

DRAFT

Existing Conditions Report
Technical Appendix E Addendum
Roosevelt to Downtown High Capacity Transit

Seattle Department of
Transportation

Draft December 8, 2015

SDOT Roosevelt to Downtown HCT Plan

Appendix E: Existing Level of Service Analysis – Downtown Addendum

This addendum supplements Appendix E – Existing Level of Service Analysis of the Roosevelt to Downtown High Capacity Transit (RDHCT) Plan project for the Seattle Department of Transportation (SDOT). That document provided a description of traffic operations within the RDHCT study area under existing conditions.

For this addendum, intersections that were studied in Appendix E in the downtown portion of the study area were evaluated during the weekday AM peak hour and the weekday PM peak hour. The study intersections, methodology, and assumptions made for this addendum are the same as for Appendix E. As such, they are not discussed in this document.

Data Collection

Traffic data at the majority of downtown study intersections were obtained from SDOT via recent 2015 counts conducted as part of a separate traffic study for the City of Seattle. Additional data from the previous CDM Smith data collection conducted in January, February, and June 2015 was also utilized.

Table 1 provides the list of study intersections in the downtown portion of the study area. The intersection turning movement counts are included in **Appendix E ADD 1**.

Table 1 List of Study Intersections – Downtown Seattle

#	Study Intersection	Source
1	Stewart Street/3rd Avenue	Roosevelt to Downtown Study
2	Stewart Street/4th Avenue/Olive Way	Roosevelt to Downtown Study
3	Stewart Street/5th Avenue	SDOT
4	Stewart Street/Westlake Avenue	SDOT
5	Stewart Street/6th Avenue	SDOT
6	Stewart Street/7th Avenue	Roosevelt to Downtown Study
7	Stewart Street/8th Avenue	SDOT
8	Stewart Street/9th Avenue	SDOT
9	Stewart Street/Terry Avenue	SDOT
10	Stewart Street/Boren Avenue	Roosevelt to Downtown Study
11	Virginia Street/3rd Avenue	SDOT
12	Virginia Street/4th Avenue	SDOT
13	Virginia Street/5th Avenue	Roosevelt to Downtown Study
14	Virginia Street/6th Avenue	SDOT
15	Virginia Street/Westlake Avenue	SDOT
16	Virginia Street/7th Avenue	SDOT
17	Virginia Street/8th Avenue	SDOT
18	Virginia Street/9th Avenue	SDOT
19	Virginia Street/Terry Avenue	SDOT
20	Virginia Street/Boren Avenue/Fairview Avenue	Roosevelt to Downtown Study
21	Olive Way/5th Avenue	SDOT
22	Westlake Avenue/6th Avenue	SDOT
23	Westlake Avenue/7th Avenue	SDOT
24	Westlake Avenue/8th Avenue/Lenora Street	Roosevelt to Downtown Study
25	Westlake Avenue/9th Avenue/Blanchard Street	SDOT
26	Westlake Avenue/Denny Way	Roosevelt to Downtown Study
34	Fairview Avenue/Denny Way	Roosevelt to Downtown Study

Existing Traffic Volumes

Downtown study intersection volumes under 2015 conditions are presented in **Tables 2** and **3**. For the purposes of this addendum, all the streets running in the northeast-southwest direction are assumed to be aligned in the east-west direction, while those running in the northwest-southeast direction are assumed to be aligned in the north-south direction, which is the usual terminology applied in Seattle.

Table 2 Study Intersection Volumes – 2015 AM Peak Hour

#	Study Intersection	Northbound			Southbound			Eastbound			Westbound			Northeastbound			Northwestbound			Southeastbound			Southwestbound		
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
1	Stewart Street/3rd Avenue	-	-	-	-	-	-	-	-	-	-	-	0	6	1	13	96	12	7	110	61	26	480	95	
2	Stewart Street/4th Avenue/Olive Way	-	-	-	-	-	-	-	-	-	-	-	1	0	48	101	997	228	0	0	0	0	512	140	
3	Stewart Street/5th Avenue	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0	1140	94	251	603	0		
4	Stewart Street/Westlake Avenue	-	-	-	-	-	157	-	-	-	-	-	-	-	-	-	-	-	-	-	0	688	0		
5	Stewart Street/6th Avenue	-	-	-	-	-	-	-	-	-	-	-	-	-	-	53	633	0	-	-	-	0	699	156	
6	Stewart Street/7th Avenue	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0	337	44	243	910	0		
7	Stewart Street/8th Avenue	-	-	-	-	-	-	-	-	-	-	-	-	-	-	176	265	0	-	-	-	0	1063	117	
8	Stewart Street/9th Avenue	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0	203	148	126	1021	0		
9	Stewart Street/Terry Avenue	-	-	-	-	-	-	-	-	-	-	-	-	-	-	47	54	0	-	-	-	0	1094	55	
10	Stewart Street/Boren Avenue	-	-	-	-	-	-	-	-	-	-	-	-	-	-	169	574	0	0	487	90	277	892	19	
11	Virginia Street/3rd Avenue	-	-	-	-	-	-	-	-	-	-	-	32	359	63	0	116	28	30	161	0	-	-	-	
12	Virginia Street/4th Avenue	-	-	-	-	-	-	-	-	-	-	-	44	385	0	0	977	187	-	-	-	-	-	-	
13	Virginia Street/5th Avenue	-	-	-	-	-	-	-	-	-	-	-	0	501	104	-	-	-	96	1049	0	-	-	-	
14	Virginia Street/6th Avenue	-	-	-	-	-	-	-	-	-	-	-	49	568	0	0	469	19	-	-	-	-	-	-	
15	Virginia Street/Westlake Avenue	0	137	153	1	152	0	-	-	-	-	-	89	462	36	-	-	-	-	-	-	-	-	-	
16	Virginia Street/7th Avenue	-	-	-	-	-	-	-	-	-	-	-	0	459	157	-	-	-	116	254	0	-	-	-	
17	Virginia Street/8th Avenue	-	-	-	-	-	-	-	-	-	-	-	45	484	0	0	228	153	-	-	-	0	0	138	
18	Virginia Street/9th Avenue	-	-	-	-	-	-	-	-	-	-	-	0	417	138	-	-	-	26	128	18	83	140	0	
19	Virginia Street/Terry Avenue	-	-	-	-	-	-	-	-	-	-	-	28	367	0	38	40	37	-	-	-	0	199	17	
20	Virginia Street/Boren Avenue/Fairview Avenue	0	238	0	130	186	6	-	-	-	-	-	-	-	-	1	2	411	0	314	49	-	-	-	
21	Olive Way/5th Avenue	-	-	-	-	-	-	0	245	27	-	-	-	-	-	-	-	400	991	0	-	-	-		
22	Westlake Avenue/6th Avenue	0	5	0	0	130	24	-	-	-	-	-	-	-	-	23	464	306	-	-	-	-	-	-	
23	Westlake Avenue/7th Avenue	0	226	0	150	118	1	-	-	-	-	-	-	-	-	-	-	3	220	35	-	-	-		
24	Westlake Avenue/8th Avenue/Lenora Street	12	183	0	0	188	105	-	-	-	-	-	-	-	-	120	106	169	5	0	29	-	-	-	
25	Westlake Avenue/9th Avenue/Blanchard Street	0	331	35	112	242	0	-	-	-	-	-	108	0	85	0	0	67	-	-	-	-	-	-	
26	Westlake Avenue/Denny Way	17	426	63	103	279	48	8	1097	24	0	974	112	0	6	1	13	96	12	7	110	61	26	480	95
34	Fairview Avenue/Denny Way	377	308	43	71	257	64	106	992	8	81	705	79	-	-	-	-	-	-	-	-	-	-	-	

Table 3 Study Intersection Volumes – 2015 PM Peak Hour

#	Study Intersection	Northbound			Southbound			Eastbound			Westbound			Northeastbound			Northwestbound			Southeastbound			Southwestbound		
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
1	Stewart Street/3rd Avenue	-	-	-	-	-	-	-	-	-	-	-	0	91	2	1	199	16	7	184	72	0	423	25	
2	Stewart Street/4th Avenue/Olive Way	-	-	-	-	-	-	-	-	-	-	-	0	0	107	29	1277	218	0	0	0	0	402	130	
3	Stewart Street/5th Avenue	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0	766	86	251	434	0		
4	Stewart Street/Westlake Avenue	-	-	-	-	-	164	-	-	-	-	-	-	-	-	-	-	-	-	-	0	496	0		
5	Stewart Street/6th Avenue	-	-	-	-	-	-	-	-	-	-	-	-	-	-	81	836	0	-	-	-	0	415	154	
6	Stewart Street/7th Avenue	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0	360	40	180	516	0		
7	Stewart Street/8th Avenue	-	-	-	-	-	-	-	-	-	-	-	-	-	-	141	311	0	-	-	-	0	523	100	
8	Stewart Street/9th Avenue	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0	334	100	106	472	0		
9	Stewart Street/Terry Avenue	-	-	-	-	-	-	-	-	-	-	-	-	-	-	68	64	0	-	-	-	0	506	19	
10	Stewart Street/Boren Avenue	-	-	-	-	-	-	-	-	-	-	-	-	-	-	57	428	0	0	877	46	158	471	35	
11	Virginia Street/3rd Avenue	-	-	-	-	-	-	-	-	-	-	-	29	514	42	0	164	86	86	222	0	-	-	-	
12	Virginia Street/4th Avenue	-	-	-	-	-	-	-	-	-	-	-	75	602	0	0	1254	183	-	-	-	-	-	-	
13	Virginia Street/5th Avenue	-	-	-	-	-	-	-	-	-	-	-	0	758	86	-	-	-	132	777	0	-	-	-	
14	Virginia Street/6th Avenue	-	-	-	-	-	-	-	-	-	-	-	83	841	0	0	706	32	-	-	-	-	-	-	
15	Virginia Street/Westlake Avenue	0	137	153	1	152	0	-	-	-	-	-	98	754	21	-	-	-	-	-	-	-	-	-	
16	Virginia Street/7th Avenue	-	-	-	-	-	-	-	-	-	-	-	0	669	182	-	-	-	87	255	0	-	-	-	
17	Virginia Street/8th Avenue	-	-	-	-	-	-	-	-	-	-	-	73	700	0	0	302	96	0	0	0	0	0	110	
18	Virginia Street/9th Avenue	-	-	-	-	-	-	-	-	-	-	-	0	585	238	-	-	-	79	182	30	23	62	0	
19	Virginia Street/Terry Avenue	-	-	-	-	-	-	-	-	-	-	-	44	611	0	12	31	31	-	-	-	0	66	16	
20	Virginia Street/Boren Avenue/Fairview Avenue	0	238	0	130	186	6	-	-	-	-	-	-	-	-	0	0	490	0	425	4	-	-	-	
21	Olive Way/5th Avenue	-	-	-	-	-	-	0	245	27	-	-	-	-	-	-	-	360	657	0	-	-	-		
22	Westlake Avenue/6th Avenue	0	5	0	0	130	24	-	-	-	-	-	-	-	-	17	729	244	-	-	-	-	-	-	
23	Westlake Avenue/7th Avenue	0	226	0	150	118	1	-	-	-	-	-	-	-	-	-	-	4	234	25	-	-	-		
24	Westlake Avenue/8th Avenue/Lenora Street	12	183	0	0	188	105	-	-	-	-	-	-	-	-	136	191	164	7	0	48	-	-	-	
25	Westlake Avenue/9th Avenue/Blanchard Street	0	331	35	112	242	0	-	-	-	-	-	171	0	304	0	0	107	-	-	-	-	-	-	
26	Westlake Avenue/Denny Way	56	426	89	131	239	45	0	909	27	0	709	97	-	-	-	-	-	-	-	-	-	-	-	
34	Fairview Avenue/Denny Way	314	455	156	98	347	64	98	740	3	64	516	68	-	-	-	-	-	-	-	-	-	-	-	

Existing Intersection Operations

Traffic operations at the downtown study intersections were analyzed under existing AM and PM peak hours. The results are summarized in **Table 4**, based on average intersection delay. The study intersection LOS values for the entire study area are shown in **Figure 1** (AM Peak) and **Figure 2** (PM Peak).

Table 4 Study Intersection Operations – Existing Conditions

#	Study Intersection	AM Peak Hour		PM Peak Hour	
		Delay (sec)	LOS	Delay (sec)	LOS
1	Stewart Street/3rd Avenue*	15.3	B	9.3	A
2	Stewart Street/4th Avenue/Olive Way*	13.2	B	16.0	B
3	Stewart Street/5th Avenue*	9.5	A	7.4	A
4	Stewart Street/Westlake Avenue*	6.6	A	7.9	A
5	Stewart Street/6th Avenue	16.0	B	16.0	B
6	Stewart Street/7th Avenue*	9.4	A	7.9	A
7	Stewart Street/8th Avenue*	12.3	B	11.3	B
8	Stewart Street/9th Avenue*	8.9	A	10.7	B
9	Stewart Street/Terry Avenue*	9.5	A	12.6	B
10	Stewart Street/Boren Avenue*	38.6	D	23.7	C
11	Virginia Street/3rd Avenue*	13.2	B	13.1	B
12	Virginia Street/4th Avenue*	9.2	A	7.3	A
13	Virginia Street/5th Avenue*	16.1	B	15.4	B
14	Virginia Street/6th Avenue*	5.8	A	4.6	A
15	Virginia Street/Westlake Avenue*	5.4	A	6.4	A
16	Virginia Street/7th Avenue*	14.2	B	4.9	A
17	Virginia Street/8th Avenue*	15.0	B	9.4	A
18	Virginia Street/9th Avenue*	7.0	A	8.8	A
19	Virginia Street/Terry Avenue*	9.5	A	5.1	A
20	Virginia Street/Boren Avenue/Fairview Avenue*	25.0	C	20.7	C
21	Olive Way/5th Avenue*	5.6	A	7.0	A
22	Westlake Avenue/6th Avenue*	8.8	A	11.7	B
23	Westlake Avenue/7th Avenue*	14.4	B	12.9	B
24	Westlake Avenue/8th Avenue/Lenora Street*	23.0	C	19.2	B
25	Westlake Avenue/9th Avenue/Blanchard Street	12.1	B	14.5	B
26	Westlake Avenue/Denny Way	27.4	C	29.9	C
34	Fairview Avenue/Denny Way	43.0	D	41.2	D

Notes:

Intersections denoted with an asterisk (*) were analyzed using the HCM 2000 methodology.

Delay presented in seconds per vehicle.

Bold indicates intersection that operates at LOS E or F.

Under existing conditions, none of the study intersections within the downtown portion of the study area operate at LOS E or F.

Synchro output sheets are included in **Appendix E ADD 2**.

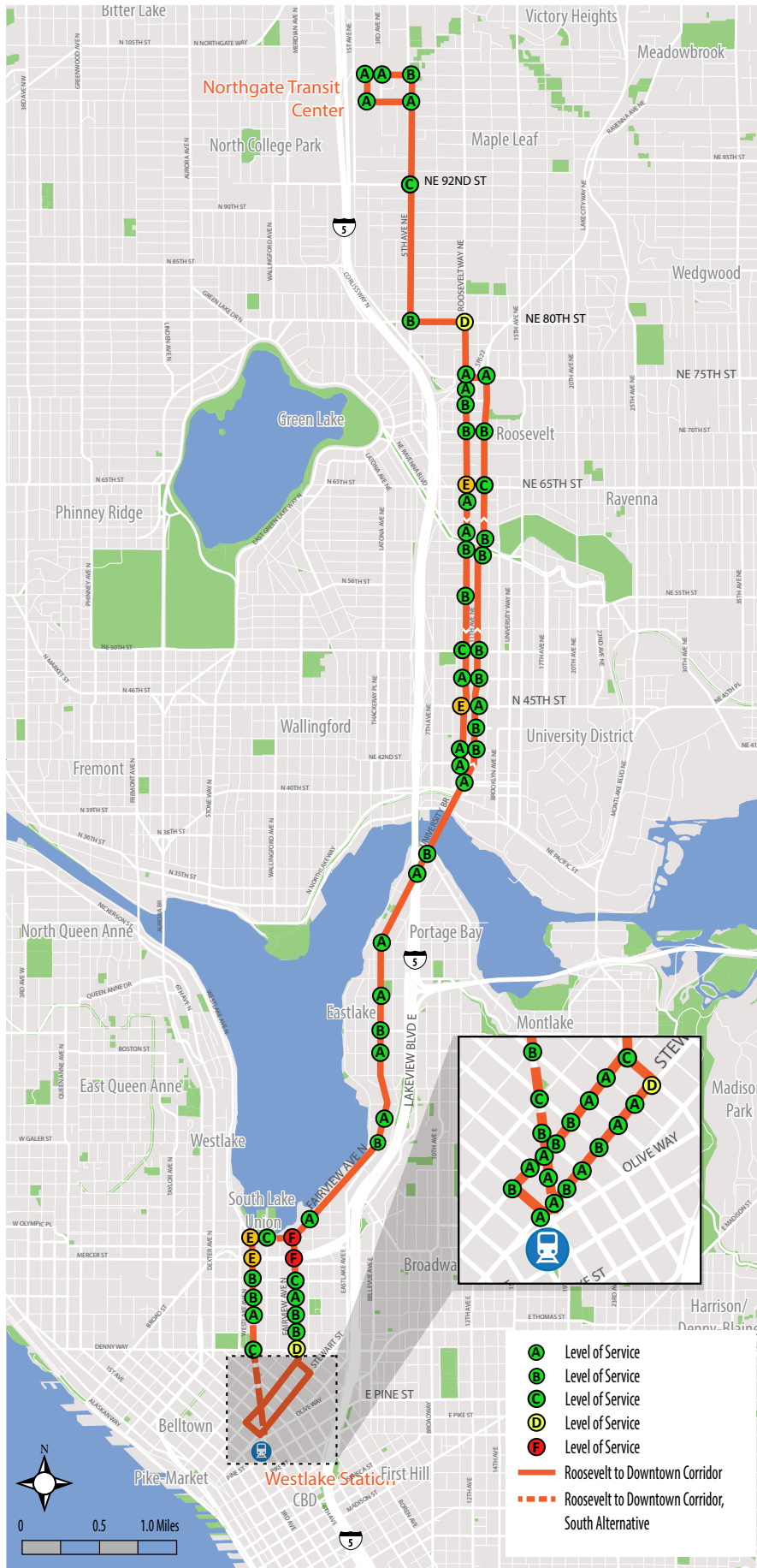


Figure 1. Study Intersection LOS Values – Existing Conditions – AM Peak Hour

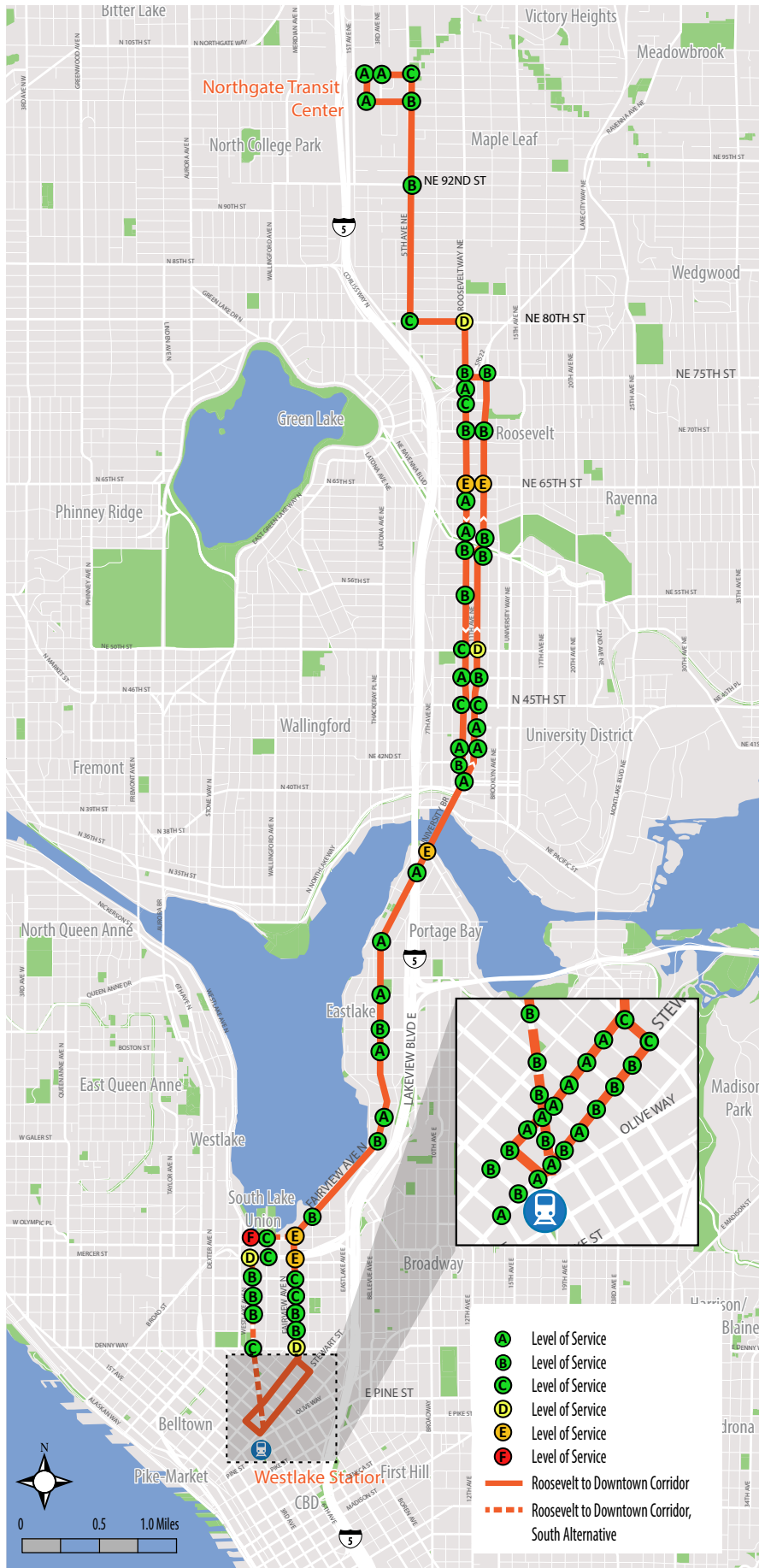


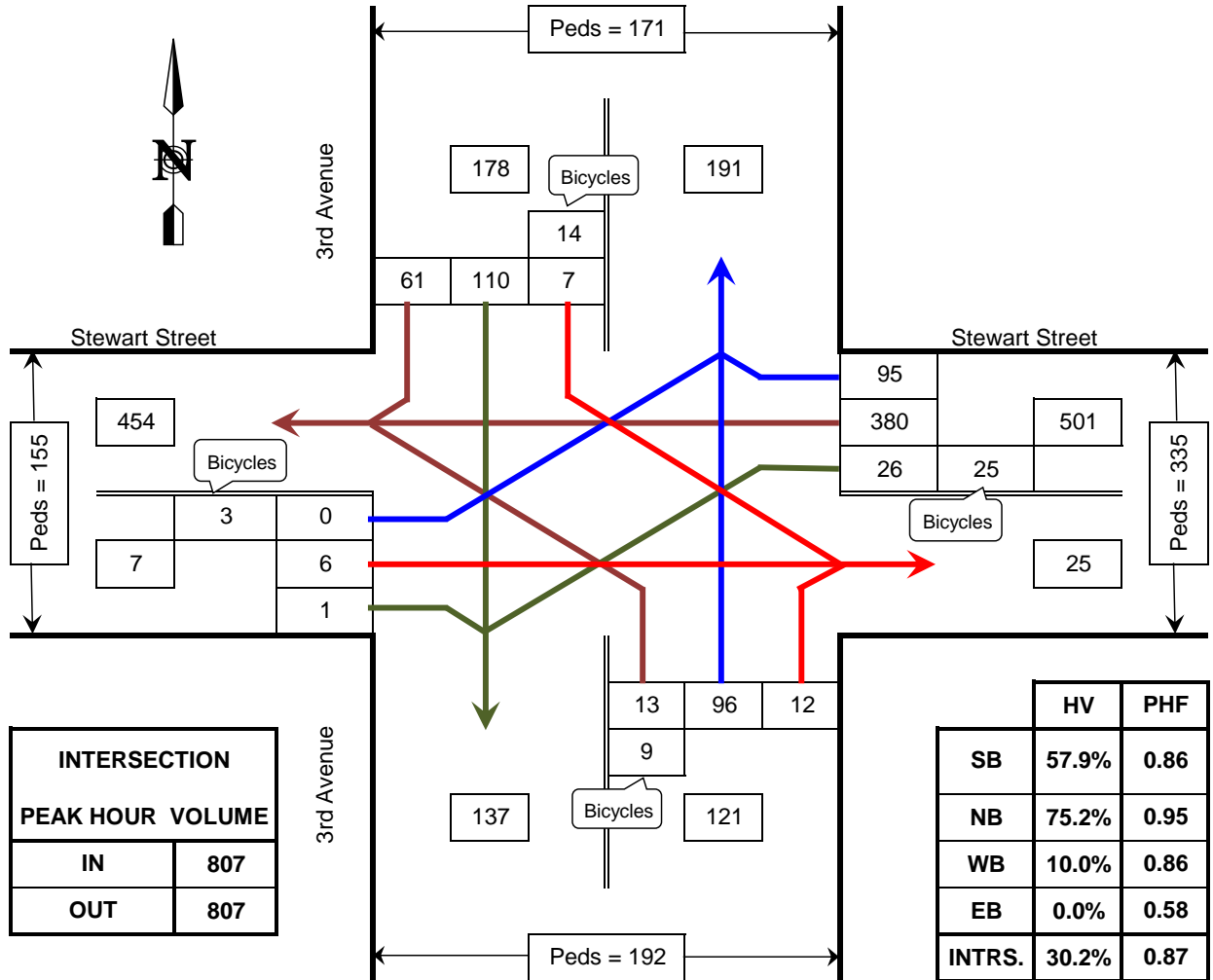
Figure 2. Study Intersection LOS Values – Existing Conditions – PM Peak Hour

APPENDIX E ADD 1

STUDY INTERSECTION COUNTS

TURNING MOVEMENTS DIAGRAM

8:00 AM - 9:00 AM PEAK HOUR: 8:00 AM TO 9:00 AM



INTERSECTION	
PEAK HOUR VOLUME	
IN	807
OUT	807

	HV	PHF
SB	57.9%	0.86
NB	75.2%	0.95
WB	10.0%	0.86
EB	0.0%	0.58
INTRS.	30.2%	0.87

PHF = Peak Hour Factor
HV = Heavy Vehicles

Stewart Street @ 3rd Avenue Seattle, WA

COUNTED BY: SN/PB

DATE OF COUNT: Tue. 1/20/15

REDUCED BY: CN

TIME OF COUNT: 8:00 AM - 9:00 AM

REDUCTION DATE: Wed. 1/21/15

WEATHER: Sunny

DTG TRAFFIC DATA GATHERING

INTERSECTION TURNING MOVEMENTS REDUCTION SHEET

LOCATION: Stewart Street @ 3rd Avenue
Seattle, WA

DATE OF COUNT: Tue. 1/20/15
TIME OF COUNT: 8:00 AM - 9:00 AM

COUNTED BY: SN/PB
WEATHER: Sunny

TIME INTERVAL ENDING AT	FROM NORTH ON 3rd Avenue						FROM SOUTH ON 3rd Avenue						FROM EAST ON Stewart Street						FROM WEST ON Stewart Street						INTERVAL TOTALS	
	Peds	HV	Bicycle	Left	Thru	Right	Peds	HV	Bicycle	Left	Thru	Right	Peds	HV	Bicycle	Left	Thru	Right	Peds	HV	Bicycle	Left	Thru	Right		
05:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
05:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
06:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
06:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
06:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
06:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:15 AM	33	23	5	0	27	12	52	23	2	1	25	3	78	17	1	8	77	21	31	0	0	0	3	0	177	
08:30 AM	56	22	3	2	24	13	46	21	5	6	17	6	92	12	5	3	104	28	29	0	1	0	1	1	205	
08:45 AM	35	28	1	2	29	21	54	29	1	2	28	1	69	10	7	7	114	25	43	0	0	0	2	0	231	
09:00 AM	47	30	5	3	30	15	40	18	1	4	26	2	96	11	12	8	85	21	52	0	2	0	0	0	194	
PEAK HOUR TOTALS	171	103	14	7	110	61	192	91	9	13	96	12	335	50	25	26	380	95	155	0	3	0	6	1	INTERSECTION	
ALL MOVEMENTS	178						121						501						7						807	
% HV	57.9%						75.2%						10.0%						0.0%						30.2%	
PEAK HOUR FACTOR	0.86						0.95						0.86						0.58						0.87	

