012	-	-	0.065	0.065	0.012	-	-

Intersection	
Intersection Delay (sec/veh):	4.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Volume (vph)	5	50	5	5	30	5	5	10	10	5	25	5
Conflicting Peds.(#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
Right Turn Channelized	None	None	None	None	None	None	None	None	None	None	None	None
Storage Length	0		0	0		0	0		0	0		0
Median Width		0			0			0			0	
Grade (%)		0%			0%			0%			0%	
Peak Hour Factor	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80
Heavy Vehicles(%)	10	10	10	10	10	10	10	10	10	10	10	10
Movement Flow Rate	6	62	6	6	37	6	6	12	12	6	31	6
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Major/Minor	Major 1			Major 2			Minor 1			Minor 2		
Conflicting Flow Rate - All	44	0	0	69	0	0	150	134	66	144	134	41
Stage 1	-	-	-	-	-	-	78	78	-	53	53	-
Stage 2	-	-	-	-	-	-	72	56	-	91	81	-
Follow-up Headway	2.29	-	-	2.29	-	-	3.59	4.09	3.39	3.59	4.09	3.39
Pot Capacity-1 Maneuver	1514	-	-	1483	-	-	800	742	976	807	742	1008
Stage 1	-	-	-	-	-	-	911	815	-	940	835	-
Stage 2	-	-	-	-	-	-	918	833	-	897	812	-
Time blocked-Platoon(%)	0	-	-	0	-	-	0	0	0	0	0	0
Mov Capacity-1 Maneuver	1514	-	-	1483	-	-	765	736	976	782	736	1008
Mov Capacity-2 Maneuver	-	-	-	-	-	-	765	736	-	782	736	-
Stage 1	-	-	-	-	-	-	907	812	-	936	832	-
Stage 2	-	-	-	-	-	-	875	830	-	868	809	-

Approach	EB	WB	NB	SB
HCM Control Delay (s)	0.6	0.9	9.5	9.9
HCM LOS	A	A	A	A

Lane	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (vph)	823							772
HCM Control Delay (s)	9.5	7.388	0	-	7.438	0	-	9.9
HCM Lane VC Ratio	0.038	0.004	-	-	0.004	-	-	0.057
HCM Lane LOS	A	A	A	-	A	A	-	A
HCM 95th Percentile Queue (veh)	0.118	0.012	-	-	0.013	-	-	0.18

Intersection	
Intersection Delay (sec/veh):	7.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Volume (vph)	90	5	5	5	5	10	5	5	5	5	5	30
Conflicting Peds.(#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
Right Turn Channelized	None	None	None	None	None	None	None	None	None	None	None	None
Storage Length	0		0	0		0	0		0	0		0
Median Width		0			0			0			0	
Grade (%)		0%			0%			0%			0%	
Peak Hour Factor	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80
Heavy Vehicles(%)	10	10	10	10	10	10	10	10	10	10	10	10
Movement Flow Rate	112	6	6	6	6	12	6	6	6	6	6	37
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Major/Minor	Major 1			Major 2			Minor 1			Minor 2		
Conflicting Flow Rate - All	19	0	0	12	0	0	282	266	9	266	263	13
Stage 1	-	-	-	-	-	-	235	235	-	25	25	-
Stage 2	-	-	-	-	-	-	47	31	-	241	238	-
Follow-up Headway	2.29	-	-	2.29	-	-	3.59	4.09	3.39	3.59	4.09	3.39
Pot Capacity-1 Maneuver	1547	-	-	1556	-	-	654	626	1050	671	629	1044
Stage 1	-	-	-	-	-	-	750	696	-	973	859	-
Stage 2	-	-	-	-	-	-	947	854	-	745	694	-
Time blocked-Platoon(%)	0	-	-	0	-	-	0	0	0	0	0	0
Mov Capacity-1 Maneuver	1547	-	-	1556	-	-	588	577	1050	622	580	1044
Mov Capacity-2 Maneuver	-	-	-	-	-	-	588	577	-	622	580	-
Stage 1	-	-	-	-	-	-	695	644	-	901	856	-
Stage 2	-	-	-	-	-	-	903	851	-	679	643	-