PHF = Peak Hour Factor

8:00 AM - 9:00 AM PEAK HOUR: 8:00 AM TO 9:00 AM

REDUCED BY: CN

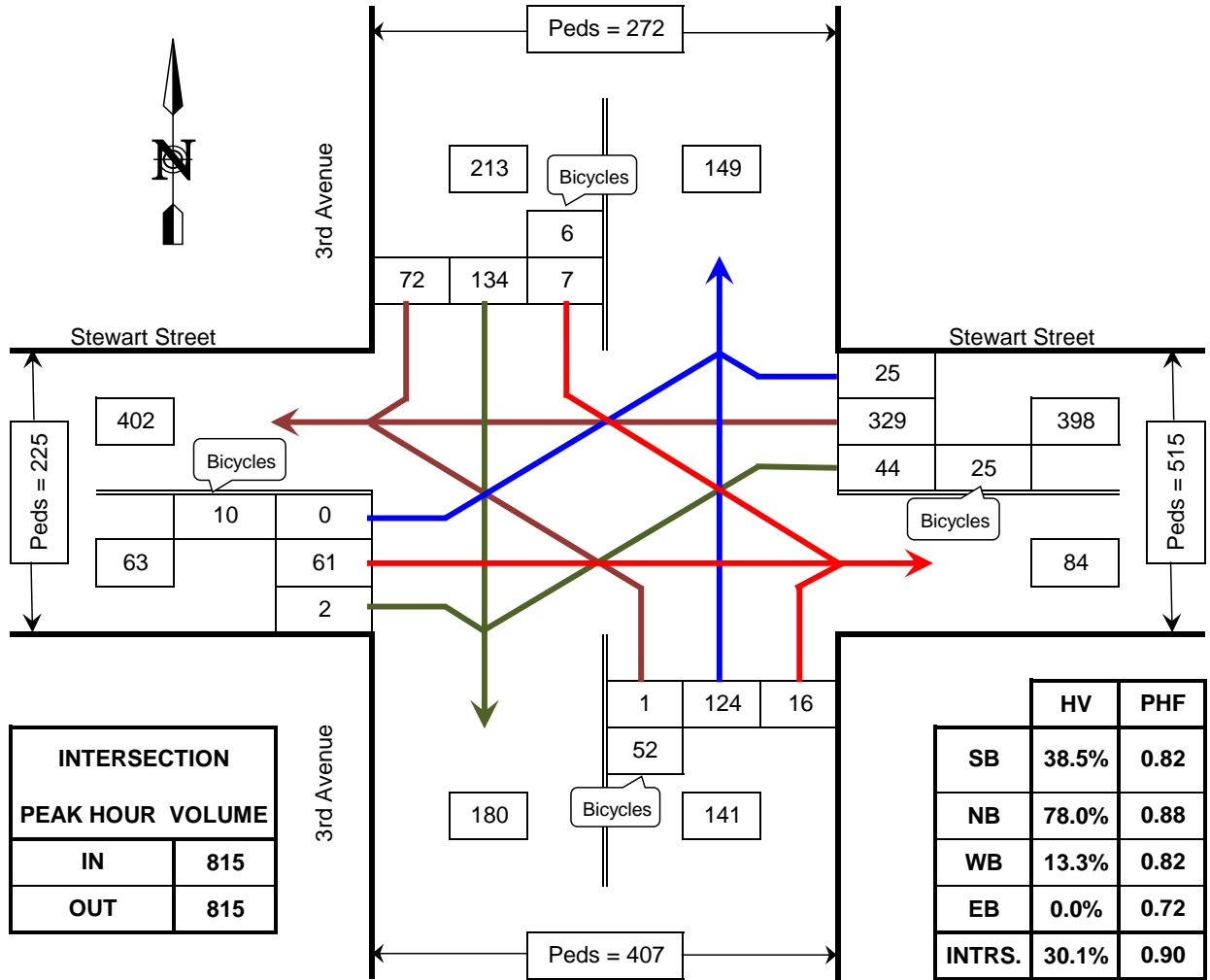
DATE OF REDUCTION: 1/21/2015

ROLLING HOUR COUNT

TIME INTERVAL	FROM NORTH ON 3rd Avenue						FROM SOUTH ON 3rd Avenue						FROM EAST ON Stewart Street						FROM WEST ON Stewart Street						INTERVAL TOTALS	
	Peds	HV	Bicycle	Left	Thru	Right	Peds	HV	Bicycle	Left	Thru	Right	Peds	HV	Bicycle	Left	Thru	Right	Peds	HV	Bicycle	Left	Thru	Right		
5:00 AM - 6:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 AM - 6:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 AM - 6:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 AM - 6:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:00 AM - 7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:15 AM - 7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:30 AM - 7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:45 AM - 7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:00 AM - 8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM - 8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM - 8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM - 8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM - 9:00 AM	171	103	14	7	110	61	192	91	9	13	96	12	335	50	25	26	380	95	155	0	3	0	6	1	807	

TURNING MOVEMENTS DIAGRAM

5:00 PM - 6:00 PM PEAK HOUR: 5:00 PM TO 6:00 PM



**Stewart Street @ 3rd Avenue
Seattle, WA**

PHF = Peak Hour Factor
HV = Heavy Vehicles

COUNTED BY: SN/PB

DATE OF COUNT: Tue. 1/20/15

REDUCED BY: CN

TIME OF COUNT: 5:00 PM - 6:00 PM

REDUCTION DATE: Wed. 1/21/15

WEATHER: Sunny

TRAFFIC DATA GATHERING

INTERSECTION TURNING MOVEMENTS REDUCTION SHEET

LOCATION: Stewart Street @ 3rd Avenue
Seattle, WA

DATE OF COUNT: Tue. 1/20/15
 TIME OF COUNT: 5:00 PM - 6:00 PM

COUNTED BY: SN/PB
 WEATHER: Sunny

TIME INTERVAL ENDING AT	FROM NORTH ON 3rd Avenue						FROM SOUTH ON 3rd Avenue						FROM EAST ON Stewart Street						FROM WEST ON Stewart Street						INTERVAL TOTALS
	Peds	HV	Bicycle	Left	Thru	Right	Peds	HV	Bicycle	Left	Thru	Right	Peds	HV	Bicycle	Left	Thru	Right	Peds	HV	Bicycle	Left	Thru	Right	
02:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
02:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
02:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
03:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
03:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
03:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
03:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
04:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
04:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
05:15 PM	74	25	5	3	35	17	108	32	4	0	32	5	150	18	10	10	66	4	64	0	0	0	9	0	
05:30 PM	66	21	0	2	33	11	117	31	22	1	38	1	176	8	5	11	73	6	70	0	4	0	21	1	
05:45 PM	78	20	1	1	36	28	89	30	20	0	35	4	89	16	4	17	80	9	61	0	3	0	17	0	
06:00 PM	54	16	0	1	30	16	93	17	6	0	19	6	100	11	6	6	110	6	30	0	3	0	14	1	
PEAK HOUR TOTALS	272	82	6	7	134	72	407	110	52	1	124	16	515	53	25	44	329	25	225	0	10	0	61	2	
ALL MOVEMENTS	213						141						398						63						815
% HV	38.5%						78.0%						13.3%						0.0%						30.1%
PEAK HOUR FACTOR	0.82						0.88						0.82						0.72						0.90

PHF = Peak Hour Factor

5:00 PM - 6:00 PM PEAK HOUR: 5:00 PM TO 6:00 PM

REDUCED BY: CN

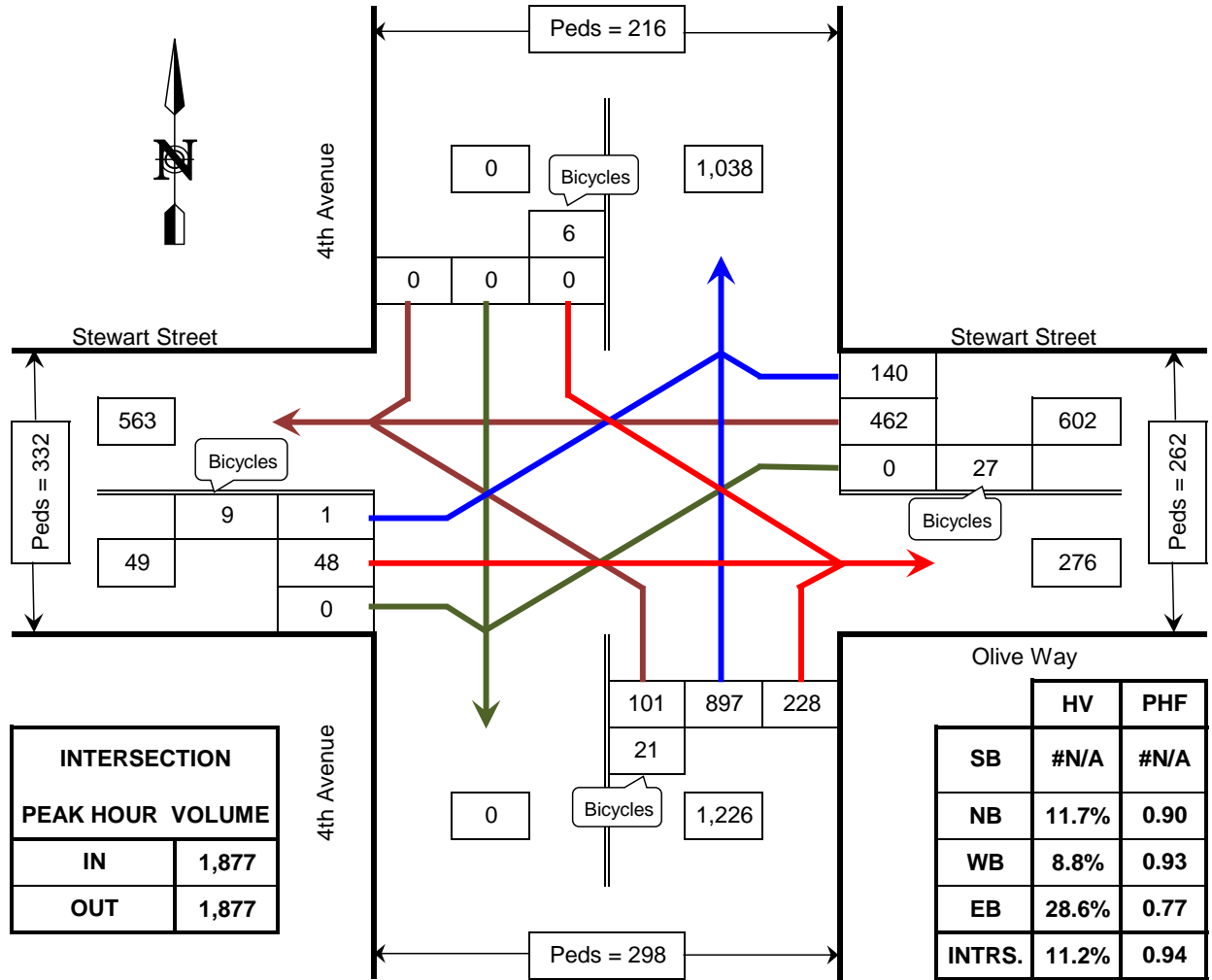
DATE OF REDUCTION: 1/21/2015

ROLLING HOUR COUNT

TIME INTERVAL	FROM NORTH ON 3rd Avenue						FROM SOUTH ON 3rd Avenue						FROM EAST ON Stewart Street						FROM WEST ON Stewart Street						INTERVAL TOTALS
	Peds	HV	Bicycle	Left	Thru	Right	Peds	HV	Bicycle	Left	Thru	Right	Peds	HV	Bicycle	Left	Thru	Right	Peds	HV	Bicycle	Left	Thru	Right	
2:00 PM - 3:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
2:15 PM - 3:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
2:30 PM - 3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
2:45 PM - 3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
3:00 PM - 4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
3:15 PM - 4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
3:30 PM - 4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
3:45 PM - 4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
4:00 PM - 5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
4:15 PM - 5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
4:30 PM - 5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
4:45 PM - 5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
5:00 PM - 6:00 PM	272	82	6	7	134	72	407	110	52	1	124	16	515	53	25	44	329	25	225	0	10	0	61	2	

TURNING MOVEMENTS DIAGRAM

8:00 AM - 9:00 AM PEAK HOUR: 8:00 AM TO 9:00 AM



PHF = Peak Hour Factor
HV = Heavy Vehicles

**Stewart Street/Olive Way @ 4th Avenue
Seattle, WA**

COUNTED BY: CN/GP

DATE OF COUNT: Tue. 1/20/15

REDUCED BY: CN

TIME OF COUNT: 8:00 AM - 9:00 AM

REDUCTION DATE: Thu. 1/22/15

WEATHER: Sunny



TRAFFIC DATA GATHERING

INTERSECTION TURNING MOVEMENTS REDUCTION SHEET

LOCATION: Stewart Street/Olive Way @ 4th Avenue
Seattle, WA

DATE OF COUNT: Tue. 1/20/15
TIME OF COUNT: 8:00 AM - 9:00 AM

COUNTED BY: CN/GP
WEATHER: Sunny

Main data table with columns for Time Interval, From North On (4th Avenue), From South On (4th Avenue), From East On (Stewart Street/Olive Way), From West On (Stewart Street), and Interval Totals. Includes summary rows for Peak Hour Totals, All Movements, % HV, and Peak Hour Factor.

PHF = Peak Hour Factor

8:00 AM - 9:00 AM PEAK HOUR: 8:00 AM TO 9:00 AM

REDUCED BY: CN

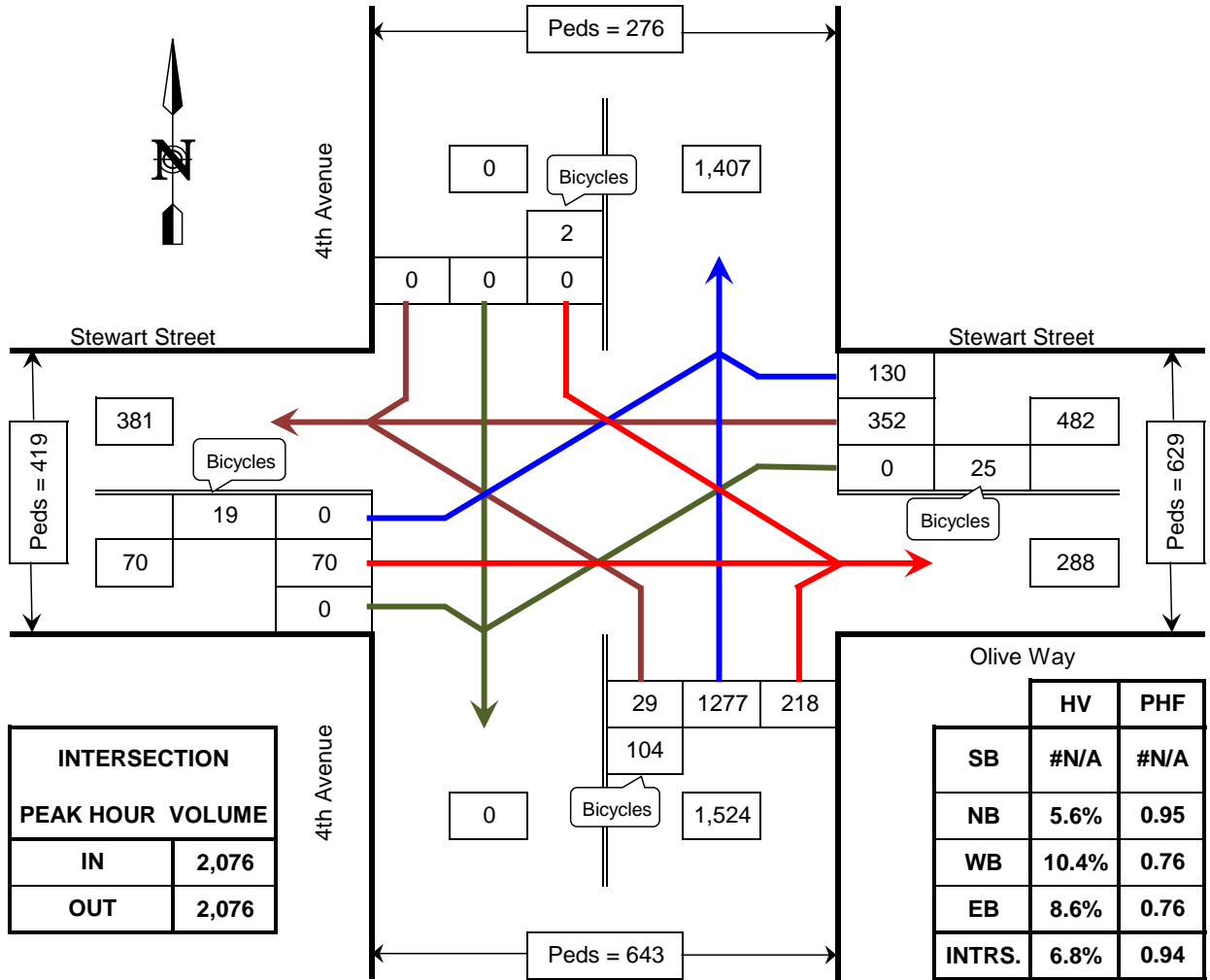
DATE OF REDUCTION: 1/22/2015

ROLLING HOUR COUNT

Rolling Hour Count table with columns for Time Interval, From North On (4th Avenue), From South On (4th Avenue), From East On (Stewart Street/Olive Way), From West On (Stewart Street), and Interval Totals. Shows counts for 15-minute intervals from 5:00 AM to 9:00 AM.

TURNING MOVEMENTS DIAGRAM

5:00 PM - 6:00 PM PEAK HOUR: 5:00 PM TO 6:00 PM



PHF = Peak Hour Factor
HV = Heavy Vehicles

**Stewart Street/Olive Way @ 4th Avenue
Seattle, WA**

COUNTED BY: CN/JH

DATE OF COUNT: Tue. 1/20/15

REDUCED BY: CN

TIME OF COUNT: 5:00 PM - 6:00 PM

REDUCTION DATE: Thu. 1/22/15

WEATHER: Sunny

TRAFFIC DATA GATHERING

INTERSECTION TURNING MOVEMENTS REDUCTION SHEET

LOCATION: Stewart Street/Olive Way @ 4th Avenue
Seattle, WA

DATE OF COUNT: Tue. 1/20/15
 TIME OF COUNT: 5:00 PM - 6:00 PM

COUNTED BY: CN/JH
 WEATHER: Sunny

TIME INTERVAL ENDING AT	FROM NORTH ON 4th Avenue						FROM SOUTH ON 4th Avenue						FROM EAST ON Stewart Street/Olive Way						FROM WEST ON Stewart Street						INTERVAL TOTALS
	Peds	HV	Bicycle	Left	Thru	Right	Peds	HV	Bicycle	Left	Thru	Right	Peds	HV	Bicycle	Left	Thru	Right	Peds	HV	Bicycle	Left	Thru	Right	
02:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
02:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:15 PM	72	0	0	0	0	0	222	20	25	8	317	47	150	15	10	0	63	20	68	2	10	0	10	0	465
05:30 PM	65	0	0	0	0	0	151	24	27	7	309	60	223	7	5	0	78	33	106	1	1	0	23	0	510
05:45 PM	77	0	0	0	0	0	140	21	29	10	339	54	135	20	2	0	97	32	127	2	4	0	16	0	548
06:00 PM	62	0	2	0	0	0	130	21	23	4	312	57	121	8	8	0	114	45	118	1	4	0	21	0	553
PEAK HOUR TOTALS	276	0	2	0	0	0	643	86	104	29	1277	218	629	50	25	0	352	130	419	6	19	0	70	0	INTERSECTION
ALL MOVEMENTS	0						1524						482						70						2076
% HV	#N/A						5.6%						10.4%						8.6%						6.8%
PEAK HOUR FACTOR	#N/A						0.95						0.76						0.76						0.94

PHF = Peak Hour Factor

5:00 PM - 6:00 PM PEAK HOUR: 5:00 PM TO 6:00 PM

REDUCED BY: CN

DATE OF REDUCTION: 1/22/2015

ROLLING HOUR COUNT

TIME INTERVAL	FROM NORTH ON 4th Avenue						FROM SOUTH ON 4th Avenue						FROM EAST ON Stewart Street/Olive Way						FROM WEST ON Stewart Street						INTERVAL TOTALS
	Peds	HV	Bicycle	Left	Thru	Right	Peds	HV	Bicycle	Left	Thru	Right	Peds	HV	Bicycle	Left	Thru	Right	Peds	HV	Bicycle	Left	Thru	Right	
2:00 PM - 3:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:15 PM - 3:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:30 PM - 3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:45 PM - 3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:00 PM - 4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:15 PM - 4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:30 PM - 4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:45 PM - 4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:00 PM - 5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM - 5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM - 5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM - 5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM - 6:00 PM	276	0	2	0	0	0	643	86	104	29	1277	218	629	50	25	0	352	130	419	6	19	0	70	0	2076

Peak Hour Summary

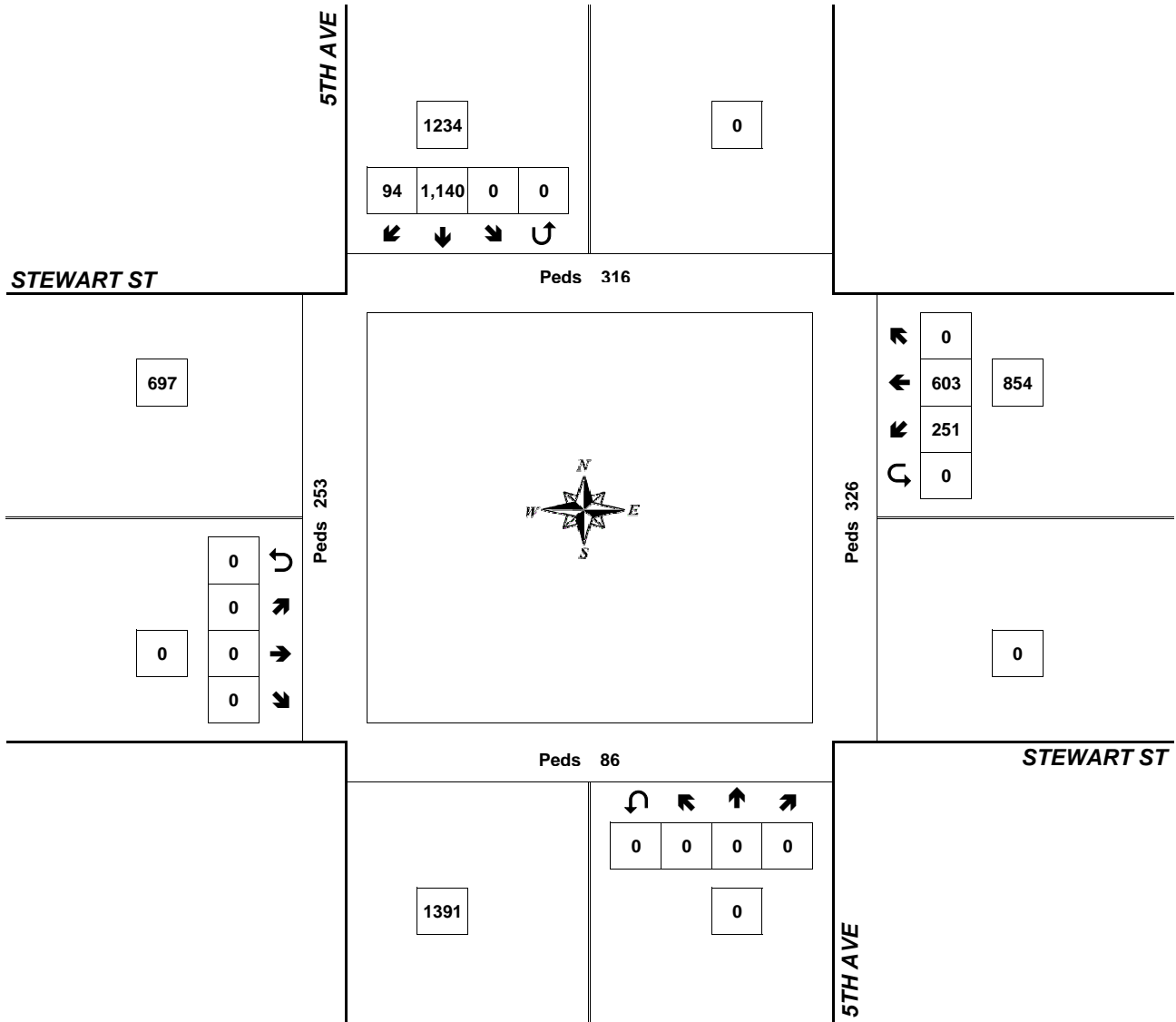
Site ID: 389



Eric Boivin
(303) 668-0220

5TH AVE & STEWART ST

7:45 AM to 8:45 AM
Wednesday, February 11, 2015



Approach	PHF	HV%	Volume
EB	0.00	0.0%	0
WB	0.94	11.5%	854
NB	0.00	0.0%	0
SB	0.88	1.6%	1,234
Intersection	0.91	5.7%	2,088

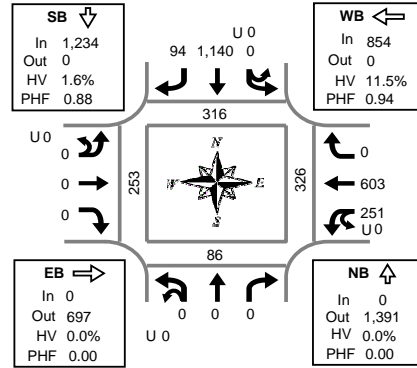
Count Period: 7:00 AM to 9:00 AM

Total Vehicle Summary



Eric Boivin
(303) 668-0220

Site ID: 389
5TH AVE & STEWART ST
 Wednesday, February 11, 2015
 7:00 AM to 9:00 AM



Peak Hour Summary 7:45 AM to 8:45 AM

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

Interval Start Time	Northbound 5TH AVE				Southbound 5TH AVE				Eastbound STEWART ST				Westbound STEWART ST				Interval Total	Pedestrians & Bicycles In Crosswalk (By Location)			
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R		North	South	East	West
7:00 AM	0	0	0	0	0	0	182	18	0	1	0	0	0	57	127	0	385	40	17	65	31
7:15 AM	0	0	0	0	0	0	265	13	0	0	0	0	0	46	126	0	450	41	21	84	34
7:30 AM	0	0	0	0	0	0	258	24	0	0	0	0	0	55	140	0	477	48	16	136	52
7:45 AM	0	0	0	0	0	0	322	30	0	0	0	0	0	56	163	0	571	73	10	111	55
8:00 AM	0	0	0	0	0	0	297	20	0	0	0	0	0	71	155	0	543	91	27	71	55
8:15 AM	0	0	0	0	0	0	260	28	0	0	0	0	0	66	130	0	484	79	21	66	75
8:30 AM	0	0	0	0	0	0	261	16	0	0	0	0	0	58	155	0	490	73	28	78	68
8:45 AM	0	0	0	0	0	0	274	16	0	0	0	0	0	54	135	0	479	78	20	90	62
Total Survey	0	0	0	0	0	0	2,119	165	0	1	0	0	0	463	1,131	0	3,879	523	160	701	432

Peak Hour Summary 7:45 AM to 8:45 AM

By Approach	Northbound 5TH AVE				Southbound 5TH AVE				Eastbound STEWART ST				Westbound STEWART ST				Total	Pedestrians & Bicycles In Crosswalk (By Location)			
	In	Out	Total	HV	In	Out	Total	HV	In	Out	Total	HV	In	Out	Total	HV		North	South	East	West
Volume	0	1,391	1,391	0	1,234	0	1,234	20	0	697	697	0	854	0	854	98	2,088	316	86	326	253
%HV		0.0%				1.6%		2.1%		0.0%			11.5%				5.7%				
PHF		0.00				0.88		0.78		0.00			0.94				0.91				

By Movement	Northbound 5TH AVE				Southbound 5TH AVE				Eastbound STEWART ST				Westbound STEWART ST				Total				
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R					
Volume	0	0	0	0	0	0	1,140	94	0	0	0	0	0	251	603	0	2,088				
%HV	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	1.6%	2.1%	0.0%	0.0%	0.0%	0.0%	0.0%	16.7%	9.3%	0.0%	5.7%				
PHF	0.00	0.00	0.00	0.00	0.00	0.00	0.89	0.78	0.00	0.00	0.00	0.00	0.00	0.88	0.92	0.00	0.91				

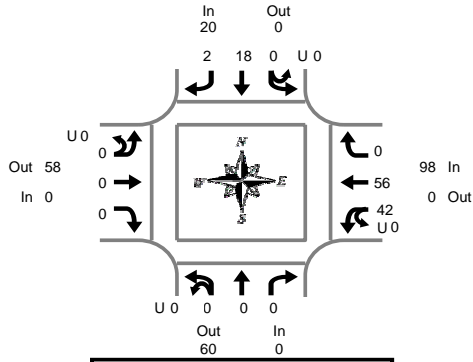
Rolling Hour Summary 7:00 AM to 9:00 AM

Interval Start Time	Northbound 5TH AVE				Southbound 5TH AVE				Eastbound STEWART ST				Westbound STEWART ST				Interval Total	Pedestrians & Bicycles In Crosswalk (By Location)			
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R		North	South	East	West
7:00 AM	0	0	0	0	0	0	1,027	85	0	1	0	0	0	214	556	0	1,883	202	64	396	172
7:15 AM	0	0	0	0	0	0	1,142	87	0	0	0	0	0	228	584	0	2,041	253	74	402	196
7:30 AM	0	0	0	0	0	0	1,137	102	0	0	0	0	0	248	588	0	2,075	291	74	384	237
7:45 AM	0	0	0	0	0	0	1,140	94	0	0	0	0	0	251	603	0	2,088	316	86	326	253
8:00 AM	0	0	0	0	0	0	1,092	80	0	0	0	0	0	249	575	0	1,996	321	96	305	260

Heavy Vehicle Summary



Eric Boivin
(303) 668-0220



**Peak Hour Summary
7:45 AM to 8:45 AM**

5TH AVE & STEWART ST

Wednesday, February 11, 2015

7:00 AM to 9:00 AM

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

Interval Start Time	Northbound 5TH AVE					Southbound 5TH AVE					Eastbound STEWART ST					Westbound STEWART ST					Interval Total
	U	L	T	R	Total	U	L	T	R	Total	U	L	T	R	Total	U	L	T	R	Total	
7:00 AM	0	0	0	0	0	0	0	7	1	8	0	0	0	0	0	0	10	10	0	20	28
7:15 AM	0	0	0	0	0	0	0	4	1	5	0	0	0	0	0	0	9	13	0	22	27
7:30 AM	0	0	0	0	0	0	0	6	0	6	0	0	0	0	0	0	9	11	0	20	26
7:45 AM	0	0	0	0	0	0	0	6	0	6	0	0	0	0	0	0	8	15	0	23	29
8:00 AM	0	0	0	0	0	0	0	5	1	6	0	0	0	0	0	0	10	15	0	25	31
8:15 AM	0	0	0	0	0	0	0	3	1	4	0	0	0	0	0	0	8	13	0	21	25
8:30 AM	0	0	0	0	0	0	0	4	0	4	0	0	0	0	0	0	16	13	0	29	33
8:45 AM	0	0	0	0	0	0	0	8	0	8	0	0	0	0	0	0	8	15	0	23	31
Total Survey	0	0	0	0	0	0	0	43	4	47	0	0	0	0	0	0	78	105	0	183	4

Peak Hour Summary 7:45 AM to 8:45 AM

By Approach	Northbound 5TH AVE			Southbound 5TH AVE			Eastbound STEWART ST			Westbound STEWART ST			Total
	In	Out	Total	In	Out	Total	In	Out	Total	In	Out	Total	
Volume	0	60	60	20	0	20	0	58	58	98	0	98	118

By Movement	Northbound 5TH AVE					Southbound 5TH AVE					Eastbound STEWART ST					Westbound STEWART ST					Total	
	U	L	T	R	Total	U	L	T	R	Total	U	L	T	R	Total	U	L	T	R	Total		
Volume	0	0	0	0	0	0	0	18	2	20	0	0	0	0	0	0	0	42	56	0	98	118

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

Interval Start Time	Northbound 5TH AVE					Southbound 5TH AVE					Eastbound STEWART ST					Westbound STEWART ST					Interval Total
	U	L	T	R	Total	U	L	T	R	Total	U	L	T	R	Total	U	L	T	R	Total	
7:00 AM	0	0	0	0	0	0	0	23	2	25	0	0	0	0	0	0	36	49	0	85	110
7:15 AM	0	0	0	0	0	0	0	21	2	23	0	0	0	0	0	0	36	54	0	90	113
7:30 AM	0	0	0	0	0	0	0	20	2	22	0	0	0	0	0	0	35	54	0	89	111
7:45 AM	0	0	0	0	0	0	0	18	2	20	0	0	0	0	0	0	42	56	0	98	118
8:00 AM	0	0	0	0	0	0	0	20	2	22	0	0	0	0	0	0	42	56	0	98	120

Peak Hour Summary

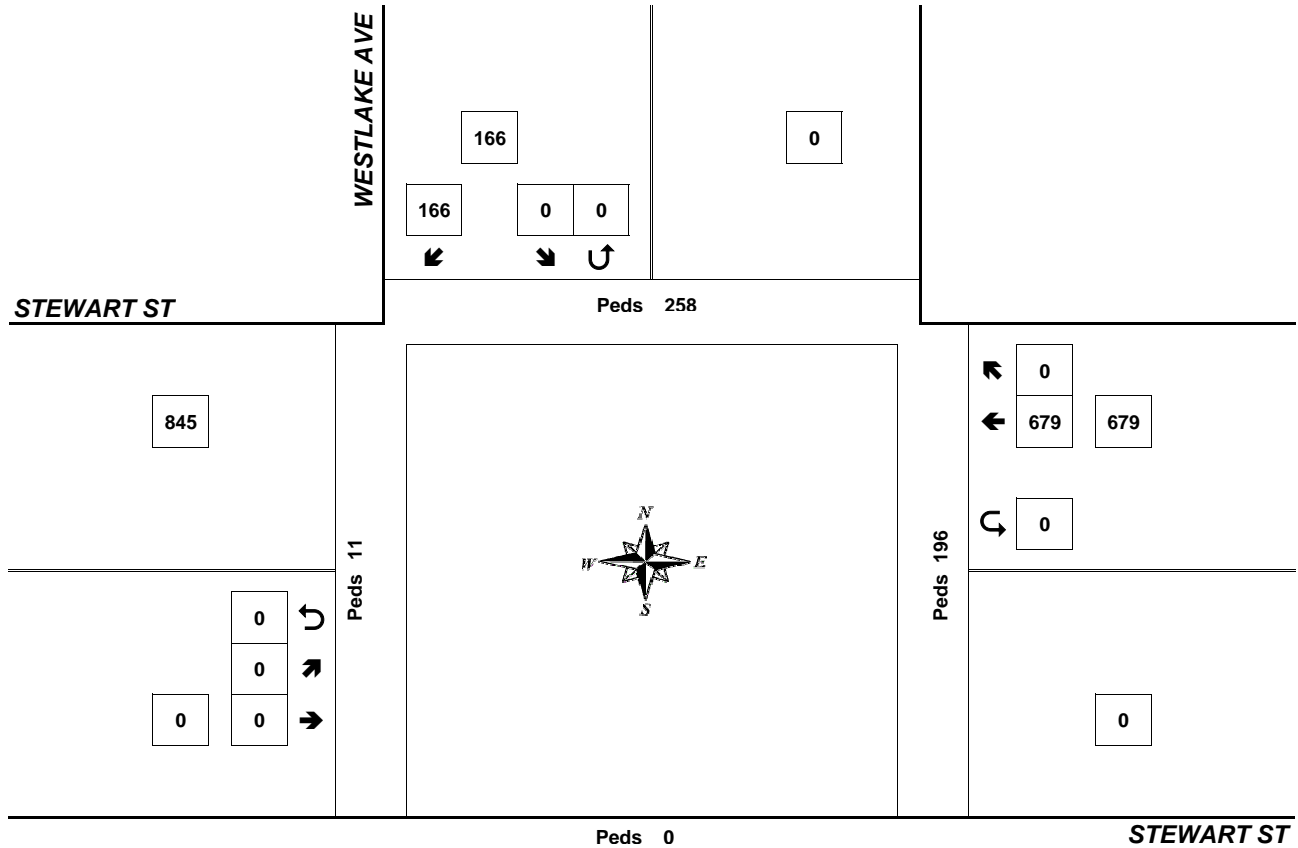
Site ID: 438



Eric Boivin
(303) 668-0220

WESTLAKE AVE & STEWART ST

7:45 AM to 8:45 AM
Wednesday, February 11, 2015



Approach	PHF	HV%	Volume
EB	0.00	0.0%	0
WB	0.95	13.3%	679
NB	0.00	0.0%	0
SB	0.88	4.2%	166
Intersection	0.94	11.5%	845

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

Total Vehicle Summary



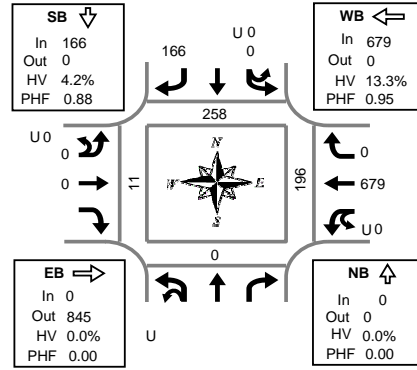
Eric Boivin
(303) 668-0220

Site ID: 438

WESTLAKE AVE & STEWART ST

Wednesday, February 11, 2015

7:00 AM to 9:00 AM



Peak Hour Summary
7:45 AM to 8:45 AM

15-Minute Interval Summary

7:00 AM to 9:00 AM

Interval Start Time	Northbound n/a				Southbound WESTLAKE AVE				Eastbound STEWART ST				Westbound STEWART ST				Interval Total	Pedestrians & Bicycles In Crosswalk (By Location)		
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R		North	East	West
7:00 AM					0	0		22	0	0	0		0		158	0	180	30	56	4
7:15 AM					0	0		28	0	0	0		0		138	0	166	32	42	5
7:30 AM					0	0		29	0	0	0		0		166	0	195	63	48	1
7:45 AM					0	0		47	0	0	0		0		178	0	225	72	39	3
8:00 AM					0	0		41	0	0	0		0		177	0	218	75	60	3
8:15 AM					0	0		41	0	0	0		0		153	0	194	53	40	2
8:30 AM					0	0		37	0	0	0		0		171	0	208	58	57	3
8:45 AM					0	0		31	0	0	0		0		167	0	198	51	35	3
Total Survey					0	0		276	0	0	0		0		1,308	0	1,584	434	377	24

Peak Hour Summary

7:45 AM to 8:45 AM

By Approach	Northbound n/a				Southbound WESTLAKE AVE				Eastbound STEWART ST				Westbound STEWART ST				Total	Pedestrians & Bicycles In Crosswalk (By Location)			
	In	Out	Total	HV	In	Out	Total	HV	In	Out	Total	HV	In	Out	Total	HV		North	South	East	West
Volume	0	0	0	0	166	0	166	7	0	845	845	0	679	0	679	90	845	258	0	196	11
%HV				0.0%			4.2%				0.0%				13.3%		11.5%				
PHF				0.00			0.88				0.00				0.95		0.94				

By Movement	Northbound n/a				Southbound WESTLAKE AVE				Eastbound STEWART ST				Westbound STEWART ST				Total				
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R					
Volume					0	0		166	0	0	0		0		679	0	845				
%HV					0.0%	0.0%		4.2%	0.0%	0.0%	0.0%		0.0%		13.3%	0.0%	11.5%				
PHF					0.00	0.00		0.88	0.00	0.00	0.00		0.00		0.95	0.00	0.94				

Rolling Hour Summary

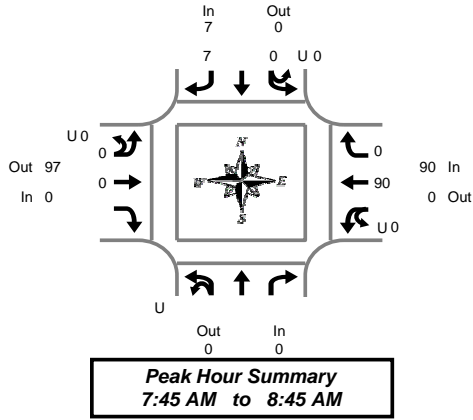
7:00 AM to 9:00 AM

Interval Start Time	Northbound n/a				Southbound WESTLAKE AVE				Eastbound STEWART ST				Westbound STEWART ST				Interval Total	Pedestrians & Bicycles In Crosswalk (By Location)			
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R		North	South	East	West
7:00 AM					0	0		126	0	0	0		0		640	0	766	197	185	13	
7:15 AM					0	0		145	0	0	0		0		659	0	804	242	189	12	
7:30 AM					0	0		158	0	0	0		0		674	0	832	263	187	9	
7:45 AM					0	0		166	0	0	0		0		679	0	845	258	196	11	
8:00 AM					0	0		150	0	0	0		0		668	0	818	237	192	11	

Heavy Vehicle Summary



Eric Boivin
(303) 668-0220



WESTLAKE AVE & STEWART ST

Wednesday, February 11, 2015
7:00 AM to 9:00 AM

15-Minute Interval Summary

7:00 AM to 9:00 AM

Interval Start Time	Northbound n/a					Southbound WESTLAKE AVE					Eastbound STEWART ST					Westbound STEWART ST					Interval Total
	U	L	T	R	Total	U	L	T	R	Total	U	L	T	R	Total	U	L	T	R	Total	
7:00 AM						0	0		1	1	0	0	0		0	0		19	0	19	20
7:15 AM						0	0		0	0	0	0	0		0	0		22	0	22	22
7:30 AM						0	0		2	2	0	0	0		0	0		19	0	19	21
7:45 AM						0	0		2	2	0	0	0		0	0		23	0	23	25
8:00 AM						0	0		1	1	0	0	0		0	0		22	0	22	23
8:15 AM						0	0		1	1	0	0	0		0	0		19	0	19	20
8:30 AM						0	0		3	3	0	0	0		0	0		26	0	26	29
8:45 AM						0	0		2	2	0	0	0		0	0		22	0	22	24
Total Survey						0	0	0	12	12	0	0	0		0	0		172	0	172	12

Peak Hour Summary

7:45 AM to 8:45 AM

By Approach	Northbound n/a			Southbound WESTLAKE AVE			Eastbound STEWART ST			Westbound STEWART ST			Total
	In	Out	Total	In	Out	Total	In	Out	Total	In	Out	Total	
Volume	0	0	0	7	0	7	0	97	97	90	0	90	97

By Movement	Northbound n/a					Southbound WESTLAKE AVE					Eastbound STEWART ST					Westbound STEWART ST					Total	
	U	L	T	R	Total	U	L	T	R	Total	U	L	T	R	Total	U	L	T	R	Total		
Volume					0	0	0		7	7	0	0	0	0	0	0	0		90	0	90	97

Rolling Hour Summary

7:00 AM to 9:00 AM

Interval Start Time	Northbound n/a					Southbound WESTLAKE AVE					Eastbound STEWART ST					Westbound STEWART ST					Interval Total
	U	L	T	R	Total	U	L	T	R	Total	U	L	T	R	Total	U	L	T	R	Total	
7:00 AM						0	0		5	5	0	0	0		0	0		83	0	83	88
7:15 AM						0	0		5	5	0	0	0		0	0		86	0	86	91
7:30 AM						0	0		6	6	0	0	0		0	0		83	0	83	89
7:45 AM						0	0		7	7	0	0	0		0	0		90	0	90	97
8:00 AM						0	0		7	7	0	0	0		0	0		89	0	89	96

Peak Hour Summary

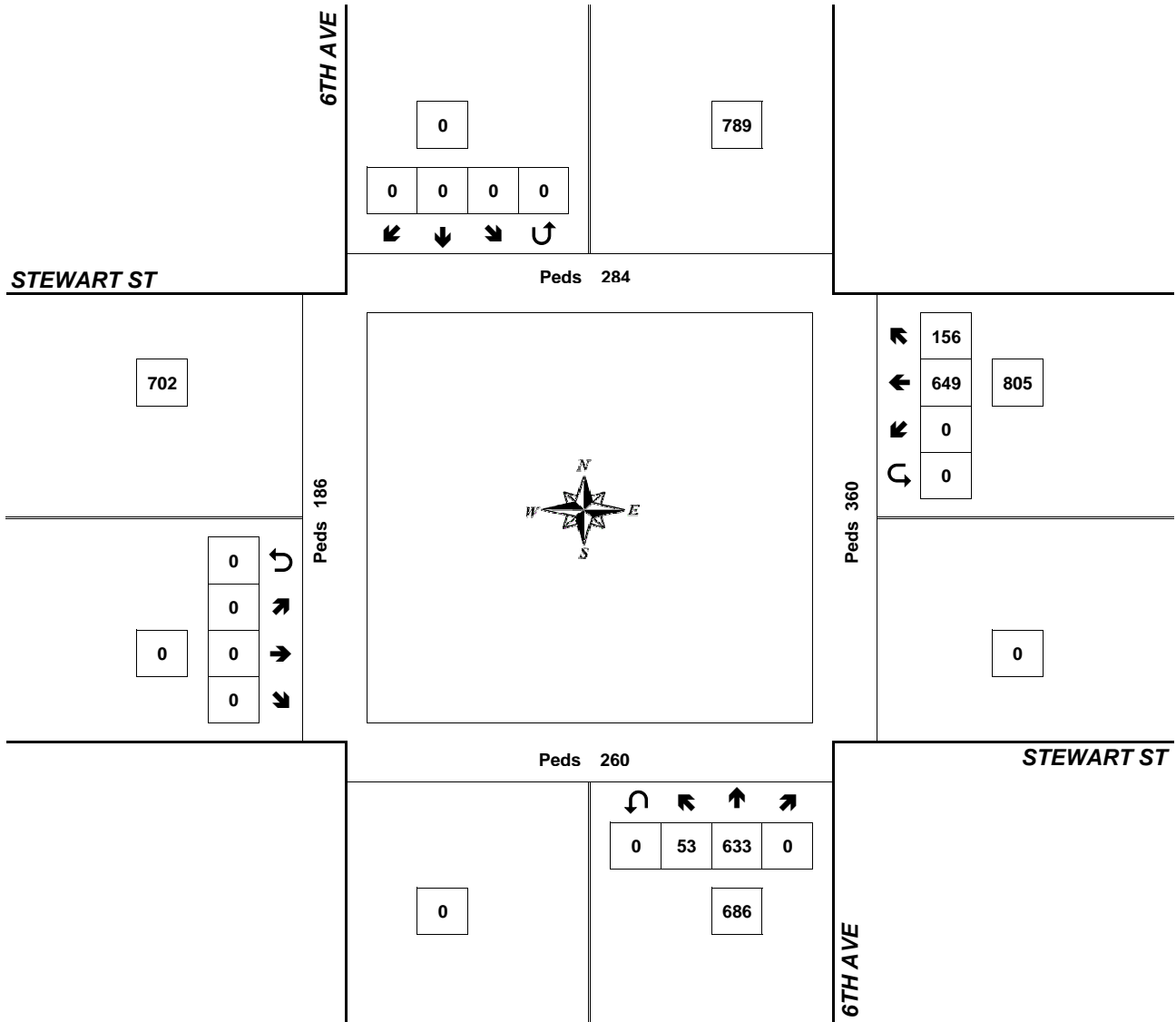
Site ID: 437



Eric Boivin
(303) 668-0220

6TH AVE & STEWART ST

7:45 AM to 8:45 AM
Wednesday, February 11, 2015



Approach	PHF	HV%	Volume
EB	0.00	0.0%	0
WB	0.90	11.2%	805
NB	0.90	2.5%	686
SB	0.00	0.0%	0
Intersection	0.94	7.2%	1,491

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

Total Vehicle Summary



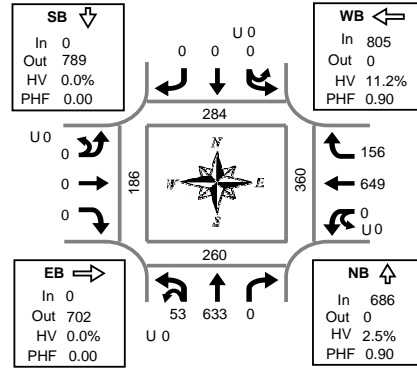
Eric Boivin
(303) 668-0220

Site ID: 437

6TH AVE & STEWART ST

Wednesday, February 11, 2015

7:00 AM to 9:00 AM



Peak Hour Summary
7:45 AM to 8:45 AM

15-Minute Interval Summary

7:00 AM to 9:00 AM

Interval Start Time	Northbound 6TH AVE				Southbound 6TH AVE				Eastbound STEWART ST				Westbound STEWART ST				Interval Total	Pedestrians & Bicycles In Crosswalk (By Location)			
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R		North	South	East	West
7:00 AM	0	12	104	0	0	0	0	0	0	0	0	0	0	0	149	31	296	28	37	61	29
7:15 AM	0	8	102	0	0	0	0	0	0	0	0	0	0	0	134	23	267	39	44	81	30
7:30 AM	0	12	123	0	0	0	0	0	0	0	0	0	0	0	152	28	315	50	46	75	40
7:45 AM	0	4	144	0	0	0	0	0	0	0	0	0	0	0	184	40	372	65	66	73	45
8:00 AM	0	17	171	0	0	0	0	0	0	0	0	0	0	0	163	46	397	83	70	102	42
8:15 AM	0	12	147	0	0	0	0	0	0	0	0	0	0	0	147	32	338	66	56	80	46
8:30 AM	0	20	171	0	0	0	0	0	0	0	0	0	0	0	155	38	384	70	68	105	53
8:45 AM	0	21	142	0	0	0	0	0	0	0	0	0	0	0	149	50	362	78	69	76	57
Total Survey	0	106	1,104	0	0	0	0	0	0	0	0	0	0	0	1,233	288	2,731	479	456	653	342

Peak Hour Summary

7:45 AM to 8:45 AM

By Approach	Northbound 6TH AVE				Southbound 6TH AVE				Eastbound STEWART ST				Westbound STEWART ST				Total	Pedestrians & Bicycles In Crosswalk (By Location)			
	In	Out	Total	HV	In	Out	Total	HV	In	Out	Total	HV	In	Out	Total	HV		North	South	East	West
Volume	686	0	686	17	0	789	789	0	0	702	702	0	805	0	805	90	1,491	284	260	360	186
%HV	2.5%				0.0%				0.0%				11.2%				7.2%				
PHF	0.90				0.00				0.00				0.90				0.94				

By Movement	Northbound 6TH AVE				Southbound 6TH AVE				Eastbound STEWART ST				Westbound STEWART ST				Total
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R	
Volume	0	53	633	0	0	0	0	0	0	0	0	0	0	649	156	1,491	
%HV	0.0%	1.9%	2.5%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	13.6%	1.3%	7.2%	
PHF	0.00	0.66	0.93	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.88	0.85	0.94	

Rolling Hour Summary

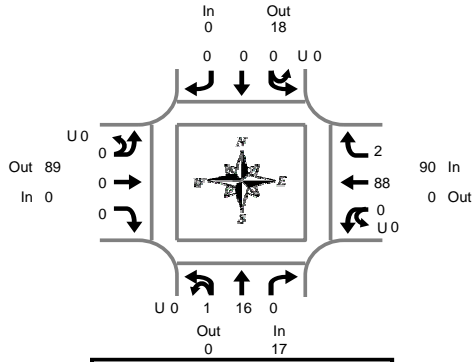
7:00 AM to 9:00 AM

Interval Start Time	Northbound 6TH AVE				Southbound 6TH AVE				Eastbound STEWART ST				Westbound STEWART ST				Interval Total	Pedestrians & Bicycles In Crosswalk (By Location)			
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R		North	South	East	West
7:00 AM	0	36	473	0	0	0	0	0	0	0	0	0	0	619	122	1,250	182	193	290	144	
7:15 AM	0	41	540	0	0	0	0	0	0	0	0	0	0	633	137	1,351	237	226	331	157	
7:30 AM	0	45	585	0	0	0	0	0	0	0	0	0	0	646	146	1,422	264	238	330	173	
7:45 AM	0	53	633	0	0	0	0	0	0	0	0	0	0	649	156	1,491	284	260	360	186	
8:00 AM	0	70	631	0	0	0	0	0	0	0	0	0	0	614	166	1,481	297	263	363	198	

Heavy Vehicle Summary



Eric Boivin
(303) 668-0220



**Peak Hour Summary
7:45 AM to 8:45 AM**

6TH AVE & STEWART ST

Wednesday, February 11, 2015

7:00 AM to 9:00 AM

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

Interval Start Time	Northbound 6TH AVE					Southbound 6TH AVE					Eastbound STEWART ST					Westbound STEWART ST					Interval Total
	U	L	T	R	Total	U	L	T	R	Total	U	L	T	R	Total	U	L	T	R	Total	
7:00 AM	0	0	2	0	2	0	0	0	0	0	0	0	0	0	0	0	0	18	2	20	22
7:15 AM	0	0	5	0	5	0	0	0	0	0	0	0	0	0	0	0	0	22	5	27	32
7:30 AM	0	1	4	0	5	0	0	0	0	0	0	0	0	0	0	0	0	18	1	19	24
7:45 AM	0	0	3	0	3	0	0	0	0	0	0	0	0	0	0	0	0	23	1	24	27
8:00 AM	0	0	4	0	4	0	0	0	0	0	0	0	0	0	0	0	0	22	1	23	27
8:15 AM	0	1	6	0	7	0	0	0	0	0	0	0	0	0	0	0	0	18	0	18	25
8:30 AM	0	0	3	0	3	0	0	0	0	0	0	0	0	0	0	0	0	25	0	25	28
8:45 AM	0	2	13	0	15	0	0	0	0	0	0	0	0	0	0	0	0	21	1	22	37
Total Survey	0	4	40	0	44	0	0	0	0	0	0	0	0	0	0	0	0	167	11	178	11

Peak Hour Summary
7:45 AM to 8:45 AM

By Approach	Northbound 6TH AVE			Southbound 6TH AVE			Eastbound STEWART ST			Westbound STEWART ST			Total
	In	Out	Total	In	Out	Total	In	Out	Total	In	Out	Total	
Volume	17	0	17	0	18	18	0	89	89	90	0	90	107

By Movement	Northbound 6TH AVE					Southbound 6TH AVE					Eastbound STEWART ST					Westbound STEWART ST					Total
	U	L	T	R	Total	U	L	T	R	Total	U	L	T	R	Total	U	L	T	R	Total	
Volume	0	1	16	0	17	0	0	0	0	0	0	0	0	0	0	0	0	88	2	90	107