Approach	EB	WB	NB	SB
HCM Control Delay (s)	6.8	1.8	10.4	9.3
HCM LOS	A	A	B	A

Lane	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (vph)	684							881
HCM Control Delay (s)	10.4	7.51	0	-	7.323	0	-	9.3
HCM Lane VC Ratio	0.027	0.073	-	-	0.004	-	-	0.057
HCM Lane LOS	B	A	A	-	A	A	-	A
HCM 95th Percentile Queue (veh)	0.084	0.235	-	-	0.012	-	-	0.18

Intersection	
Intersection Delay (sec/veh):	3.1

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Volume (vph)	60	5	5	90	30	30
Conflicting Peds.(#/hr)	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
Right Turn Channelized	None	None	None	None	None	None
Storage Length	0	0	0			0
Median Width	12			0	0	
Grade (%)	0%			0%	0%	
Peak Hour Factor	0.80	0.80	0.80	0.80	0.80	0.80
Heavy Vehicles(%)	10	10	10	10	10	10
Movement Flow Rate	75	6	6	112	37	37
Number of Lanes	1	0	0	1	1	0

Major/Minor				Major 1	Major 2	
Conflicting Flow Rate - All	182	57	76	0	0	0
Stage 1	57	-	-	-	-	-
Stage 2	125	-	-	-	-	-
Follow-up Headway	3.59	3.39	2.29	-	-	-
Pot Capacity-1 Maneuver	789	987	1474	-	-	-
Stage 1	946	-	-	-	-	-
Stage 2	881	-	-	-	-	-
Time blocked-Platoon(%)	0	0	0	-	-	-
Mov Capacity-1 Maneuver	786	987	1474	-	-	-
Mov Capacity-2 Maneuver	786	-	-	-	-	-
Stage 1	946	-	-	-	-	-
Stage 2	877	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay (s)	10	0.4	0
HCM LOS	B	A	A

Lane	NBL	NBT	EBLn1	SBT	SBR
Capacity (vph)			799		
HCM Control Delay (s)	7.453	-	10	-	-
HCM Lane VC Ratio	0.004	-	0.102	-	-
HCM Lane LOS	A	-	B	-	-
HCM 95th Percentile Queue (veh)	0.013	-	0.338	-	-

Intersection	
Intersection Delay (sec/veh):	1.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Volume (vph)	5	5	5	5	5	5	5	135	5	5	50	10
Conflicting Peds.(#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
Right Turn Channelized	None	None	None	None	None	None	None	None	None	None	None	None
Storage Length	0		0	0		0	0		0	0		0
Median Width		0			0			0			0	
Grade (%)		0%			0%			0%			0%	
Peak Hour Factor	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80
Heavy Vehicles(%)	10	10	10	10	10	10	10	10	10	10	10	10
Movement Flow Rate	6	6	6	6	6	6	6	169	6	6	62	12
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Major/Minor		Minor 2			Minor 1			Major 1			Major 2	
Conflicting Flow Rate - All	272	269	70	272	272	172	76	0	0	175	0	0
Stage 1	82	82	-	184	184	-	-	-	-	-	-	-
Stage 2	190	187	-	88	88	-	-	-	-	-	-	-
Follow-up Headway	3.59	4.09	3.39	3.59	4.09	3.39	2.29	-	-	2.29	-	-
Pot Capacity-1 Maneuver	665	624	971	665	621	851	1474	-	-	1354	-	-
Stage 1	907	812	-	800	733	-	-	-	-	-	-	-
Stage 2	794	730	-	900	807	-	-	-	-	-	-	-
Time blocked-Platoon(%)	0	0	0	0	0	0	0	-	-	0	-	-
Mov Capacity-1 Maneuver	650	618	971	651	615	851	1474	-	-	1354	-	-
Mov Capacity-2 Maneuver	650	618	-	651	615	-	-	-	-	-	-	-
Stage 1	902	808	-	796	729	-	-	-	-	-	-	-
Stage 2	778	726	-	883	803	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay (s)	10.2	10.3	0.3	0.6
HCM LOS	B	B	A	A

Lane	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (vph)				717	692			
HCM Control Delay (s)	7.453	0	-	10.2	10.3	7.671	0	-
HCM Lane VC Ratio	0.004	-	-	0.026	0.027	0.005	-	-
HCM Lane LOS	A	A	-	B	B	A	A	-
HCM 95th Percentile Queue (veh)	0.013	-	-	0.08	0.083	0.014	-	-