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

Interval Start Time	Northbound 6TH AVE					Southbound 6TH AVE					Eastbound STEWART ST					Westbound STEWART ST					Interval Total
	U	L	T	R	Total	U	L	T	R	Total	U	L	T	R	Total	U	L	T	R	Total	
7:00 AM	0	1	14	0	15	0	0	0	0	0	0	0	0	0	0	0	0	81	9	90	105
7:15 AM	0	1	16	0	17	0	0	0	0	0	0	0	0	0	0	0	0	85	8	93	110
7:30 AM	0	2	17	0	19	0	0	0	0	0	0	0	0	0	0	0	0	81	3	84	103
7:45 AM	0	1	16	0	17	0	0	0	0	0	0	0	0	0	0	0	0	88	2	90	107
8:00 AM	0	3	26	0	29	0	0	0	0	0	0	0	0	0	0	0	0	86	2	88	117

Peak Hour Summary

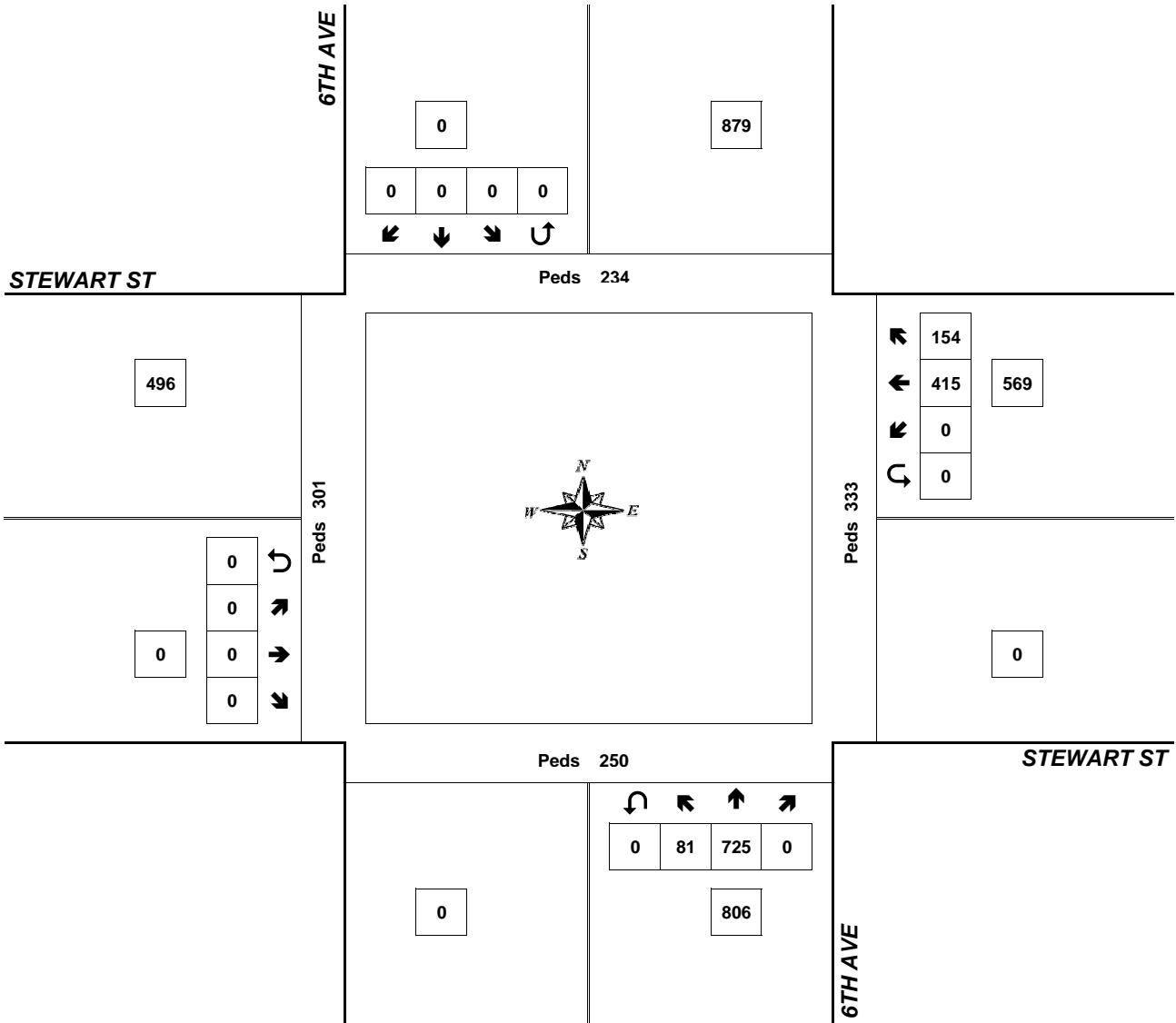
Site ID: 437



Eric Boivin
(303) 668-0220

6TH AVE & STEWART ST

4:45 PM to 5:45 PM
Wednesday, February 11, 2015



Approach	PHF	HV%	Volume
EB	0.00	0.0%	0
WB	0.94	12.1%	569
NB	0.94	1.6%	806
SB	0.00	0.0%	0
Intersection	0.95	6.0%	1,375

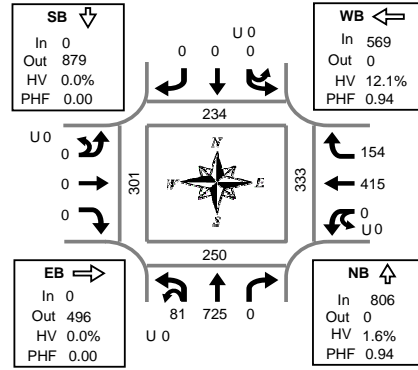
Count Period: 4:00 PM to 6:00 PM

Total Vehicle Summary



Eric Boivin
(303) 668-0220

Site ID: 437
6TH AVE & STEWART ST
 Wednesday, February 11, 2015
 4:00 PM to 6:00 PM



Peak Hour Summary
 4:45 PM to 5:45 PM

15-Minute Interval Summary

4:00 PM to 6:00 PM

Interval Start Time	Northbound 6TH AVE				Southbound 6TH AVE				Eastbound STEWART ST				Westbound STEWART ST				Interval Total	Pedestrians & Bicycles In Crosswalk (By Location)			
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R		North	South	East	West
4:00 PM	0	19	123	0	0	0	0	0	0	0	0	0	0	0	125	29	296	47	36	64	69
4:15 PM	0	27	127	0	0	0	0	0	0	0	0	0	0	0	93	33	280	48	42	61	63
4:30 PM	0	21	157	0	0	0	0	0	0	0	0	0	0	0	109	35	322	47	53	72	61
4:45 PM	0	24	190	0	0	0	0	0	0	0	0	0	0	0	98	34	346	54	50	83	59
5:00 PM	0	21	166	0	0	0	0	0	0	0	0	0	0	0	112	37	336	77	75	90	72
5:15 PM	0	20	176	0	0	0	0	0	0	0	0	0	0	0	98	38	332	50	64	79	74
5:30 PM	0	16	193	0	0	0	0	0	0	0	0	0	0	0	107	45	361	53	61	81	96
5:45 PM	0	23	170	0	0	0	0	0	0	0	0	0	0	0	83	39	315	47	38	69	67
Total Survey	0	171	1,302	0	0	0	0	0	0	0	0	0	0	0	825	290	2,588	423	419	599	561

Peak Hour Summary

4:45 PM to 5:45 PM

By Approach	Northbound 6TH AVE				Southbound 6TH AVE				Eastbound STEWART ST				Westbound STEWART ST				Total	Pedestrians & Bicycles In Crosswalk (By Location)			
	In	Out	Total	HV	In	Out	Total	HV	In	Out	Total	HV	In	Out	Total	HV		North	South	East	West
Volume	806	0	806	13	0	879	879	0	0	496	496	0	569	0	569	69	1,375	234	250	333	301
%HV		1.6%				0.0%				0.0%				12.1%		6.0%					
PHF		0.94				0.00				0.00				0.94		0.95					

By Movement	Northbound 6TH AVE				Southbound 6TH AVE				Eastbound STEWART ST				Westbound STEWART ST				Total				
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R					
Volume	0	81	725	0	0	0	0	0	0	0	0	0	0	415	154	1,375					
%HV	0.0%	1.2%	1.7%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	14.7%	5.2%	6.0%				
PHF	0.00	0.84	0.94	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.93	0.86	0.95				

Rolling Hour Summary

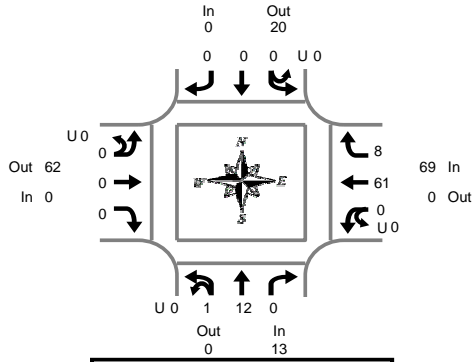
4:00 PM to 6:00 PM

Interval Start Time	Northbound 6TH AVE				Southbound 6TH AVE				Eastbound STEWART ST				Westbound STEWART ST				Interval Total	Pedestrians & Bicycles In Crosswalk (By Location)			
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R		North	South	East	West
4:00 PM	0	91	597	0	0	0	0	0	0	0	0	0	0	425	131	1,244	196	181	280	252	
4:15 PM	0	93	640	0	0	0	0	0	0	0	0	0	0	412	139	1,284	226	220	306	255	
4:30 PM	0	86	689	0	0	0	0	0	0	0	0	0	0	417	144	1,336	228	242	324	266	
4:45 PM	0	81	725	0	0	0	0	0	0	0	0	0	0	415	154	1,375	234	250	333	301	
5:00 PM	0	80	705	0	0	0	0	0	0	0	0	0	0	400	159	1,344	227	238	319	309	

Heavy Vehicle Summary



Eric Boivin
(303) 668-0220



Peak Hour Summary
4:45 PM to 5:45 PM

6TH AVE & STEWART ST

Wednesday, February 11, 2015

4:00 PM to 6:00 PM

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

Interval Start Time	Northbound 6TH AVE					Southbound 6TH AVE					Eastbound STEWART ST					Westbound STEWART ST					Interval Total
	U	L	T	R	Total	U	L	T	R	Total	U	L	T	R	Total	U	L	T	R	Total	
4:00 PM	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	23	2	25	26
4:15 PM	0	0	2	0	2	0	0	0	0	0	0	0	0	0	0	0	0	13	1	14	16
4:30 PM	0	0	5	0	5	0	0	0	0	0	0	0	0	0	0	0	0	20	2	22	27
4:45 PM	0	0	3	0	3	0	0	0	0	0	0	0	0	0	0	0	0	15	4	19	22
5:00 PM	0	0	2	0	2	0	0	0	0	0	0	0	0	0	0	0	0	18	1	19	21
5:15 PM	0	0	4	0	4	0	0	0	0	0	0	0	0	0	0	0	0	11	1	12	16
5:30 PM	0	1	3	0	4	0	0	0	0	0	0	0	0	0	0	0	0	17	2	19	23
5:45 PM	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	6	1	7	8
Total Survey	0	1	21	0	22	0	0	0	0	0	0	0	0	0	0	0	0	123	14	137	14

Peak Hour Summary
4:45 PM to 5:45 PM

By Approach	Northbound 6TH AVE			Southbound 6TH AVE			Eastbound STEWART ST			Westbound STEWART ST			Total
	In	Out	Total	In	Out	Total	In	Out	Total	In	Out	Total	
Volume	13	0	13	0	20	20	0	62	62	69	0	69	82

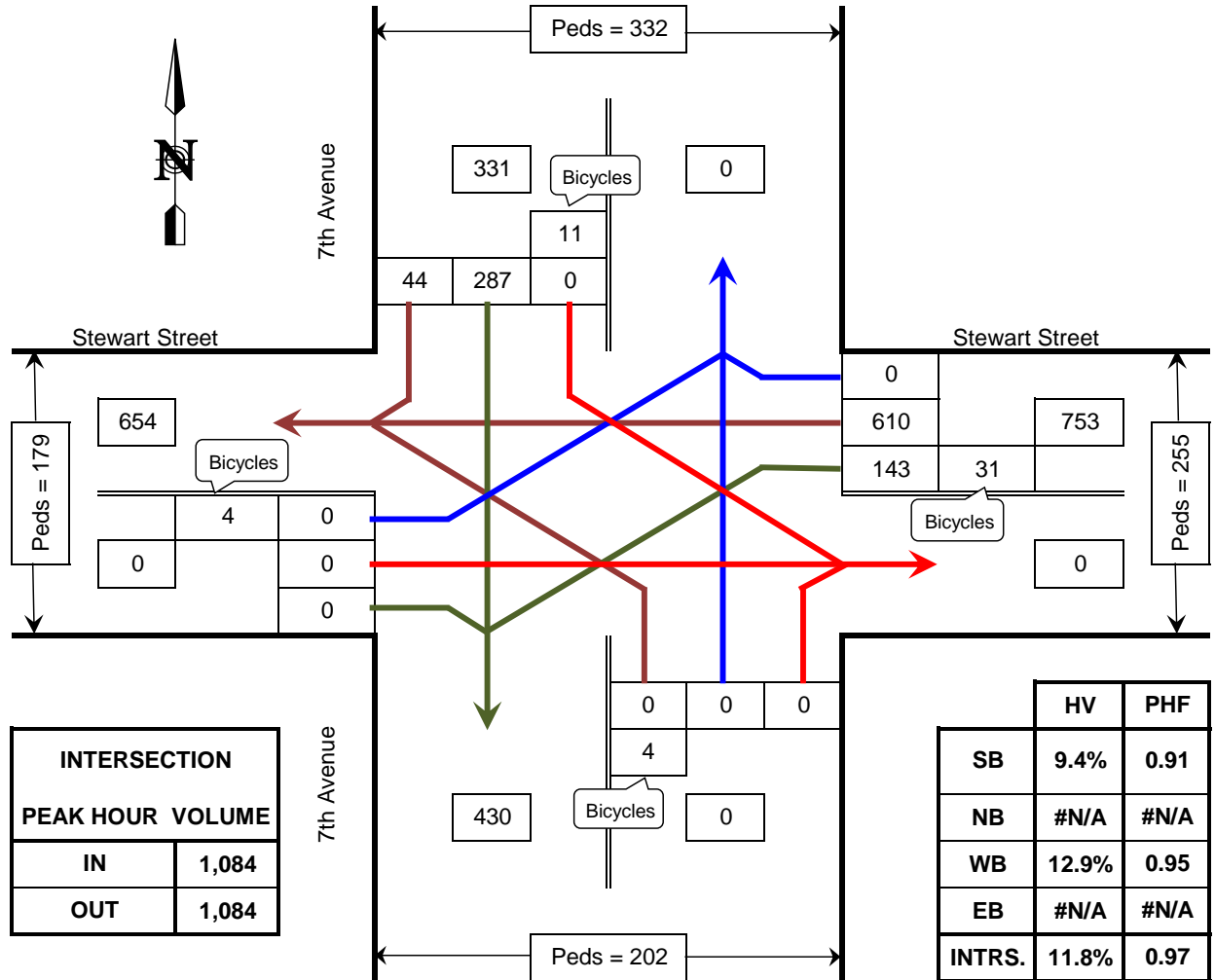
By Movement	Northbound 6TH AVE					Southbound 6TH AVE					Eastbound STEWART ST					Westbound STEWART ST					Total
	U	L	T	R	Total	U	L	T	R	Total	U	L	T	R	Total	U	L	T	R	Total	
Volume	0	1	12	0	13	0	0	0	0	0	0	0	0	0	0	0	0	61	8	69	82

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

Interval Start Time	Northbound 6TH AVE					Southbound 6TH AVE					Eastbound STEWART ST					Westbound STEWART ST					Interval Total
	U	L	T	R	Total	U	L	T	R	Total	U	L	T	R	Total	U	L	T	R	Total	
4:00 PM	0	0	11	0	11	0	0	0	0	0	0	0	0	0	0	0	0	71	9	80	91
4:15 PM	0	0	12	0	12	0	0	0	0	0	0	0	0	0	0	0	0	66	8	74	86
4:30 PM	0	0	14	0	14	0	0	0	0	0	0	0	0	0	0	0	0	64	8	72	86
4:45 PM	0	1	12	0	13	0	0	0	0	0	0	0	0	0	0	0	0	61	8	69	82
5:00 PM	0	1	10	0	11	0	0	0	0	0	0	0	0	0	0	0	0	52	5	57	68

TURNING MOVEMENTS DIAGRAM

8:00 AM - 9:00 AM PEAK HOUR: 8:00 AM TO 9:00 AM



PHF = Peak Hour Factor
HV = Heavy Vehicles

**Stewart Street @ 7th Avenue
Seattle, WA**

COUNTED BY: JH

DATE OF COUNT: Tue. 1/20/15

REDUCED BY: CN

TIME OF COUNT: 8:00 AM - 9:00 AM

REDUCTION DATE: Thu. 1/22/15

WEATHER: Sunny

TRAFFIC DATA GATHERING

INTERSECTION TURNING MOVEMENTS REDUCTION SHEET

LOCATION: Stewart Street @ 7th Avenue
Seattle, WA

DATE OF COUNT: Tue. 1/20/15
 TIME OF COUNT: 8:00 AM - 9:00 AM

COUNTED BY: JH
 WEATHER: Sunny

TIME INTERVAL ENDING AT	FROM NORTH ON 7th Avenue						FROM SOUTH ON 7th Avenue						FROM EAST ON Stewart Street						FROM WEST ON Stewart Street						INTERVAL TOTALS	
	Peds	HV	Bicycle	Left	Thru	Right	Peds	HV	Bicycle	Left	Thru	Right	Peds	HV	Bicycle	Left	Thru	Right	Peds	HV	Bicycle	Left	Thru	Right		
05:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
05:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
06:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
06:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
06:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
06:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:15 AM	88	9	0	0	75	16	67	0	1	0	0	0	82	30	1	51	133	0	62	0	1	0	0	0	0	275
08:30 AM	111	3	6	0	67	1	69	0	3	0	0	0	80	27	24	33	152	0	45	0	2	0	0	0	0	253
08:45 AM	63	8	1	0	68	14	35	0	0	0	0	0	54	23	2	31	167	0	31	0	0	0	0	0	0	280
09:00 AM	70	11	4	0	77	13	31	0	0	0	0	0	39	17	4	28	158	0	41	0	1	0	0	0	0	276
PEAK HOUR TOTALS	332	31	11	0	287	44	202	0	4	0	0	0	255	97	31	143	610	0	179	0	4	0	0	0	INTERSECTION	
ALL MOVEMENTS	331						0						753						0						1084	
% HV	9.4%						#N/A						12.9%						#N/A						11.8%	
PEAK HOUR FACTOR	0.91						#N/A						0.95						#N/A						0.97	

PHF = Peak Hour Factor

8:00 AM - 9:00 AM PEAK HOUR: 8:00 AM TO 9:00 AM

REDUCED BY: CN

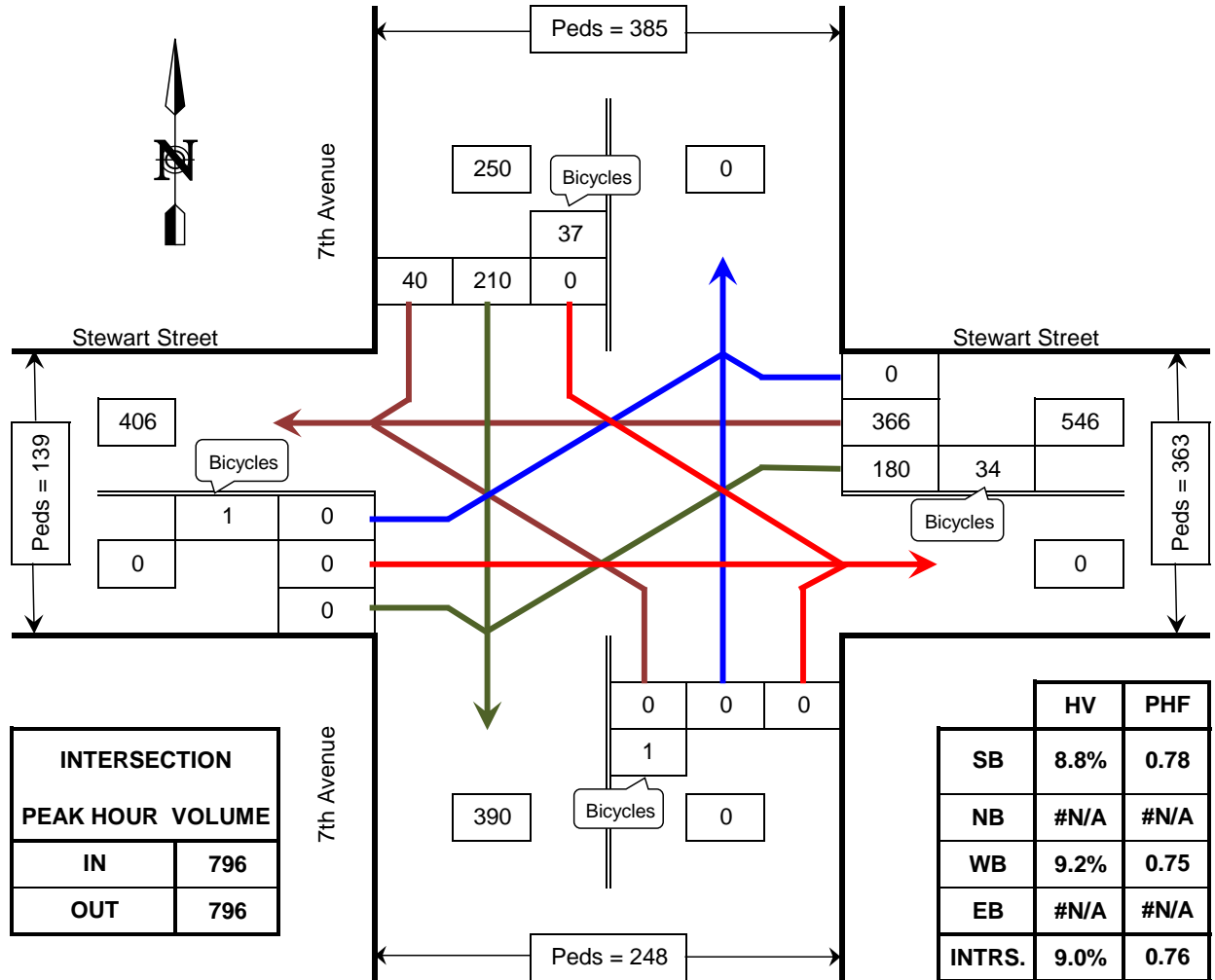
DATE OF REDUCTION: 1/22/2015

ROLLING HOUR COUNT

TIME INTERVAL	FROM NORTH ON 7th Avenue						FROM SOUTH ON 7th Avenue						FROM EAST ON Stewart Street						FROM WEST ON Stewart Street						INTERVAL TOTALS	
	Peds	HV	Bicycle	Left	Thru	Right	Peds	HV	Bicycle	Left	Thru	Right	Peds	HV	Bicycle	Left	Thru	Right	Peds	HV	Bicycle	Left	Thru	Right		
5:00 AM - 6:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 AM - 6:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 AM - 6:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 AM - 6:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:00 AM - 7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:15 AM - 7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:30 AM - 7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:45 AM - 7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:00 AM - 8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM - 8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM - 8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM - 8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM - 9:00 AM	332	31	11	0	287	44	202	0	4	0	0	0	255	97	31	143	610	0	179	0	4	0	0	0	0	1084

TURNING MOVEMENTS DIAGRAM

5:00 PM - 6:00 PM PEAK HOUR: 5:00 PM TO 6:00 PM



PHF = Peak Hour Factor
HV = Heavy Vehicles

**Stewart Street @ 7th Avenue
Seattle, WA**

COUNTED BY: JH

DATE OF COUNT: Tue. 1/20/15

REDUCED BY: CN

TIME OF COUNT: 5:00 PM - 6:00 PM

REDUCTION DATE: Thu. 1/22/15

WEATHER: Sunny

TRAFFIC DATA GATHERING

INTERSECTION TURNING MOVEMENTS REDUCTION SHEET

LOCATION: Stewart Street @ 7th Avenue
Seattle, WA

DATE OF COUNT: Tue. 1/20/15
 TIME OF COUNT: 5:00 PM - 6:00 PM

COUNTED BY: JH
 WEATHER: Sunny

TIME INTERVAL ENDING AT	FROM NORTH ON 7th Avenue						FROM SOUTH ON 7th Avenue						FROM EAST ON Stewart Street						FROM WEST ON Stewart Street						INTERVAL TOTALS	
	Peds	HV	Bicycle	Left	Thru	Right	Peds	HV	Bicycle	Left	Thru	Right	Peds	HV	Bicycle	Left	Thru	Right	Peds	HV	Bicycle	Left	Thru	Right		
02:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
02:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:15 PM	113	3	12	0	60	12	63	0	0	0	0	0	107	14	5	43	74	0	29	0	0	0	0	0	0	189
05:30 PM	91	10	10	0	65	15	52	0	0	0	0	0	68	9	5	52	130	0	33	0	0	0	0	0	0	262
05:45 PM	76	3	8	0	40	3	70	0	1	0	0	0	95	17	9	21	70	0	33	0	0	0	0	0	0	134
06:00 PM	105	6	7	0	45	10	63	0	0	0	0	0	93	10	15	64	92	0	44	0	1	0	0	0	0	211
PEAK HOUR TOTALS	385	22	37	0	210	40	248	0	1	0	0	0	363	50	34	180	366	0	139	0	1	0	0	0	INTERSECTION	
ALL MOVEMENTS	250						0						546						0						796	
% HV	8.8%						#N/A						9.2%						#N/A						9.0%	
PEAK HOUR FACTOR	0.78						#N/A						0.75						#N/A						0.76	

PHF = Peak Hour Factor

5:00 PM - 6:00 PM PEAK HOUR: 5:00 PM TO 6:00 PM

REDUCED BY: CN

DATE OF REDUCTION: 1/22/2015

ROLLING HOUR COUNT

TIME INTERVAL	FROM NORTH ON 7th Avenue						FROM SOUTH ON 7th Avenue						FROM EAST ON Stewart Street						FROM WEST ON Stewart Street						INTERVAL TOTALS	
	Peds	HV	Bicycle	Left	Thru	Right	Peds	HV	Bicycle	Left	Thru	Right	Peds	HV	Bicycle	Left	Thru	Right	Peds	HV	Bicycle	Left	Thru	Right		
2:00 PM - 3:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:15 PM - 3:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:30 PM - 3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:45 PM - 3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:00 PM - 4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:15 PM - 4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:30 PM - 4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:45 PM - 4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:00 PM - 5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM - 5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM - 5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM - 5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM - 6:00 PM	385	22	37	0	210	40	248	0	1	0	0	0	363	50	34	180	366	0	139	0	1	0	0	0	0	796

Peak Hour Summary

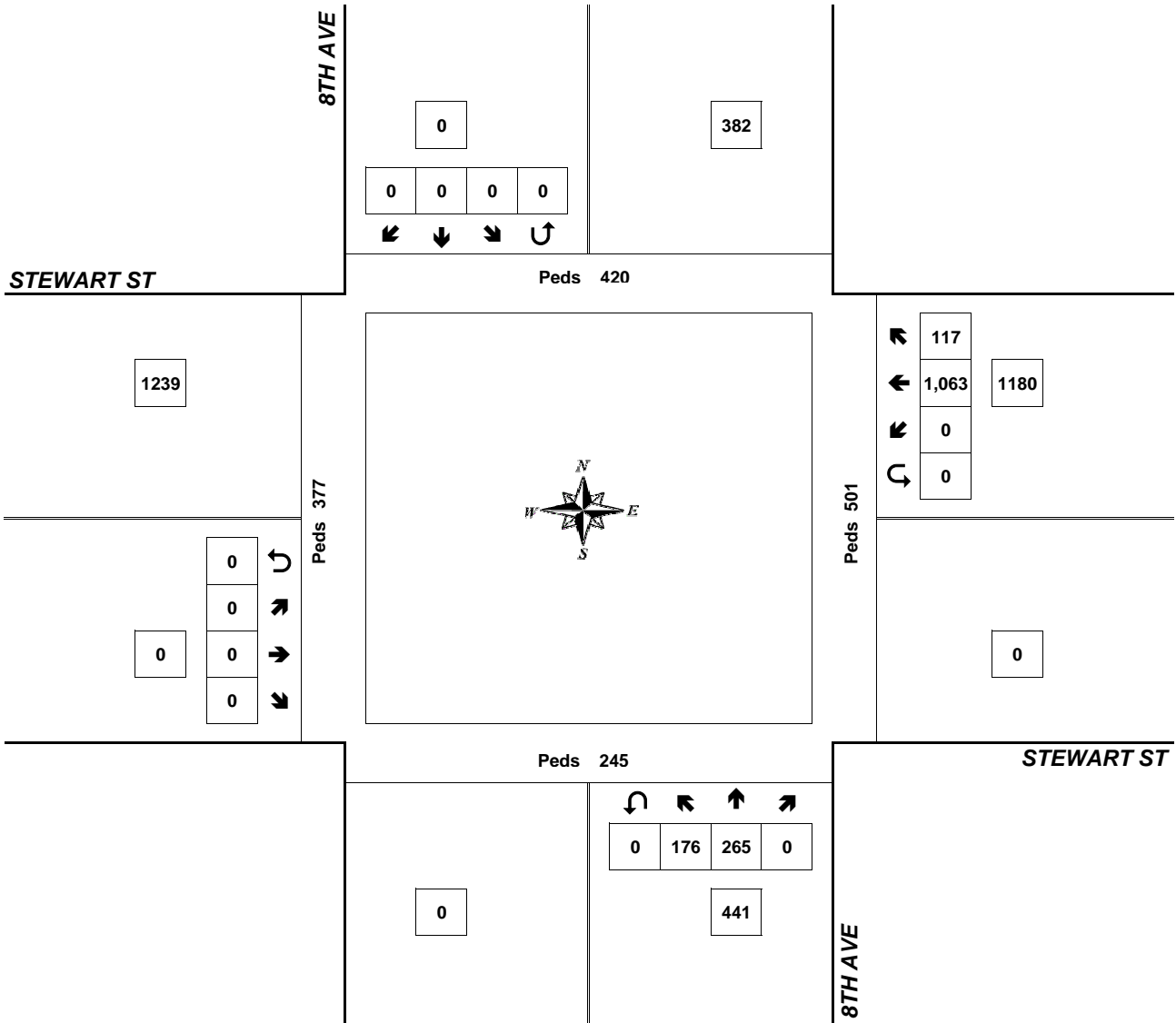
Site ID: 506



Eric Boivin
(303) 668-0220

8TH AVE & STEWART ST

8:00 AM to 9:00 AM
Thursday, February 12, 2015



Approach	PHF	HV%	Volume
EB	0.00	0.0%	0
WB	0.95	8.6%	1,180
NB	0.95	3.4%	441
SB	0.00	0.0%	0
Intersection	0.98	7.2%	1,621

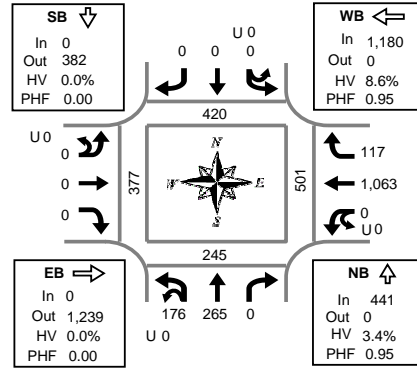
Count Period: 7:00 AM to 9:00 AM

Total Vehicle Summary



Eric Boivin
(303) 668-0220

Site ID: 506
8TH AVE & STEWART ST
 Thursday, February 12, 2015
 7:00 AM to 9:00 AM



Peak Hour Summary
8:00 AM to 9:00 AM

15-Minute Interval Summary

7:00 AM to 9:00 AM

Interval Start Time	Northbound 8TH AVE				Southbound 8TH AVE				Eastbound STEWART ST				Westbound STEWART ST				Interval Total	Pedestrians & Bicycles In Crosswalk (By Location)				
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R		North	South	East	West	
7:00 AM	0	28	36	0	0	0	0	0	0	0	0	0	0	0	0	180	26	270	43	12	34	42
7:15 AM	0	28	45	0	0	0	0	0	0	0	0	0	0	0	0	189	24	286	53	21	65	37
7:30 AM	0	42	49	0	0	0	0	0	0	0	0	0	0	0	0	226	35	352	60	51	100	72
7:45 AM	0	32	57	0	0	0	0	0	0	0	0	0	0	0	0	233	30	352	89	38	86	67
8:00 AM	0	47	65	0	0	0	0	0	0	0	0	0	0	0	0	272	20	404	87	50	110	67
8:15 AM	0	49	67	0	0	0	0	0	0	0	0	0	0	0	0	256	36	408	90	66	124	92
8:30 AM	0	42	63	0	0	0	0	0	0	0	0	0	0	0	0	283	27	415	112	72	109	107
8:45 AM	0	38	70	0	0	0	0	0	0	0	0	0	0	0	0	252	34	394	131	57	158	111
Total Survey	0	306	452	0	0	0	0	0	0	0	0	0	0	0	0	1,891	232	2,881	665	367	786	595

Peak Hour Summary

8:00 AM to 9:00 AM

By Approach	Northbound 8TH AVE				Southbound 8TH AVE				Eastbound STEWART ST				Westbound STEWART ST				Total	Pedestrians & Bicycles In Crosswalk (By Location)			
	In	Out	Total	HV	In	Out	Total	HV	In	Out	Total	HV	In	Out	Total	HV		North	South	East	West
Volume	441	0	441	15	0	382	382	0	0	1,239	1,239	0	1,180	0	1,180	102	1,621	420	245	501	377
%HV	3.4%				0.0%				0.0%				8.6%				7.2%				
PHF	0.95				0.00				0.00				0.95				0.98				

By Movement	Northbound 8TH AVE				Southbound 8TH AVE				Eastbound STEWART ST				Westbound STEWART ST				Total				
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R					
Volume	0	176	265	0	0	0	0	0	0	0	0	0	0	0	1,063	117	1,621				
%HV	0.0%	1.1%	4.9%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	8.0%	14.5%	7.2%				
PHF	0.00	0.90	0.95	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.94	0.81	0.98				

Rolling Hour Summary

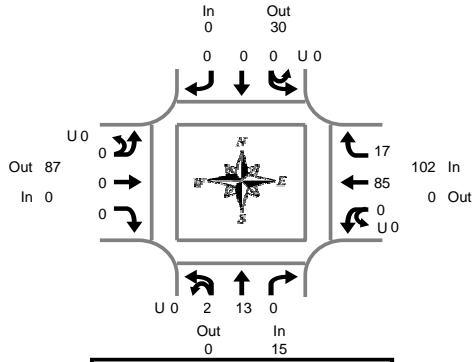
7:00 AM to 9:00 AM

Interval Start Time	Northbound 8TH AVE				Southbound 8TH AVE				Eastbound STEWART ST				Westbound STEWART ST				Interval Total	Pedestrians & Bicycles In Crosswalk (By Location)			
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R		North	South	East	West
7:00 AM	0	130	187	0	0	0	0	0	0	0	0	0	0	0	828	115	1,260	245	122	285	218
7:15 AM	0	149	216	0	0	0	0	0	0	0	0	0	0	0	920	109	1,394	289	160	361	243
7:30 AM	0	170	238	0	0	0	0	0	0	0	0	0	0	0	987	121	1,516	326	205	420	298
7:45 AM	0	170	252	0	0	0	0	0	0	0	0	0	0	0	1,044	113	1,579	378	226	429	333
8:00 AM	0	176	265	0	0	0	0	0	0	0	0	0	0	0	1,063	117	1,621	420	245	501	377

Heavy Vehicle Summary



Eric Boivin
(303) 668-0220



**Peak Hour Summary
8:00 AM to 9:00 AM**

8TH AVE & STEWART ST

Thursday, February 12, 2015
7:00 AM to 9:00 AM

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

Interval Start Time	Northbound 8TH AVE					Southbound 8TH AVE					Eastbound STEWART ST					Westbound STEWART ST					Interval Total
	U	L	T	R	Total	U	L	T	R	Total	U	L	T	R	Total	U	L	T	R	Total	
7:00 AM	0	1	7	0	8	0	0	0	0	0	0	0	0	0	0	0	0	17	3	20	28
7:15 AM	0	1	5	0	6	0	0	0	0	0	0	0	0	0	0	0	0	16	4	20	26
7:30 AM	0	1	4	0	5	0	0	0	0	0	0	0	0	0	0	0	0	21	4	25	30
7:45 AM	0	0	5	0	5	0	0	0	0	0	0	0	0	0	0	0	0	21	5	26	31
8:00 AM	0	1	3	0	4	0	0	0	0	0	0	0	0	0	0	0	0	22	3	25	29
8:15 AM	0	0	3	0	3	0	0	0	0	0	0	0	0	0	0	0	0	26	4	30	33
8:30 AM	0	1	3	0	4	0	0	0	0	0	0	0	0	0	0	0	0	16	5	21	25
8:45 AM	0	0	4	0	4	0	0	0	0	0	0	0	0	0	0	0	0	21	5	26	30
Total Survey	0	5	34	0	39	0	0	0	0	0	0	0	0	0	0	0	0	160	33	193	33

Peak Hour Summary
8:00 AM to 9:00 AM

By Approach	Northbound 8TH AVE			Southbound 8TH AVE			Eastbound STEWART ST			Westbound STEWART ST			Total
	In	Out	Total	In	Out	Total	In	Out	Total	In	Out	Total	
Volume	15	0	15	0	30	30	0	87	87	102	0	102	117

By Movement	Northbound 8TH AVE					Southbound 8TH AVE					Eastbound STEWART ST					Westbound STEWART ST					Total
	U	L	T	R	Total	U	L	T	R	Total	U	L	T	R	Total	U	L	T	R	Total	
Volume	0	2	13	0	15	0	0	0	0	0	0	0	0	0	0	0	0	85	17	102	117

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

Interval Start Time	Northbound 8TH AVE					Southbound 8TH AVE					Eastbound STEWART ST					Westbound STEWART ST					Interval Total
	U	L	T	R	Total	U	L	T	R	Total	U	L	T	R	Total	U	L	T	R	Total	
7:00 AM	0	3	21	0	24	0	0	0	0	0	0	0	0	0	0	0	0	75	16	91	115
7:15 AM	0	3	17	0	20	0	0	0	0	0	0	0	0	0	0	0	0	80	16	96	116
7:30 AM	0	2	15	0	17	0	0	0	0	0	0	0	0	0	0	0	0	90	16	106	123
7:45 AM	0	2	14	0	16	0	0	0	0	0	0	0	0	0	0	0	0	85	17	102	118
8:00 AM	0	2	13	0	15	0	0	0	0	0	0	0	0	0	0	0	0	85	17	102	117

Peak Hour Summary

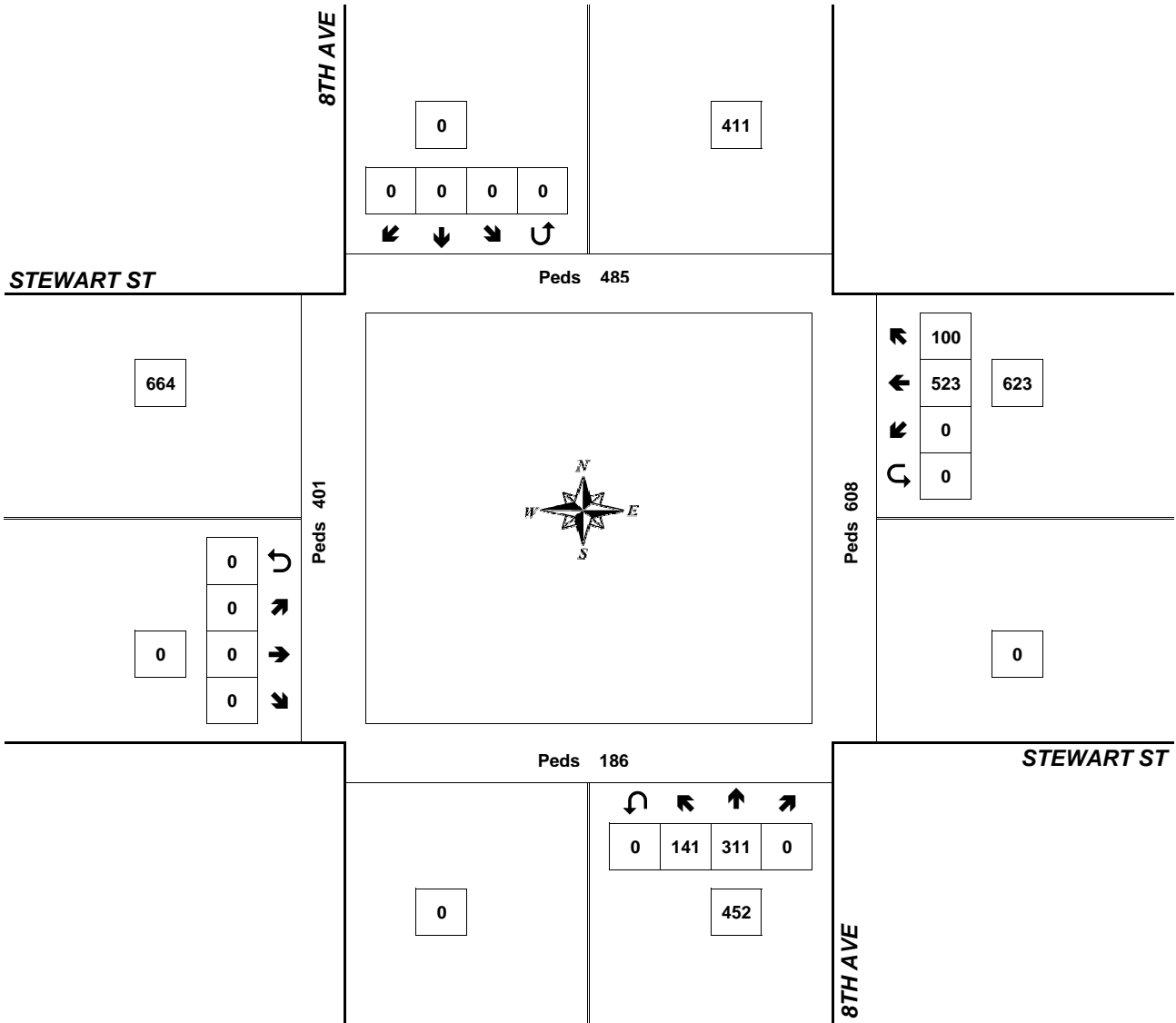
Site ID: 506



Eric Boivin
(303) 668-0220

8TH AVE & STEWART ST

4:30 PM to 5:30 PM
Thursday, February 12, 2015



Approach	PHF	HV%	Volume
EB	0.00	0.0%	0
WB	0.88	14.8%	623
NB	0.85	3.3%	452
SB	0.00	0.0%	0
Intersection	0.92	10.0%	1,075

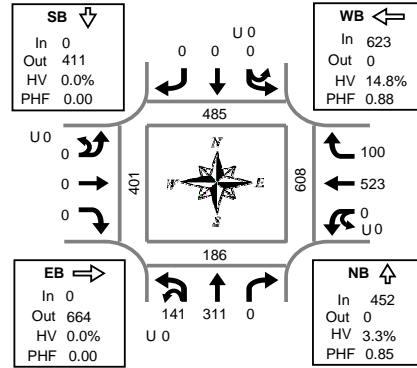
Count Period: 4:00 PM to 6:00 PM

Total Vehicle Summary



Eric Boivin
(303) 668-0220

Site ID: 506
8TH AVE & STEWART ST
 Thursday, February 12, 2015
 4:00 PM to 6:00 PM



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

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

Interval Start Time	Northbound 8TH AVE				Southbound 8TH AVE				Eastbound STEWART ST				Westbound STEWART ST				Interval Total	Pedestrians & Bicycles In Crosswalk (By Location)			
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R		North	South	East	West
4:00 PM	0	20	62	0	0	0	0	0	0	0	0	0	0	0	114	26	222	133	50	128	81
4:15 PM	0	30	68	0	0	0	0	0	0	0	0	0	0	0	99	32	229	95	41	126	64
4:30 PM	0	37	82	0	0	0	0	0	0	0	0	0	0	118	20	257	97	33	126	71	
4:45 PM	0	29	56	0	0	0	0	0	0	0	0	0	0	134	31	250	142	46	153	114	
5:00 PM	0	37	78	0	0	0	0	0	0	0	0	0	0	147	31	293	131	53	170	113	
5:15 PM	0	38	95	0	0	0	0	0	0	0	0	0	0	124	18	275	115	54	159	103	
5:30 PM	0	33	70	0	0	0	0	0	0	0	0	0	0	98	19	220	116	45	156	90	
5:45 PM	0	23	78	0	0	0	0	0	0	0	0	0	0	124	23	248	115	39	134	103	
Total Survey	0	247	589	0	0	0	0	0	0	0	0	0	0	958	200	1,994	944	361	1,152	739	

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

By Approach	Northbound 8TH AVE				Southbound 8TH AVE				Eastbound STEWART ST				Westbound STEWART ST				Total	Pedestrians & Bicycles In Crosswalk (By Location)			
	In	Out	Total	HV	In	Out	Total	HV	In	Out	Total	HV	In	Out	Total	HV		North	South	East	West
Volume	452	0	452	15	0	411	411	0	0	664	664	0	623	0	623	92	1,075	485	186	608	401
%HV	3.3%				0.0%				0.0%				14.8%				10.0%				
PHF	0.85				0.00				0.00				0.88				0.92				

By Movement	Northbound 8TH AVE				Southbound 8TH AVE				Eastbound STEWART ST				Westbound STEWART ST				Total
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R	
Volume	0	141	311	0	0	0	0	0	0	0	0	0	0	523	100	1,075	
%HV	0.0%	4.3%	2.9%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	10.9%	35.0%	10.0%	
PHF	0.00	0.93	0.82	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.89	0.81	0.92	

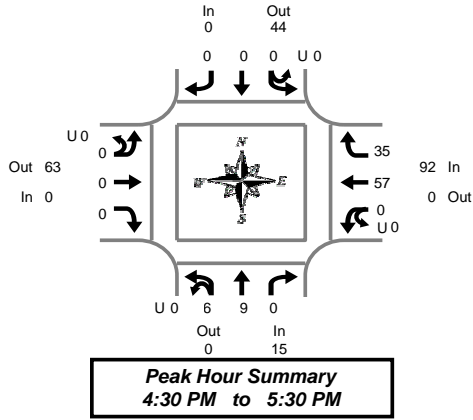
Rolling Hour Summary 4:00 PM to 6:00 PM

Interval Start Time	Northbound 8TH AVE				Southbound 8TH AVE				Eastbound STEWART ST				Westbound STEWART ST				Interval Total	Pedestrians & Bicycles In Crosswalk (By Location)			
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R		North	South	East	West
4:00 PM	0	116	268	0	0	0	0	0	0	0	0	0	0	465	109	958	467	170	533	330	
4:15 PM	0	133	284	0	0	0	0	0	0	0	0	0	0	498	114	1,029	465	173	575	362	
4:30 PM	0	141	311	0	0	0	0	0	0	0	0	0	0	523	100	1,075	485	186	608	401	
4:45 PM	0	137	299	0	0	0	0	0	0	0	0	0	0	503	99	1,038	504	198	638	420	
5:00 PM	0	131	321	0	0	0	0	0	0	0	0	0	0	493	91	1,036	477	191	619	409	

Heavy Vehicle Summary



Eric Boivin
(303) 668-0220



8TH AVE & STEWART ST

Thursday, February 12, 2015

4:00 PM to 6:00 PM

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

Interval Start Time	Northbound 8TH AVE					Southbound 8TH AVE					Eastbound STEWART ST					Westbound STEWART ST					Interval Total
	U	L	T	R	Total	U	L	T	R	Total	U	L	T	R	Total	U	L	T	R	Total	
4:00 PM	0	1	3	0	4	0	0	0	0	0	0	0	0	0	0	0	0	16	10	26	30
4:15 PM	0	2	2	0	4	0	0	0	0	0	0	0	0	0	0	0	0	10	15	25	29
4:30 PM	0	1	2	0	3	0	0	0	0	0	0	0	0	0	0	0	0	17	9	26	29
4:45 PM	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	13	10	23	24
5:00 PM	0	3	4	0	7	0	0	0	0	0	0	0	0	0	0	0	0	16	10	26	33
5:15 PM	0	1	3	0	4	0	0	0	0	0	0	0	0	0	0	0	0	11	6	17	21
5:30 PM	0	2	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	10	9	19	21
5:45 PM	0	1	3	0	4	0	0	0	0	0	0	0	0	0	0	0	0	11	6	17	21
Total Survey	0	12	17	0	29	0	0	0	0	0	0	0	0	0	0	0	0	104	75	179	75

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

By Approach	Northbound 8TH AVE			Southbound 8TH AVE			Eastbound STEWART ST			Westbound STEWART ST			Total
	In	Out	Total	In	Out	Total	In	Out	Total	In	Out	Total	
Volume	15	0	15	0	44	44	0	63	63	92	0	92	107

By Movement	Northbound 8TH AVE					Southbound 8TH AVE					Eastbound STEWART ST					Westbound STEWART ST					Total
	U	L	T	R	Total	U	L	T	R	Total	U	L	T	R	Total	U	L	T	R	Total	
Volume	0	6	9	0	15	0	0	0	0	0	0	0	0	0	0	0	0	57	35	92	107

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

Interval Start Time	Northbound 8TH AVE					Southbound 8TH AVE					Eastbound STEWART ST					Westbound STEWART ST					Interval Total
	U	L	T	R	Total	U	L	T	R	Total	U	L	T	R	Total	U	L	T	R	Total	
4:00 PM	0	5	7	0	12	0	0	0	0	0	0	0	0	0	0	0	0	56	44	100	112
4:15 PM	0	7	8	0	15	0	0	0	0	0	0	0	0	0	0	0	0	56	44	100	115
4:30 PM	0	6	9	0	15	0	0	0	0	0	0	0	0	0	0	0	0	57	35	92	107
4:45 PM	0	7	7	0	14	0	0	0	0	0	0	0	0	0	0	0	0	50	35	85	99
5:00 PM	0	7	10	0	17	0	0	0	0	0	0	0	0	0	0	0	0	48	31	79	96

Peak Hour Summary

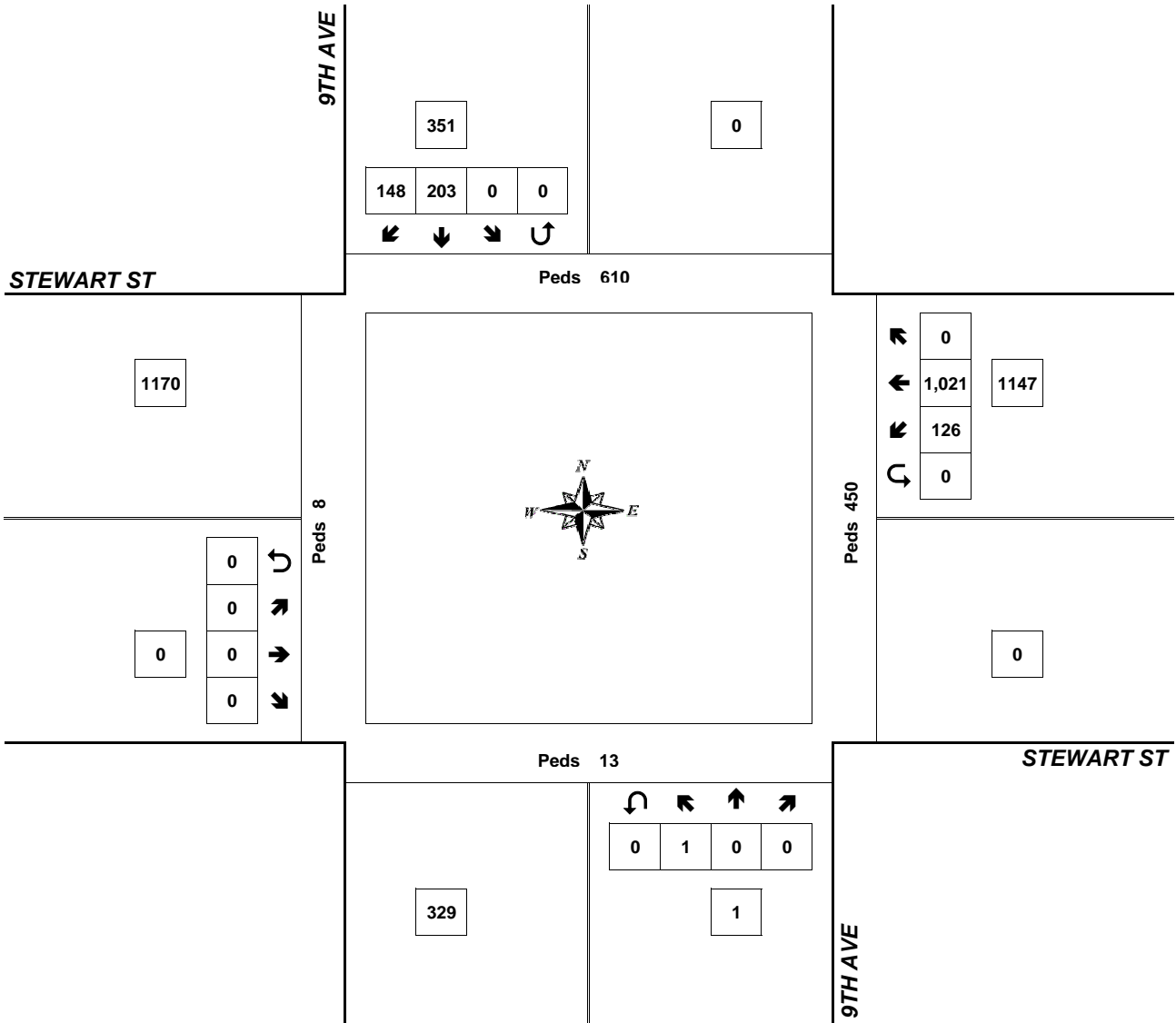
Site ID: 556



Eric Boivin
(303) 668-0220

9TH AVE & STEWART ST

8:00 AM to 9:00 AM
Thursday, February 12, 2015



Approach	PHF	HV%	Volume
EB	0.00	0.0%	0
WB	0.97	9.2%	1,147
NB	0.25	0.0%	1
SB	0.92	9.1%	351
Intersection	0.96	9.2%	1,499

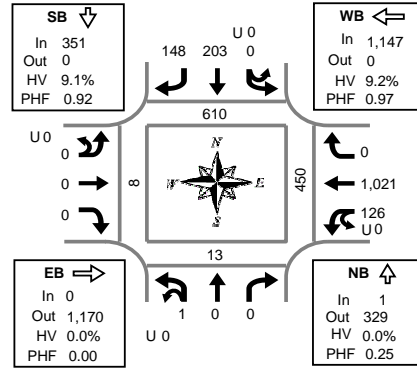
Count Period: 7:00 AM to 9:00 AM

Total Vehicle Summary



Eric Boivin
(303) 668-0220

Site ID: 556
9TH AVE & STEWART ST
 Thursday, February 12, 2015
 7:00 AM to 9:00 AM



Peak Hour Summary
8:00 AM to 9:00 AM

15-Minute Interval Summary

7:00 AM to 9:00 AM

Interval Start Time	Northbound 9TH AVE				Southbound 9TH AVE				Eastbound STEWART ST				Westbound STEWART ST				Interval Total	Pedestrians & Bicycles In Crosswalk (By Location)			
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R		North	South	East	West
7:00 AM	0	0	0	0	0	0	43	18	0	0	0	0	0	31	209	0	301	72	8	48	0
7:15 AM	0	0	0	0	0	0	33	23	0	0	0	0	0	38	209	0	303	90	16	71	2
7:30 AM	0	0	0	0	0	0	48	23	0	0	0	0	0	25	250	0	346	137	15	89	2
7:45 AM	0	0	0	0	0	0	43	33	0	0	0	0	0	36	249	0	361	122	8	78	1
8:00 AM	0	0	0	0	0	0	59	33	0	0	0	0	0	20	256	0	368	161	5	94	2
8:15 AM	0	0	0	0	0	0	50	30	0	0	0	0	0	32	262	0	374	149	4	114	0
8:30 AM	0	0	0	0	0	0	48	47	0	0	0	0	0	37	259	0	391	143	2	106	2
8:45 AM	0	1	0	0	0	0	46	38	0	0	0	0	0	37	244	0	366	157	2	136	4
Total Survey	0	1	0	0	0	0	370	245	0	0	0	0	0	256	1,938	0	2,810	1,031	60	736	13

Peak Hour Summary

8:00 AM to 9:00 AM

By Approach	Northbound 9TH AVE				Southbound 9TH AVE				Eastbound STEWART ST				Westbound STEWART ST				Total	Pedestrians & Bicycles In Crosswalk (By Location)			
	In	Out	Total	HV	In	Out	Total	HV	In	Out	Total	HV	In	Out	Total	HV		North	South	East	West
Volume	1	329	330	0	351	0	351	32	0	1,170	1,170	0	1,147	0	1,147	106	1,499	610	13	450	8
%HV		0.0%				9.1%				0.0%				9.2%			9.2%				
PHF		0.25				0.92				0.00				0.97			0.96				

By Movement	Northbound 9TH AVE				Southbound 9TH AVE				Eastbound STEWART ST				Westbound STEWART ST				Total				
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R					
Volume	0	1	0	0	0	0	203	148	0	0	0	0	0	126	1,021	0	1,499				
%HV	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	10.3%	7.4%	0.0%	0.0%	0.0%	0.0%	0.0%	10.3%	9.1%	0.0%	9.2%				
PHF	0.00	0.25	0.00	0.00	0.00	0.00	0.86	0.79	0.00	0.00	0.00	0.00	0.00	0.85	0.97	0.00	0.96				

Rolling Hour Summary

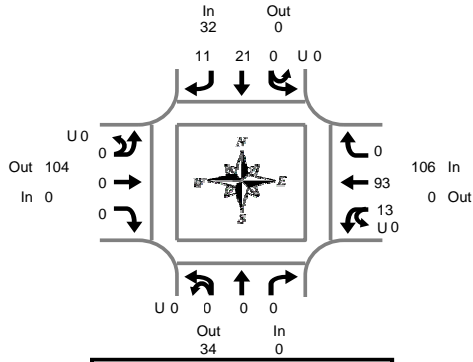
7:00 AM to 9:00 AM

Interval Start Time	Northbound 9TH AVE				Southbound 9TH AVE				Eastbound STEWART ST				Westbound STEWART ST				Interval Total	Pedestrians & Bicycles In Crosswalk (By Location)			
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R		North	South	East	West
7:00 AM	0	0	0	0	0	0	167	97	0	0	0	0	0	130	917	0	1,311	421	47	286	5
7:15 AM	0	0	0	0	0	0	183	112	0	0	0	0	0	119	964	0	1,378	510	44	332	7
7:30 AM	0	0	0	0	0	0	200	119	0	0	0	0	0	113	1,017	0	1,449	569	32	375	5
7:45 AM	0	0	0	0	0	0	200	143	0	0	0	0	0	125	1,026	0	1,494	575	19	392	5
8:00 AM	0	1	0	0	0	0	203	148	0	0	0	0	0	126	1,021	0	1,499	610	13	450	8

Heavy Vehicle Summary



Eric Boivin
(303) 668-0220



**Peak Hour Summary
8:00 AM to 9:00 AM**

9TH AVE & STEWART ST

Thursday, February 12, 2015
7:00 AM to 9:00 AM

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

Interval Start Time	Northbound 9TH AVE					Southbound 9TH AVE					Eastbound STEWART ST					Westbound STEWART ST					Interval Total
	U	L	T	R	Total	U	L	T	R	Total	U	L	T	R	Total	U	L	T	R	Total	
7:00 AM	0	0	0	0	0	0	0	7	2	9	0	0	0	0	0	0	3	19	0	22	31
7:15 AM	0	0	0	0	0	0	0	4	6	10	0	0	0	0	0	0	5	17	0	22	32
7:30 AM	0	0	0	0	0	0	0	6	4	10	0	0	0	0	0	0	4	23	0	27	37
7:45 AM	0	0	0	0	0	0	0	5	5	10	0	0	0	0	0	0	5	21	0	26	36
8:00 AM	0	0	0	0	0	0	0	7	2	9	0	0	0	0	0	0	0	22	0	22	31
8:15 AM	0	0	0	0	0	0	0	3	2	5	0	0	0	0	0	0	3	29	0	32	37
8:30 AM	0	0	0	0	0	0	0	6	3	9	0	0	0	0	0	0	4	19	0	23	32
8:45 AM	0	0	0	0	0	0	0	5	4	9	0	0	0	0	0	0	6	23	0	29	38
Total Survey	0	0	0	0	0	0	0	43	28	71	0	0	0	0	0	0	30	173	0	203	28

Peak Hour Summary 8:00 AM to 9:00 AM

By Approach	Northbound 9TH AVE			Southbound 9TH AVE			Eastbound STEWART ST			Westbound STEWART ST			Total
	In	Out	Total	In	Out	Total	In	Out	Total	In	Out	Total	
Volume	0	34	34	32	0	32	0	104	104	106	0	106	138

By Movement	Northbound 9TH AVE					Southbound 9TH AVE					Eastbound STEWART ST					Westbound STEWART ST					Total
	U	L	T	R	Total	U	L	T	R	Total	U	L	T	R	Total	U	L	T	R	Total	
Volume	0	0	0	0	0	0	0	21	11	32	0	0	0	0	0	0	13	93	0	106	138

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

Interval Start Time	Northbound 9TH AVE					Southbound 9TH AVE					Eastbound STEWART ST					Westbound STEWART ST					Interval Total
	U	L	T	R	Total	U	L	T	R	Total	U	L	T	R	Total	U	L	T	R	Total	
7:00 AM	0	0	0	0	0	0	0	22	17	39	0	0	0	0	0	0	17	80	0	97	136
7:15 AM	0	0	0	0	0	0	0	22	17	39	0	0	0	0	0	0	14	83	0	97	136
7:30 AM	0	0	0	0	0	0	0	21	13	34	0	0	0	0	0	0	12	95	0	107	141
7:45 AM	0	0	0	0	0	0	0	21	12	33	0	0	0	0	0	0	12	91	0	103	136
8:00 AM	0	0	0	0	0	0	0	21	11	32	0	0	0	0	0	0	13	93	0	106	138

Peak Hour Summary

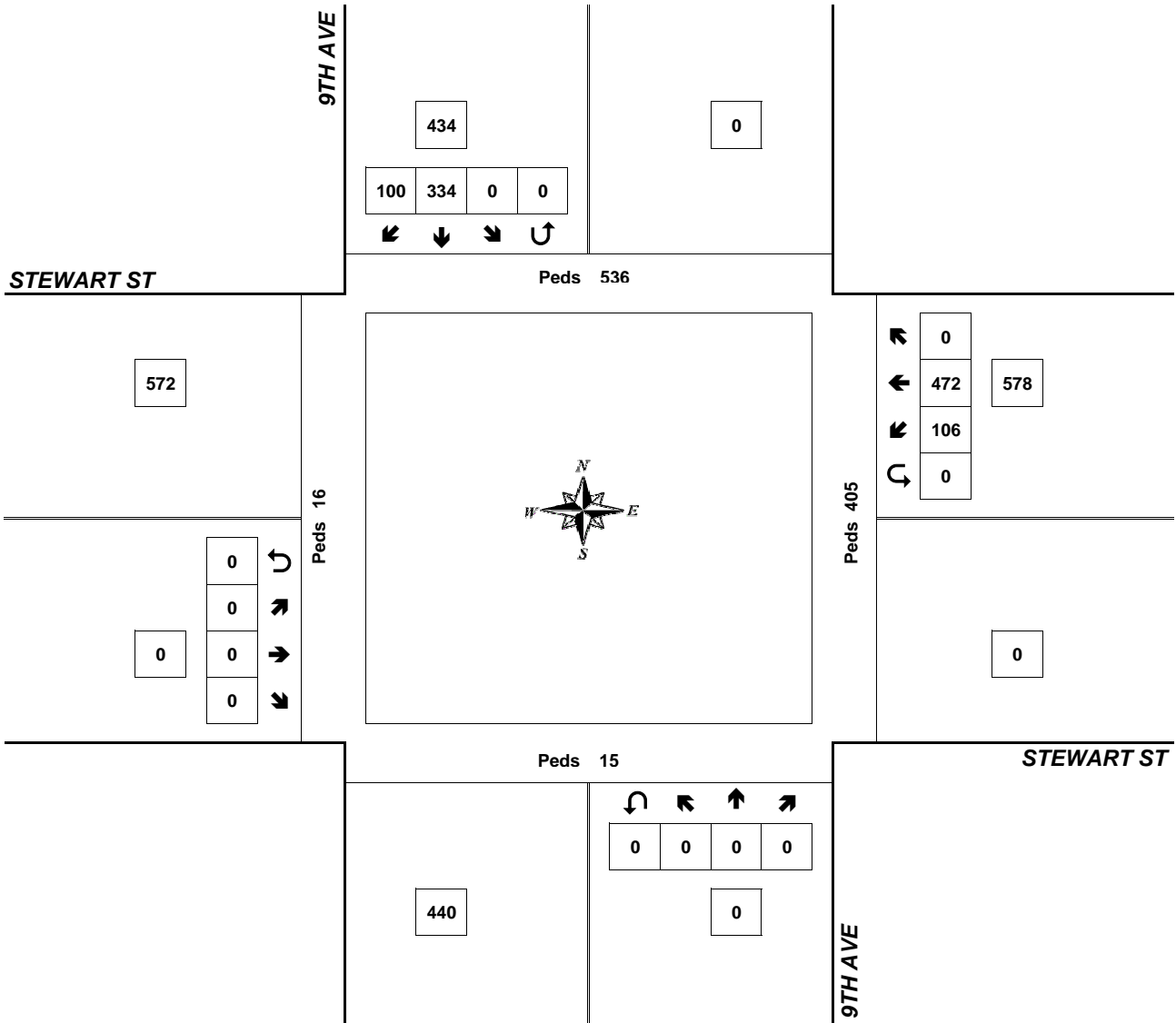
Site ID: 556



Eric Boivin
(303) 668-0220

9TH AVE & STEWART ST

4:45 PM to 5:45 PM
Thursday, February 12, 2015



Approach	PHF	HV%	Volume
EB	0.00	0.0%	0
WB	0.93	18.5%	578
NB	0.00	0.0%	0
SB	0.83	4.8%	434
Intersection	0.89	12.6%	1,012

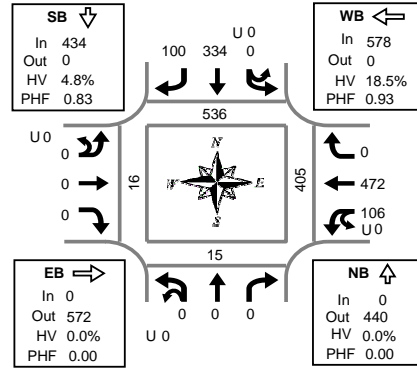
Count Period: 4:00 PM to 6:00 PM

Total Vehicle Summary



Eric Boivin
(303) 668-0220

Site ID: 556
9TH AVE & STEWART ST
 Thursday, February 12, 2015
 4:00 PM to 6:00 PM



Peak Hour Summary
 4:45 PM to 5:45 PM

15-Minute Interval Summary

4:00 PM to 6:00 PM

Interval Start Time	Northbound 9TH AVE				Southbound 9TH AVE				Eastbound STEWART ST				Westbound STEWART ST				Interval Total	Pedestrians & Bicycles In Crosswalk (By Location)			
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R		North	South	East	West
4:00 PM	0	0	0	0	0	0	66	32	0	0	0	0	0	23	96	0	217	117	7	101	3
4:15 PM	0	0	0	0	0	0	70	28	0	0	0	0	0	33	104	0	235	112	7	91	5
4:30 PM	0	0	0	0	0	0	58	25	0	0	0	0	0	26	110	0	219	116	3	90	1
4:45 PM	0	0	0	0	0	0	90	41	0	0	0	0	0	29	124	0	284	121	2	99	4
5:00 PM	0	0	0	0	0	0	82	25	0	0	0	0	0	17	125	0	249	148	5	122	5
5:15 PM	0	0	0	0	0	0	60	13	0	0	0	0	0	35	120	0	228	122	3	96	5
5:30 PM	0	0	0	0	0	0	102	21	0	0	0	0	0	25	103	0	251	145	5	88	2
5:45 PM	0	0	0	0	0	0	97	15	0	0	0	0	0	19	121	0	252	108	10	79	10
Total Survey	0	0	0	0	0	0	625	200	0	0	0	0	0	207	903	0	1,935	989	42	766	35

Peak Hour Summary

4:45 PM to 5:45 PM

By Approach	Northbound 9TH AVE				Southbound 9TH AVE				Eastbound STEWART ST				Westbound STEWART ST				Total	Pedestrians & Bicycles In Crosswalk (By Location)			
	In	Out	Total	HV	In	Out	Total	HV	In	Out	Total	HV	In	Out	Total	HV		North	South	East	West
Volume	0	440	440	0	434	0	434	21	0	572	572	0	578	0	578	107	1,012	536	15	405	16
%HV		0.0%				4.8%				0.0%			18.5%				12.6%				
PHF		0.00				0.83				0.00			0.93				0.89				

By Movement	Northbound 9TH AVE				Southbound 9TH AVE				Eastbound STEWART ST				Westbound STEWART ST				Total				
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R					
Volume	0	0	0	0	0	0	334	100	0	0	0	0	0	106	472	0	1,012				
%HV	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	3.6%	9.0%	0.0%	0.0%	0.0%	0.0%	0.0%	26.4%	16.7%	0.0%	12.6%				
PHF	0.00	0.00	0.00	0.00	0.00	0.00	0.82	0.61	0.00	0.00	0.00	0.00	0.00	0.76	0.94	0.00	0.89				

Rolling Hour Summary

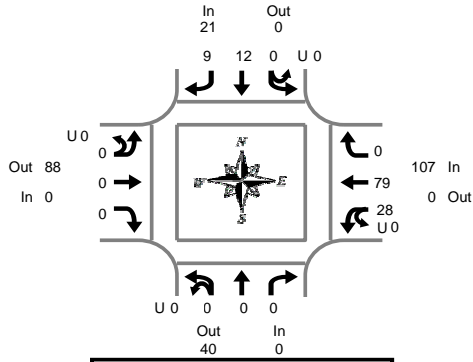
4:00 PM to 6:00 PM

Interval Start Time	Northbound 9TH AVE				Southbound 9TH AVE				Eastbound STEWART ST				Westbound STEWART ST				Interval Total	Pedestrians & Bicycles In Crosswalk (By Location)			
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R		North	South	East	West
4:00 PM	0	0	0	0	0	0	284	126	0	0	0	0	0	111	434	0	955	466	19	381	13
4:15 PM	0	0	0	0	0	0	300	119	0	0	0	0	0	105	463	0	987	497	17	402	15
4:30 PM	0	0	0	0	0	0	290	104	0	0	0	0	0	107	479	0	980	507	13	407	15
4:45 PM	0	0	0	0	0	0	334	100	0	0	0	0	0	106	472	0	1,012	536	15	405	16
5:00 PM	0	0	0	0	0	0	341	74	0	0	0	0	0	96	469	0	980	523	23	385	22

Heavy Vehicle Summary



Eric Boivin
(303) 668-0220



Peak Hour Summary
4:45 PM to 5:45 PM

9TH AVE & STEWART ST

Thursday, February 12, 2015
4:00 PM to 6:00 PM

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

Interval Start Time	Northbound 9TH AVE					Southbound 9TH AVE					Eastbound STEWART ST					Westbound STEWART ST					Interval Total
	U	L	T	R	Total	U	L	T	R	Total	U	L	T	R	Total	U	L	T	R	Total	
4:00 PM	0	0	0	0	0	0	0	6	1	7	0	0	0	0	0	0	11	26	0	37	44
4:15 PM	0	0	0	0	0	0	0	1	3	4	0	0	0	0	0	0	12	22	0	34	38
4:30 PM	0	0	0	0	0	0	0	7	3	10	0	0	0	0	0	0	9	24	0	33	43
4:45 PM	0	0	0	0	0	0	0	5	4	9	0	0	0	0	0	0	8	20	0	28	37
5:00 PM	0	0	0	0	0	0	0	3	2	5	0	0	0	0	0	0	5	25	0	30	35
5:15 PM	0	0	0	0	0	0	0	2	1	3	0	0	0	0	0	0	9	16	0	25	28
5:30 PM	0	0	0	0	0	0	0	2	2	4	0	0	0	0	0	0	6	18	0	24	28
5:45 PM	0	0	0	0	0	0	0	5	0	5	0	0	0	0	0	0	7	16	0	23	28
Total Survey	0	0	0	0	0	0	0	31	16	47	0	0	0	0	0	0	67	167	0	234	16

Peak Hour Summary
4:45 PM to 5:45 PM

By Approach	Northbound 9TH AVE			Southbound 9TH AVE			Eastbound STEWART ST			Westbound STEWART ST			Total
	In	Out	Total	In	Out	Total	In	Out	Total	In	Out	Total	
Volume	0	40	40	21	0	21	0	88	88	107	0	107	128

By Movement	Northbound 9TH AVE					Southbound 9TH AVE					Eastbound STEWART ST					Westbound STEWART ST					Total
	U	L	T	R	Total	U	L	T	R	Total	U	L	T	R	Total	U	L	T	R	Total	
Volume	0	0	0	0	0	0	0	12	9	21	0	0	0	0	0	0	28	79	0	107	128

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

Interval Start Time	Northbound 9TH AVE					Southbound 9TH AVE					Eastbound STEWART ST					Westbound STEWART ST					Interval Total
	U	L	T	R	Total	U	L	T	R	Total	U	L	T	R	Total	U	L	T	R	Total	
4:00 PM	0	0	0	0	0	0	0	19	11	30	0	0	0	0	0	0	40	92	0	132	162
4:15 PM	0	0	0	0	0	0	0	16	12	28	0	0	0	0	0	0	34	91	0	125	153
4:30 PM	0	0	0	0	0	0	0	17	10	27	0	0	0	0	0	0	31	85	0	116	143
4:45 PM	0	0	0	0	0	0	0	12	9	21	0	0	0	0	0	0	28	79	0	107	128
5:00 PM	0	0	0	0	0	0	0	12	5	17	0	0	0	0	0	0	27	75	0	102	119

Peak Hour Summary

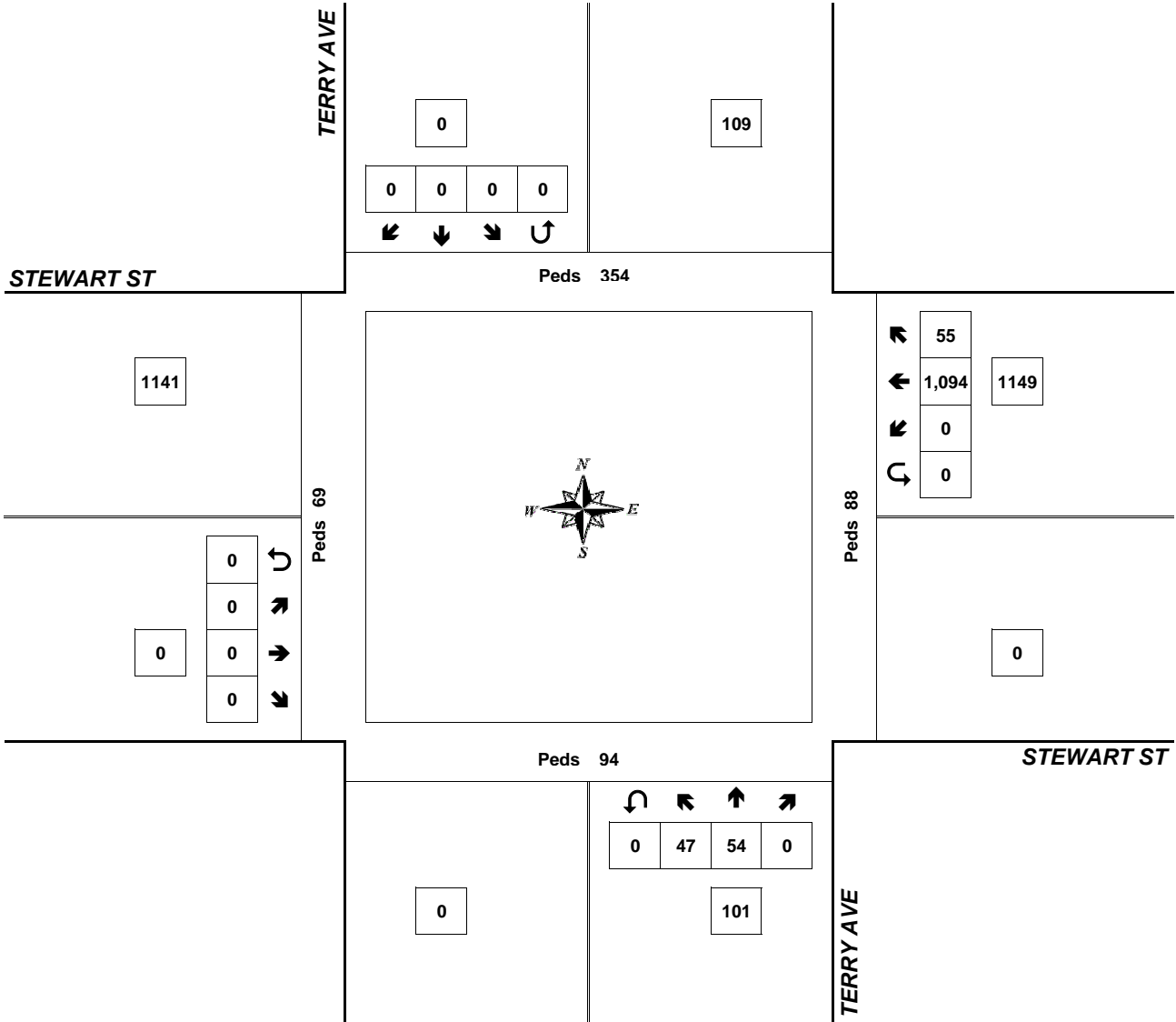
Site ID: 573



Eric Boivin
(303) 668-0220

TERRY AVE & STEWART ST

7:45 AM to 8:45 AM
Thursday, February 12, 2015



Approach	PHF	HV%	Volume
EB	0.00	0.0%	0
WB	0.95	8.8%	1,149
NB	0.81	6.9%	101
SB	0.00	0.0%	0
Intersection	0.95	8.6%	1,250

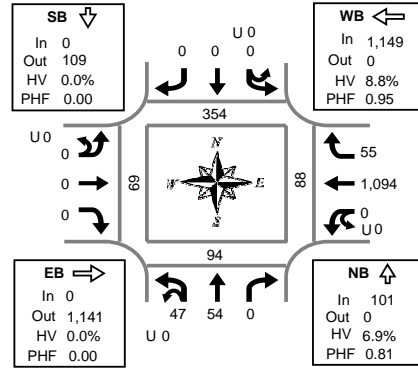
Count Period: 7:00 AM to 9:00 AM

Total Vehicle Summary



Eric Boivin
(303) 668-0220

Site ID: 573
TERRY AVE & STEWART ST
 Thursday, February 12, 2015
 7:00 AM to 9:00 AM



Peak Hour Summary
7:45 AM to 8:45 AM

15-Minute Interval Summary

7:00 AM to 9:00 AM

Interval Start Time	Northbound TERRY AVE				Southbound TERRY AVE				Eastbound STEWART ST				Westbound STEWART ST				Interval Total	Pedestrians & Bicycles In Crosswalk (By Location)				
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R		North	South	East	West	
7:00 AM	0	7	2	0	0	0	0	0	0	0	0	0	0	0	0	246	8	263	36	4	4	10
7:15 AM	0	7	3	0	0	0	0	0	0	0	0	0	0	0	0	233	6	249	44	10	10	13
7:30 AM	0	15	6	0	0	0	0	0	0	0	0	0	0	0	258	4	283	90	16	13	19	
7:45 AM	0	15	8	0	0	0	0	0	0	0	0	0	0	0	288	13	324	75	20	11	11	
8:00 AM	0	9	11	0	0	0	0	0	0	0	0	0	0	0	246	19	285	92	22	24	15	
8:15 AM	0	11	20	0	0	0	0	0	0	0	0	0	0	0	273	9	313	80	32	31	21	
8:30 AM	0	12	15	0	0	0	0	0	0	0	0	0	0	0	287	14	328	107	20	22	22	
8:45 AM	0	15	7	0	0	0	0	0	0	0	0	0	0	0	266	15	303	85	20	19	25	
Total Survey	0	91	72	0	0	0	0	0	0	0	0	0	0	0	2,097	88	2,348	609	144	134	136	

Peak Hour Summary

7:45 AM to 8:45 AM

By Approach	Northbound TERRY AVE				Southbound TERRY AVE				Eastbound STEWART ST				Westbound STEWART ST				Total	Pedestrians & Bicycles In Crosswalk (By Location)			
	In	Out	Total	HV	In	Out	Total	HV	In	Out	Total	HV	In	Out	Total	HV		North	South	East	West
Volume	101	0	101	7	0	109	109	0	0	1,141	1,141	0	1,149	0	1,149	101	1,250	354	94	88	69
%HV		6.9%				0.0%				0.0%				8.8%		8.6%					
PHF		0.81				0.00				0.00				0.95		0.95					

By Movement	Northbound TERRY AVE				Southbound TERRY AVE				Eastbound STEWART ST				Westbound STEWART ST				Total				
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R					
Volume	0	47	54	0	0	0	0	0	0	0	0	0	0	1,094	55	1,250					
%HV	0.0%	6.4%	7.4%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	8.9%	7.3%	8.6%				
PHF	0.00	0.78	0.68	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.95	0.72	0.95				

Rolling Hour Summary

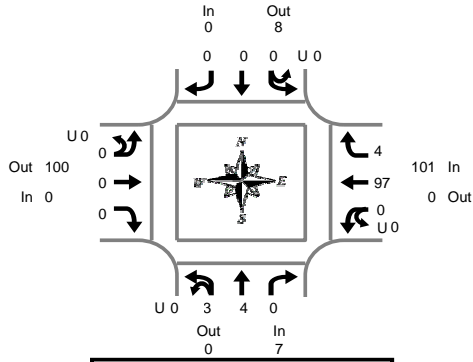
7:00 AM to 9:00 AM

Interval Start Time	Northbound TERRY AVE				Southbound TERRY AVE				Eastbound STEWART ST				Westbound STEWART ST				Interval Total	Pedestrians & Bicycles In Crosswalk (By Location)			
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R		North	South	East	West
7:00 AM	0	44	19	0	0	0	0	0	0	0	0	0	0	1,025	31	1,119	245	50	38	53	
7:15 AM	0	46	28	0	0	0	0	0	0	0	0	0	0	1,025	42	1,141	301	68	58	58	
7:30 AM	0	50	45	0	0	0	0	0	0	0	0	0	0	1,065	45	1,205	337	90	79	66	
7:45 AM	0	47	54	0	0	0	0	0	0	0	0	0	0	1,094	55	1,250	354	94	88	69	
8:00 AM	0	47	53	0	0	0	0	0	0	0	0	0	0	1,072	57	1,229	364	94	96	83	

Heavy Vehicle Summary



Eric Boivin
(303) 668-0220



**Peak Hour Summary
7:45 AM to 8:45 AM**

TERRY AVE & STEWART ST

Thursday, February 12, 2015

7:00 AM to 9:00 AM

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

Interval Start Time	Northbound TERRY AVE					Southbound TERRY AVE					Eastbound STEWART ST					Westbound STEWART ST					Interval Total
	U	L	T	R	Total	U	L	T	R	Total	U	L	T	R	Total	U	L	T	R	Total	
7:00 AM	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	20	1	21	22
7:15 AM	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	17	1	18	19
7:30 AM	0	2	1	0	3	0	0	0	0	0	0	0	0	0	0	0	0	25	0	25	28
7:45 AM	0	1	1	0	2	0	0	0	0	0	0	0	0	0	0	0	0	23	2	25	27
8:00 AM	0	2	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	24	0	24	26
8:15 AM	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	30	0	30	31
8:30 AM	0	0	2	0	2	0	0	0	0	0	0	0	0	0	0	0	0	20	2	22	24
8:45 AM	0	0	3	0	3	0	0	0	0	0	0	0	0	0	0	0	0	29	2	31	34
Total Survey	0	6	9	0	15	0	0	0	0	0	0	0	0	0	0	0	0	188	8	196	8

Peak Hour Summary 7:45 AM to 8:45 AM

By Approach	Northbound TERRY AVE			Southbound TERRY AVE			Eastbound STEWART ST			Westbound STEWART ST			Total
	In	Out	Total	In	Out	Total	In	Out	Total	In	Out	Total	
Volume	7	0	7	0	8	8	0	100	100	101	0	101	108

By Movement	Northbound TERRY AVE					Southbound TERRY AVE					Eastbound STEWART ST					Westbound STEWART ST					Total
	U	L	T	R	Total	U	L	T	R	Total	U	L	T	R	Total	U	L	T	R	Total	
Volume	0	3	4	0	7	0	0	0	0	0	0	0	0	0	0	0	0	97	4	101	108

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

Interval Start Time	Northbound TERRY AVE					Southbound TERRY AVE					Eastbound STEWART ST					Westbound STEWART ST					Interval Total
	U	L	T	R	Total	U	L	T	R	Total	U	L	T	R	Total	U	L	T	R	Total	
7:00 AM	0	4	3	0	7	0	0	0	0	0	0	0	0	0	0	0	0	85	4	89	96
7:15 AM	0	5	3	0	8	0	0	0	0	0	0	0	0	0	0	0	0	89	3	92	100
7:30 AM	0	5	3	0	8	0	0	0	0	0	0	0	0	0	0	0	0	102	2	104	112
7:45 AM	0	3	4	0	7	0	0	0	0	0	0	0	0	0	0	0	0	97	4	101	108
8:00 AM	0	2	6	0	8	0	0	0	0	0	0	0	0	0	0	0	0	103	4	107	115

Peak Hour Summary

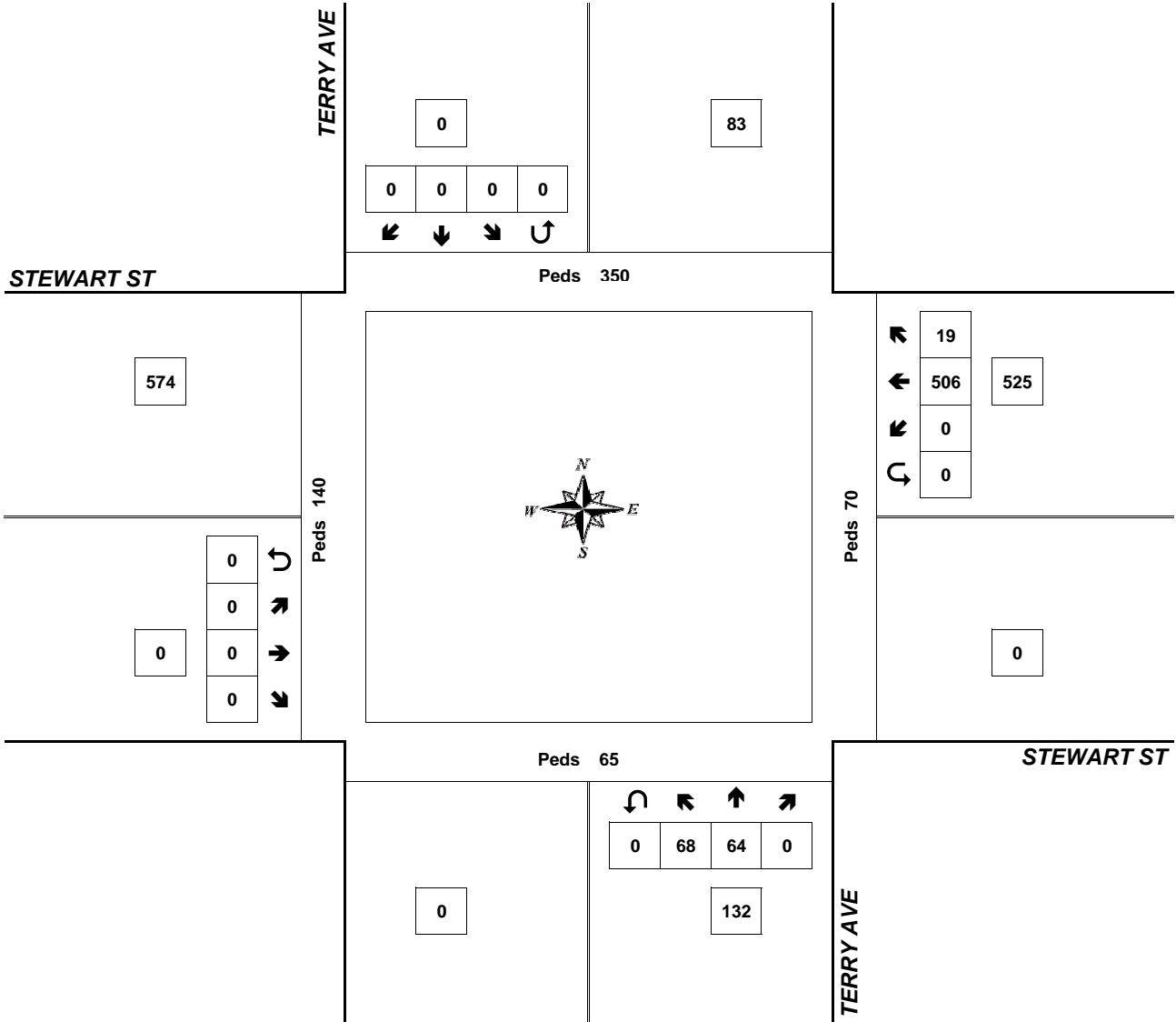
Site ID: 573



Eric Boivin
(303) 668-0220

TERRY AVE & STEWART ST

4:15 PM to 5:15 PM
Thursday, February 12, 2015



Approach	PHF	HV%	Volume
EB	0.00	0.0%	0
WB	0.88	24.0%	525
NB	0.85	4.5%	132
SB	0.00	0.0%	0
Intersection	0.92	20.1%	657

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

Total Vehicle Summary



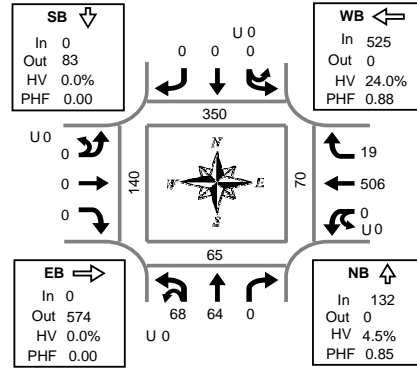
Eric Boivin
(303) 668-0220

Site ID: 573

TERRY AVE & STEWART ST

Thursday, February 12, 2015

4:00 PM to 6:00 PM



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

15-Minute Interval Summary

4:00 PM to 6:00 PM

Interval Start Time	Northbound TERRY AVE				Southbound TERRY AVE				Eastbound STEWART ST				Westbound STEWART ST				Interval Total	Pedestrians & Bicycles In Crosswalk (By Location)				
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R		North	South	East	West	
4:00 PM	0	8	12	0	0	0	0	0	0	0	0	0	0	0	0	108	6	134	88	17	21	29
4:15 PM	0	22	17	0	0	0	0	0	0	0	0	0	0	0	0	113	2	154	61	12	13	24
4:30 PM	0	16	16	0	0	0	0	0	0	0	0	0	0	0	0	120	7	159	76	15	14	31
4:45 PM	0	13	19	0	0	0	0	0	0	0	0	0	0	0	0	126	7	165	80	22	23	36
5:00 PM	0	17	12	0	0	0	0	0	0	0	0	0	0	0	0	147	3	179	133	16	20	49
5:15 PM	0	11	14	0	0	0	0	0	0	0	0	0	0	0	0	126	0	151	113	27	20	45
5:30 PM	0	14	12	0	0	0	0	0	0	0	0	0	0	0	0	110	7	143	113	29	22	42
5:45 PM	0	20	13	0	0	0	0	0	0	0	0	0	0	0	0	120	6	159	100	26	21	43
Total Survey	0	121	115	0	0	0	0	0	0	0	0	0	0	0	0	970	38	1,244	764	164	154	299

Peak Hour Summary

4:15 PM to 5:15 PM

By Approach	Northbound TERRY AVE				Southbound TERRY AVE				Eastbound STEWART ST				Westbound STEWART ST				Total	Pedestrians & Bicycles In Crosswalk (By Location)			
	In	Out	Total	HV	In	Out	Total	HV	In	Out	Total	HV	In	Out	Total	HV		North	South	East	West
Volume	132	0	132	6	0	83	83	0	0	574	574	0	525	0	525	126	657	350	65	70	140
%HV			4.5%				0.0%				0.0%				24.0%		20.1%				
PHF			0.85				0.00				0.00				0.88		0.92				

By Movement	Northbound TERRY AVE				Southbound TERRY AVE				Eastbound STEWART ST				Westbound STEWART ST				Total				
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R					
Volume	0	68	64	0	0	0	0	0	0	0	0	0	0	0	506	19	657				
%HV	0.0%	4.4%	4.7%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	24.9%	0.0%	20.1%				
PHF	0.00	0.77	0.84	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.86	0.68	0.92				

Rolling Hour Summary

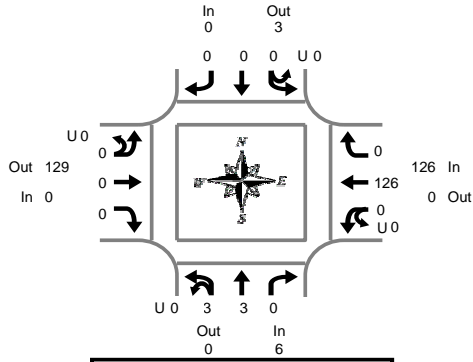
4:00 PM to 6:00 PM

Interval Start Time	Northbound TERRY AVE				Southbound TERRY AVE				Eastbound STEWART ST				Westbound STEWART ST				Interval Total	Pedestrians & Bicycles In Crosswalk (By Location)			
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R		North	South	East	West
4:00 PM	0	59	64	0	0	0	0	0	0	0	0	0	0	0	467	22	612	305	66	71	120
4:15 PM	0	68	64	0	0	0	0	0	0	0	0	0	0	0	506	19	657	350	65	70	140
4:30 PM	0	57	61	0	0	0	0	0	0	0	0	0	0	0	519	17	654	402	80	77	161
4:45 PM	0	55	57	0	0	0	0	0	0	0	0	0	0	0	509	17	638	439	94	85	172
5:00 PM	0	62	51	0	0	0	0	0	0	0	0	0	0	0	503	16	632	459	98	83	179

Heavy Vehicle Summary



Eric Boivin
(303) 668-0220



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

TERRY AVE & STEWART ST

Thursday, February 12, 2015

4:00 PM to 6:00 PM

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

Interval Start Time	Northbound TERRY AVE					Southbound TERRY AVE					Eastbound STEWART ST					Westbound STEWART ST					Interval Total
	U	L	T	R	Total	U	L	T	R	Total	U	L	T	R	Total	U	L	T	R	Total	
4:00 PM	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	33	0	33	34
4:15 PM	0	2	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	32	0	32	34
4:30 PM	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	34	0	34	35
4:45 PM	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	25	0	25	26
5:00 PM	0	1	1	0	2	0	0	0	0	0	0	0	0	0	0	0	0	35	0	35	37
5:15 PM	0	0	2	0	2	0	0	0	0	0	0	0	0	0	0	0	0	19	0	19	21
5:30 PM	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	24	0	24	25
5:45 PM	0	2	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	20	0	20	22
Total Survey	0	7	5	0	12	0	0	0	0	0	0	0	0	0	0	0	0	222	0	222	0

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

By Approach	Northbound TERRY AVE			Southbound TERRY AVE			Eastbound STEWART ST			Westbound STEWART ST			Total
	In	Out	Total	In	Out	Total	In	Out	Total	In	Out	Total	
Volume	6	0	6	0	3	3	0	129	129	126	0	126	132

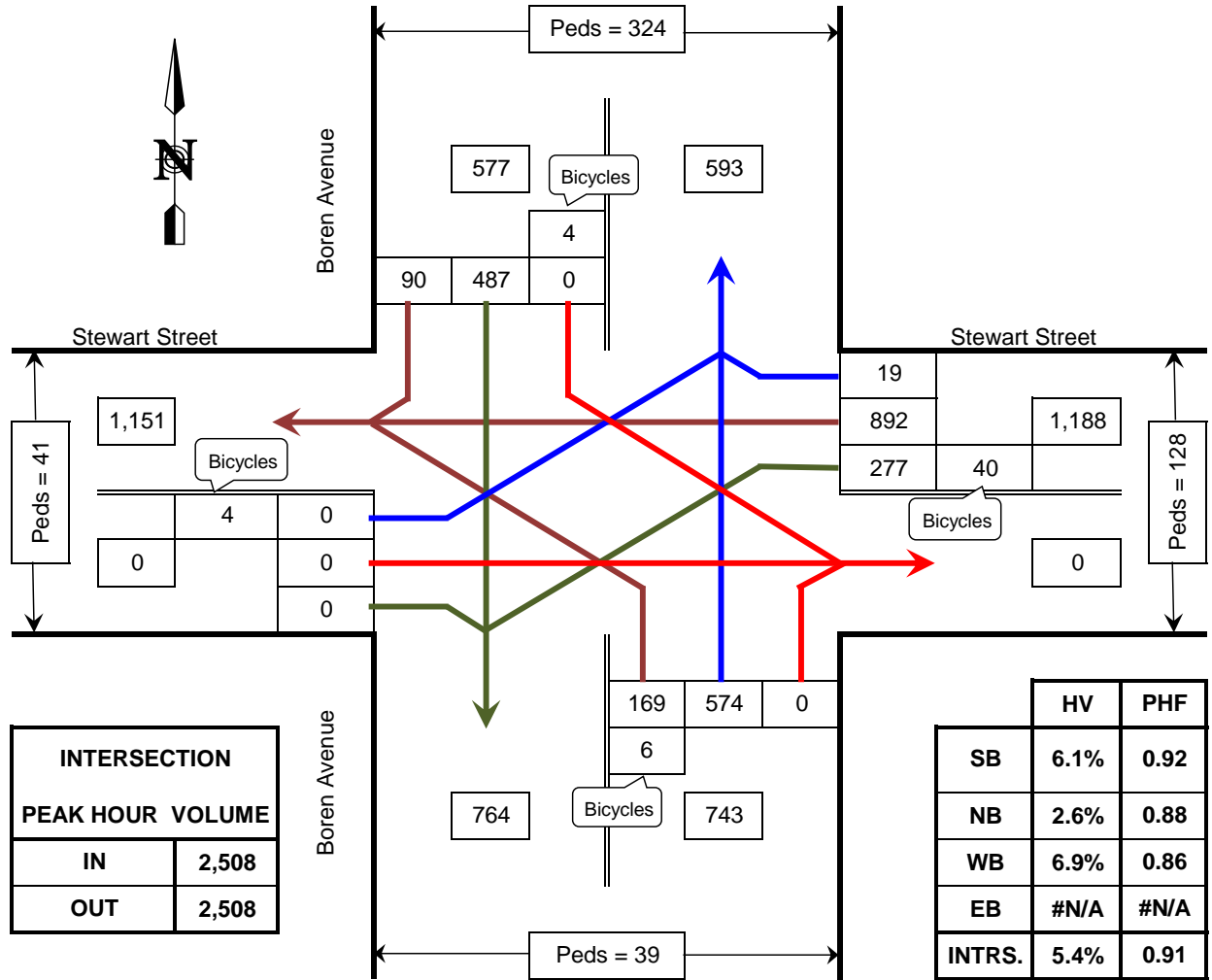
By Movement	Northbound TERRY AVE					Southbound TERRY AVE					Eastbound STEWART ST					Westbound STEWART ST					Total
	U	L	T	R	Total	U	L	T	R	Total	U	L	T	R	Total	U	L	T	R	Total	
Volume	0	3	3	0	6	0	0	0	0	0	0	0	0	0	0	0	0	126	0	126	132

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

Interval Start Time	Northbound TERRY AVE					Southbound TERRY AVE					Eastbound STEWART ST					Westbound STEWART ST					Interval Total
	U	L	T	R	Total	U	L	T	R	Total	U	L	T	R	Total	U	L	T	R	Total	
4:00 PM	0	3	2	0	5	0	0	0	0	0	0	0	0	0	0	0	0	124	0	124	129
4:15 PM	0	3	3	0	6	0	0	0	0	0	0	0	0	0	0	0	0	126	0	126	132
4:30 PM	0	1	5	0	6	0	0	0	0	0	0	0	0	0	0	0	0	113	0	113	119
4:45 PM	0	2	4	0	6	0	0	0	0	0	0	0	0	0	0	0	0	103	0	103	109
5:00 PM	0	4	3	0	7	0	0	0	0	0	0	0	0	0	0	0	0	98	0	98	105

TURNING MOVEMENTS DIAGRAM

8:00 AM - 9:00 AM PEAK HOUR: 8:00 AM TO 9:00 AM



PHF = Peak Hour Factor
HV = Heavy Vehicles

Stewart Street @ Boren Avenue
Seattle, WA

COUNTED BY: SN/PW

DATE OF COUNT: Thu. 1/22/15

REDUCED BY: CN

TIME OF COUNT: 8:00 AM - 9:00 AM

REDUCTION DATE: Sun. 1/25/15

WEATHER: Overcast



TRAFFIC DATA GATHERING

INTERSECTION TURNING MOVEMENTS REDUCTION SHEET

LOCATION: Stewart Street @ Boren Avenue
Seattle, WA

DATE OF COUNT: Thu. 1/22/15
TIME OF COUNT: 8:00 AM - 9:00 AM

COUNTED BY: SNP/W
WEATHER: Overcast

Table with columns for Time Interval, From North On (Boren Avenue), From South On (Boren Avenue), From East On (Stewart Street), From West On (Stewart Street), and Interval Totals. Rows include hourly intervals from 05:15 AM to 09:00 AM, and summary rows for Peak Hour Totals, All Movements, % HV, and Peak Hour Factor.

PHF = Peak Hour Factor

8:00 AM - 9:00 AM PEAK HOUR: 8:00 AM TO 9:00 AM

REDUCED BY: CN

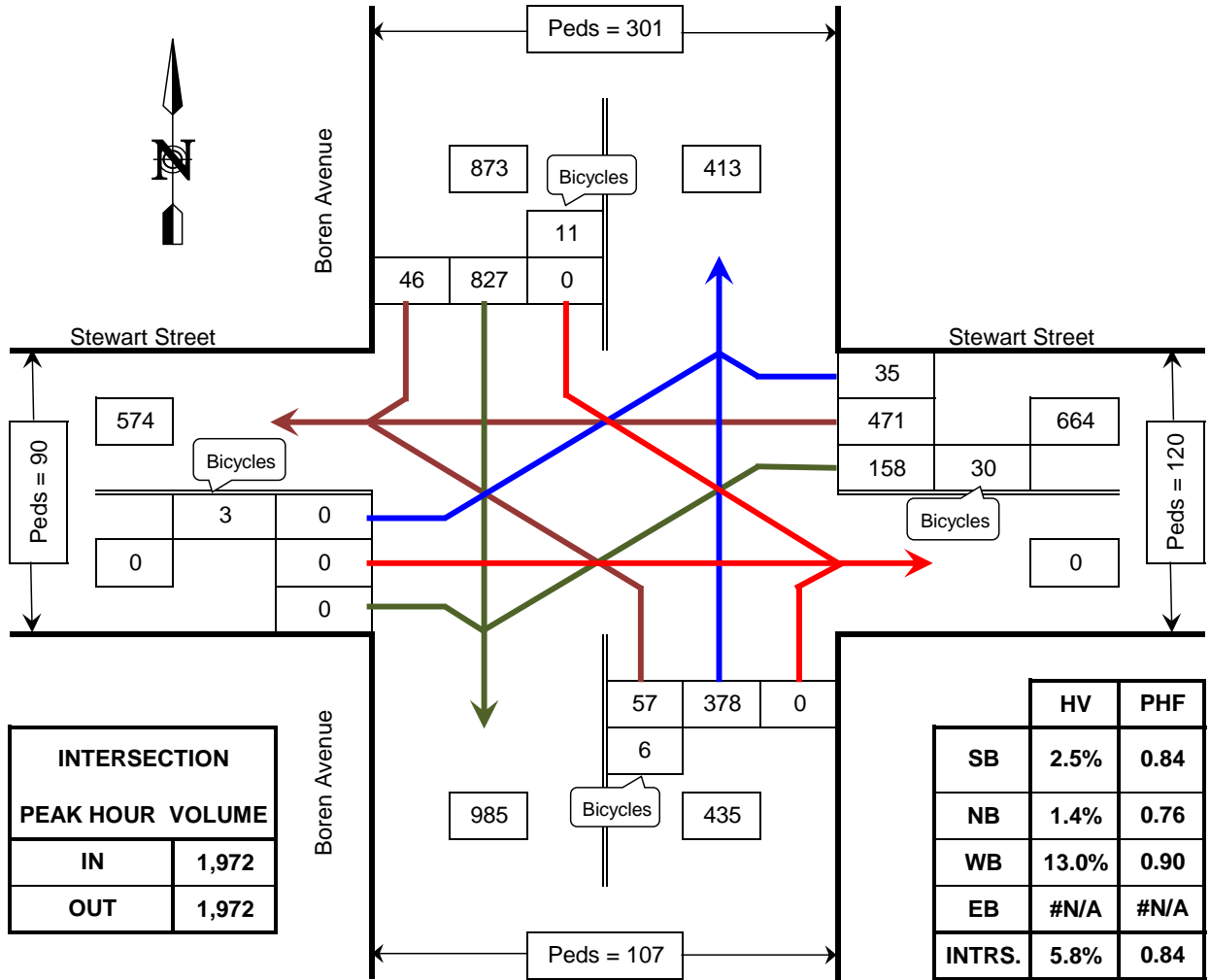
DATE OF REDUCTION: 1/25/2015

ROLLING HOUR COUNT

Table with columns for Time Interval, From North On (Boren Avenue), From South On (Boren Avenue), From East On (Stewart Street), From West On (Stewart Street), and Interval Totals. Rows show 15-minute rolling hour intervals from 5:00 AM to 8:00 AM.

TURNING MOVEMENTS DIAGRAM

5:00 PM - 6:00 PM PEAK HOUR: 5:00 PM TO 6:00 PM



**Stewart Street @ Boren Avenue
Seattle, WA**

PHF = Peak Hour Factor
HV = Heavy Vehicles

COUNTED BY: SN/PW

DATE OF COUNT: Thu. 1/22/15

REDUCED BY: CN

TIME OF COUNT: 5:00 PM - 6:00 PM

REDUCTION DATE: Sun. 1/25/15

WEATHER: Overcast

TRAFFIC DATA GATHERING

INTERSECTION TURNING MOVEMENTS REDUCTION SHEET

LOCATION: Stewart Street @ Boren Avenue
Seattle, WA

DATE OF COUNT: Thu. 1/22/15
TIME OF COUNT: 5:00 PM - 6:00 PM

COUNTED BY: SN/PW
WEATHER: Overcast

TIME INTERVAL ENDING AT	FROM NORTH ON Boren Avenue						FROM SOUTH ON Boren Avenue						FROM EAST ON Stewart Street						FROM WEST ON Stewart Street						INTERVAL TOTALS	
	Peds	HV	Bicycle	Left	Thru	Right	Peds	HV	Bicycle	Left	Thru	Right	Peds	HV	Bicycle	Left	Thru	Right	Peds	HV	Bicycle	Left	Thru	Right		
02:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
02:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:15 PM	66	4	4	0	185	8	18	0	3	8	83	0	23	30	11	28	108	6	16	0	0	0	0	0	0	426
05:30 PM	103	3	3	0	223	8	30	3	2	12	88	0	36	16	8	39	120	10	23	0	0	0	0	0	0	500
05:45 PM	72	8	0	0	177	13	27	0	1	12	88	0	37	18	7	44	115	10	25	0	3	0	0	0	0	459
06:00 PM	60	7	4	0	242	17	32	3	0	25	119	0	24	22	4	47	128	9	26	0	0	0	0	0	0	587
PEAK HOUR TOTALS	301	22	11	0	827	46	107	6	6	57	378	0	120	86	30	158	471	35	90	0	3	0	0	0	INTERSECTION	
ALL MOVEMENTS	873						435						664						0						1972	
% HV	2.5%						1.4%						13.0%						#N/A						5.8%	
PEAK HOUR FACTOR	0.84						0.76						0.90						#N/A						0.84	

PHF = Peak Hour Factor

5:00 PM - 6:00 PM PEAK HOUR: 5:00 PM TO 6:00 PM

REDUCED BY: CN

DATE OF REDUCTION: 1/25/2015

ROLLING HOUR COUNT

TIME INTERVAL	FROM NORTH ON Boren Avenue						FROM SOUTH ON Boren Avenue						FROM EAST ON Stewart Street						FROM WEST ON Stewart Street						INTERVAL TOTALS	
	Peds	HV	Bicycle	Left	Thru	Right	Peds	HV	Bicycle	Left	Thru	Right	Peds	HV	Bicycle	Left	Thru	Right	Peds	HV	Bicycle	Left	Thru	Right		
2:00 PM - 3:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:15 PM - 3:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:30 PM - 3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:45 PM - 3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:00 PM - 4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:15 PM - 4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:30 PM - 4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:45 PM - 4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:00 PM - 5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM - 5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM - 5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM - 5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM - 6:00 PM	301	22	11	0	827	46	107	6	6	57	378	0	120	86	30	158	471	35	90	0	3	0	0	0	1972	

CITY OF SEATTLE
DEPARTMENT OF TRANSPORTATION

Counted by: JR
 Counter No: 1024
 Weather: CLEAR
 Comments:

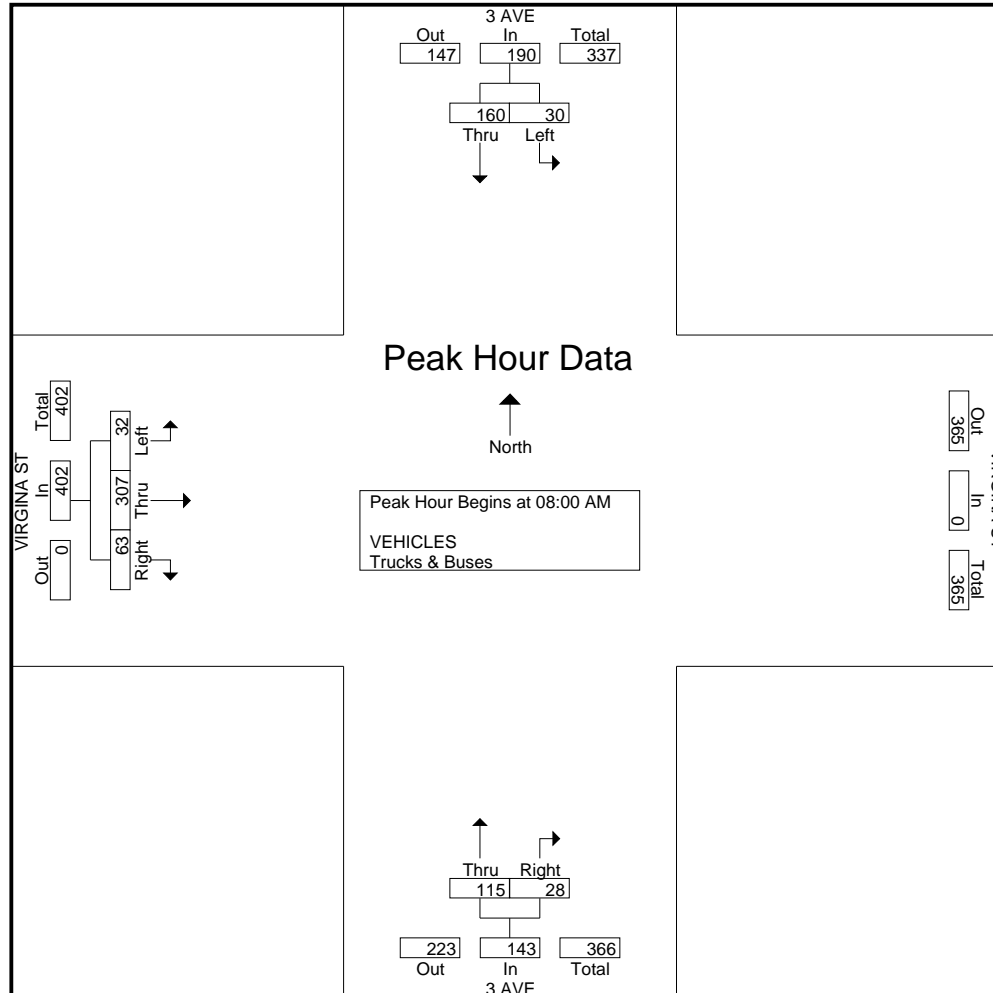
File Name : C_321ao13
 Site Code : 00022602
 Start Date : 2/26/2013
 Page No : 3

Start Time	3 AVE From North			3 AVE From South			VIRGINA ST From West				Int. Total
	Thru	Left	App. Total	Right	Thru	App. Total	Right	Thru	Left	App. Total	
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1											
Peak Hour for Entire Intersection Begins at 08:00 AM											
08:00 AM	34	10	44	6	27	33	20	76	7	103	180
08:15 AM	38	8	46	12	30	42	11	93	6	110	198
08:30 AM	50	7	57	8	31	39	19	73	10	102	198
08:45 AM	38	5	43	2	27	29	13	65	9	87	159
Total Volume	160	30	190	28	115	143	63	307	32	402	735
% App. Total	84.2	15.8		19.6	80.4		15.7	76.4	8		
PHF	.800	.750	.833	.583	.927	.851	.788	.825	.800	.914	.928

**CITY OF SEATTLE
DEPARTMENT OF TRANSPORTATION**

Counted by: JR
Counter No: 1024
Weather: CLEAR
Comments:

File Name : C_321ao13
Site Code : 00022602
Start Date : 2/26/2013
Page No : 4



CITY OF SEATTLE
DEPARTMENT OF TRANSPORTATION

Counted by: JR
Counter No: 1024
Weather: CLEAR
Comments:

File Name : C_321ao13
Site Code : 00022602
Start Date : 2/26/2013
Page No : 3

	3 AVE From North					VIRGINA ST From East					3 AVE From South					VIRGINA ST From West					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 08:00 AM																					
08:00 AM	0	7	0	63	70	0	0	0	77	77	0	1	0	32	33	0	3	0	59	62	242
08:15 AM	0	5	0	87	92	0	0	0	76	76	0	0	0	24	24	0	2	0	42	44	236
08:30 AM	0	3	0	100	103	0	0	0	78	78	0	2	0	48	50	0	8	0	61	69	300
08:45 AM	0	4	0	88	92	0	0	0	89	89	0	2	0	35	37	0	4	0	74	78	296
Total Volume	0	19	0	338	357	0	0	0	320	320	0	5	0	139	144	0	17	0	236	253	1074
% App. Total	0	5.3	0	94.7		0	0	0	100		0	3.5	0	96.5		0	6.7	0	93.3		
PHF	.000	.679	.000	.845	.867	.000	.000	.000	.899	.899	.000	.625	.000	.724	.720	.000	.531	.000	.797	.811	.895

**CITY OF SEATTLE
DEPARTMENT OF TRANSPORTATION**

Counted by: BR
Counter No: 1023
Weather: OVERCAST
Comments:

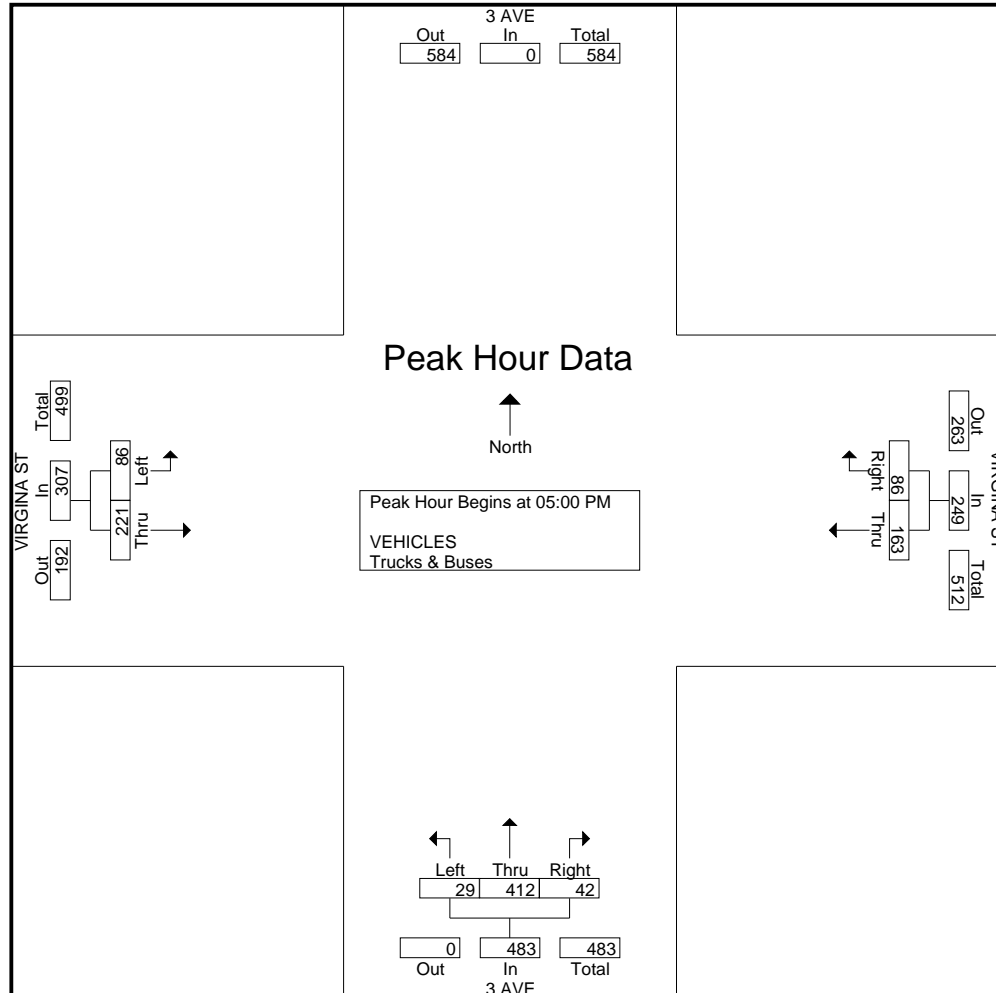
File Name : C_321p13
Site Code : 00021303
Start Date : 2/13/2013
Page No : 3

Start Time	VIRGINA ST From East			3 AVE From South				VIRGINA ST From West			Int. Total
	Right	Thru	App. Total	Right	Thru	Left	App. Total	Thru	Left	App. Total	
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1											
Peak Hour for Entire Intersection Begins at 05:00 PM											
05:00 PM	19	41	60	13	100	11	124	48	13	61	245
05:15 PM	34	40	74	7	110	10	127	53	22	75	276
05:30 PM	16	44	60	12	99	6	117	63	28	91	268
05:45 PM	17	38	55	10	103	2	115	57	23	80	250
Total Volume	86	163	249	42	412	29	483	221	86	307	1039
% App. Total	34.5	65.5		8.7	85.3	6		72	28		
PHF	.632	.926	.841	.808	.936	.659	.951	.877	.768	.843	.941

**CITY OF SEATTLE
DEPARTMENT OF TRANSPORTATION**

Counted by: BR
Counter No: 1023
Weather: OVERCAST
Comments:

File Name : C_321p13
Site Code : 00021303
Start Date : 2/13/2013
Page No : 4



CITY OF SEATTLE
DEPARTMENT OF TRANSPORTATION

Counted by: BR
 Counter No: 1023
 Weather: OVERCAST
 Comments:

File Name : C_321p13
 Site Code : 00021303
 Start Date : 2/13/2013
 Page No : 3

	3 AVE From North					VIRGINA ST From East					3 AVE From South					VIRGINA ST From West					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 04:45 PM																					
04:45 PM	0	0	0	89	89	0	1	0	31	32	0	1	0	59	60	0	0	0	74	74	255
05:00 PM	0	0	0	113	113	4	3	0	42	49	0	3	0	73	76	0	3	0	75	78	316
05:15 PM	0	0	0	79	79	2	4	0	39	45	0	5	1	77	83	0	1	0	74	75	282
05:30 PM	0	0	0	49	49	0	4	0	54	58	0	8	0	73	81	0	1	0	76	77	265
Total Volume	0	0	0	330	330	6	12	0	166	184	0	17	1	282	300	0	5	0	299	304	1118
% App. Total	0	0	0	100		3.3	6.5	0	90.2		0	5.7	0.3	94		0	1.6	0	98.4		
PHF	.000	.000	.000	.730	.730	.375	.750	.000	.769	.793	.000	.531	.250	.916	.904	.000	.417	.000	.984	.974	.884

Peak Hour Summary

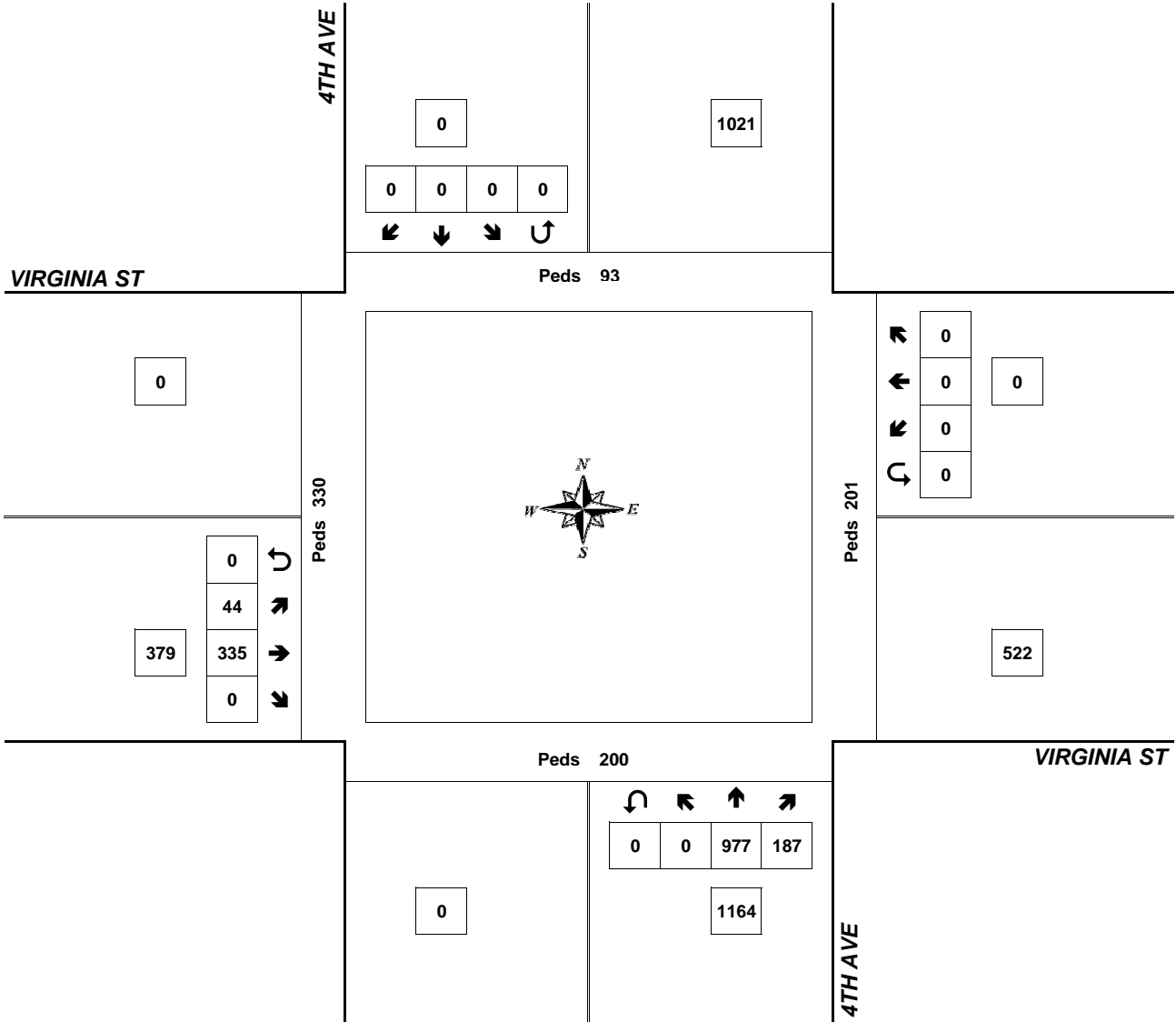
Site ID: 350



Eric Boivin
(303) 668-0220

4TH AVE & VIRGINIA ST

7:45 AM to 8:45 AM
Wednesday, February 11, 2015



Approach	PHF	HV%	Volume
EB	0.93	11.6%	379
WB	0.00	0.0%	0
NB	0.96	5.7%	1,164
SB	0.00	0.0%	0
Intersection	0.97	7.1%	1,543

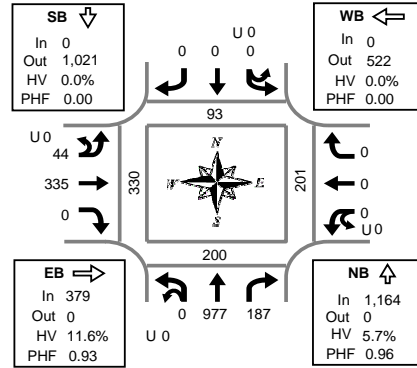
Count Period: 7:00 AM to 9:00 AM

Total Vehicle Summary



Eric Boivin
(303) 668-0220

Site ID: 350
4TH AVE & VIRGINIA ST
Wednesday, February 11, 2015
7:00 AM to 9:00 AM



Peak Hour Summary
7:45 AM to 8:45 AM

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

Interval Start Time	Northbound 4TH AVE				Southbound 4TH AVE				Eastbound VIRGINIA ST				Westbound VIRGINIA ST				Interval Total	Pedestrians & Bicycles In Crosswalk (By Location)						
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R		North	South	East	West			
7:00 AM	0	0	164	36	0	0	0	0	0	10	62	0	0	0	0	0	0	0	0	272	15	27	32	45
7:15 AM	0	0	186	39	0	0	0	0	0	0	10	75	0	0	0	0	0	0	0	310	10	37	39	63
7:30 AM	0	0	188	25	0	0	0	0	0	0	8	88	0	0	0	0	0	0	309	20	40	49	72	
7:45 AM	0	0	255	48	0	0	0	0	0	0	11	83	0	0	0	0	0	0	397	17	55	63	96	
8:00 AM	0	0	241	56	0	0	0	0	0	0	10	79	0	0	0	0	0	0	386	27	49	43	74	
8:15 AM	0	0	237	40	0	0	0	0	0	0	7	87	0	0	0	0	0	0	371	30	46	53	89	
8:30 AM	0	0	244	43	0	0	0	0	0	0	16	86	0	0	0	0	0	0	389	19	50	42	71	
8:45 AM	0	0	247	41	0	0	0	0	0	0	12	82	0	0	0	0	0	0	382	27	67	50	73	
Total Survey	0	0	1,762	328	0	0	0	0	0	0	84	642	0	0	0	0	0	0	2,816	165	371	371	583	

Peak Hour Summary
7:45 AM to 8:45 AM

By Approach	Northbound 4TH AVE				Southbound 4TH AVE				Eastbound VIRGINIA ST				Westbound VIRGINIA ST				Total	Pedestrians & Bicycles In Crosswalk (By Location)			
	In	Out	Total	HV	In	Out	Total	HV	In	Out	Total	HV	In	Out	Total	HV		North	South	East	West
Volume	1,164	0	1,164	66	0	1,021	1,021	0	379	0	379	44	0	522	522	0	1,543	93	200	201	330
%HV			5.7%				0.0%				11.6%				0.0%		7.1%				
PHF			0.96				0.00				0.93				0.00		0.97				

By Movement	Northbound 4TH AVE				Southbound 4TH AVE				Eastbound VIRGINIA ST				Westbound VIRGINIA ST				Total				
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R					
Volume	0	0	977	187	0	0	0	0	0	44	335	0	0	0	0	0	1,543				
%HV	0.0%	0.0%	5.4%	7.0%	0.0%	0.0%	0.0%	0.0%	0.0%	11.4%	11.6%	0.0%	0.0%	0.0%	0.0%	0.0%	7.1%				
PHF	0.00	0.00	0.96	0.83	0.00	0.00	0.00	0.00	0.00	0.69	0.96	0.00	0.00	0.00	0.00	0.00	0.97				

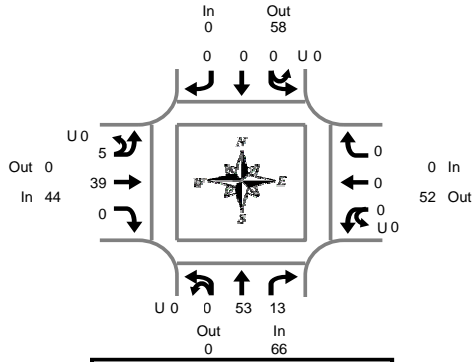
Rolling Hour Summary
7:00 AM to 9:00 AM

Interval Start Time	Northbound 4TH AVE				Southbound 4TH AVE				Eastbound VIRGINIA ST				Westbound VIRGINIA ST				Interval Total	Pedestrians & Bicycles In Crosswalk (By Location)			
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R		North	South	East	West
7:00 AM	0	0	793	148	0	0	0	0	0	39	308	0	0	0	0	0	1,288	62	159	183	276
7:15 AM	0	0	870	168	0	0	0	0	0	39	325	0	0	0	0	0	1,402	74	181	194	305
7:30 AM	0	0	921	169	0	0	0	0	0	36	337	0	0	0	0	0	1,463	94	190	208	331
7:45 AM	0	0	977	187	0	0	0	0	0	44	335	0	0	0	0	0	1,543	93	200	201	330
8:00 AM	0	0	969	180	0	0	0	0	0	45	334	0	0	0	0	0	1,528	103	212	188	307

Heavy Vehicle Summary



Eric Boivin
(303) 668-0220



Peak Hour Summary
7:45 AM to 8:45 AM

4TH AVE & VIRGINIA ST

Wednesday, February 11, 2015

7:00 AM to 9:00 AM

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

Interval Start Time	Northbound 4TH AVE					Southbound 4TH AVE					Eastbound VIRGINIA ST					Westbound VIRGINIA ST					Interval Total
	U	L	T	R	Total	U	L	T	R	Total	U	L	T	R	Total	U	L	T	R	Total	
7:00 AM	0	0	10	6	16	0	0	0	0	0	0	0	7	0	7	0	0	0	0	0	23
7:15 AM	0	0	9	5	14	0	0	0	0	0	0	0	12	0	12	0	0	0	0	0	26
7:30 AM	0	0	12	1	13	0	0	0	0	0	0	0	4	0	4	0	0	0	0	0	17
7:45 AM	0	0	18	3	21	0	0	0	0	0	0	1	16	0	17	0	0	0	0	0	38
8:00 AM	0	0	11	6	17	0	0	0	0	0	0	1	5	0	6	0	0	0	0	0	23
8:15 AM	0	0	12	3	15	0	0	0	0	0	0	1	12	0	13	0	0	0	0	0	28
8:30 AM	0	0	12	1	13	0	0	0	0	0	0	2	6	0	8	0	0	0	0	0	21
8:45 AM	0	0	17	3	20	0	0	0	0	0	0	0	8	0	8	0	0	0	0	0	28
Total Survey	0	0	101	28	129	0	0	0	0	0	0	5	70	0	75	0	0	0	0	0	28

Peak Hour Summary
7:45 AM to 8:45 AM

By Approach	Northbound 4TH AVE			Southbound 4TH AVE			Eastbound VIRGINIA ST			Westbound VIRGINIA ST			Total
	In	Out	Total	In	Out	Total	In	Out	Total	In	Out	Total	
Volume	66	0	66	0	58	58	44	0	44	0	52	52	110

By Movement	Northbound 4TH AVE					Southbound 4TH AVE					Eastbound VIRGINIA ST					Westbound VIRGINIA ST					Total					
	U	L	T	R	Total	U	L	T	R	Total	U	L	T	R	Total	U	L	T	R	Total						
Volume	0	0	53	13	66	0	0	0	0	0	0	5	39	0	44	0	0	0	0	0	0	0	0	0	0	110

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

Interval Start Time	Northbound 4TH AVE					Southbound 4TH AVE					Eastbound VIRGINIA ST					Westbound VIRGINIA ST					Interval Total
	U	L	T	R	Total	U	L	T	R	Total	U	L	T	R	Total	U	L	T	R	Total	
7:00 AM	0	0	49	15	64	0	0	0	0	0	0	1	39	0	40	0	0	0	0	0	104
7:15 AM	0	0	50	15	65	0	0	0	0	0	0	2	37	0	39	0	0	0	0	0	104
7:30 AM	0	0	53	13	66	0	0	0	0	0	0	3	37	0	40	0	0	0	0	0	106
7:45 AM	0	0	53	13	66	0	0	0	0	0	0	5	39	0	44	0	0	0	0	0	110
8:00 AM	0	0	52	13	65	0	0	0	0	0	0	4	31	0	35	0	0	0	0	0	100

Peak Hour Summary

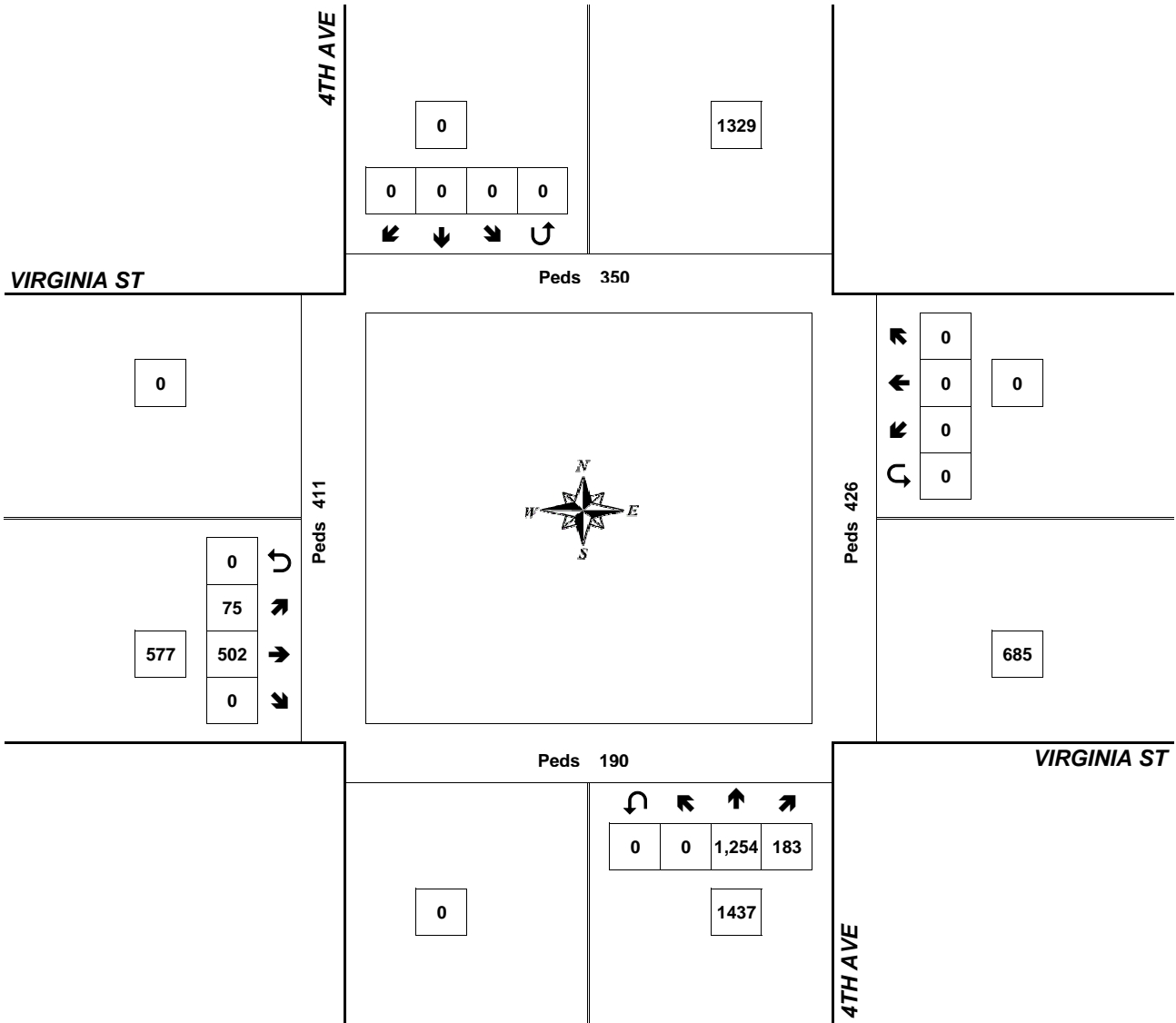
Site ID: 350



Eric Boivin
(303) 668-0220

4TH AVE & VIRGINIA ST

5:00 PM to 6:00 PM
Wednesday, February 11, 2015



Approach	PHF	HV%	Volume
EB	0.90	5.2%	577
WB	0.00	0.0%	0
NB	0.88	2.1%	1,437
SB	0.00	0.0%	0
Intersection	0.93	3.0%	2,014

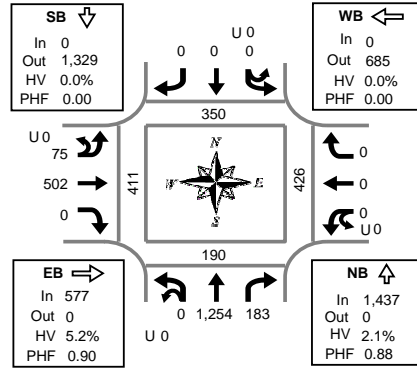
Count Period: 4:00 PM to 6:00 PM

Total Vehicle Summary



Eric Boivin
(303) 668-0220

Site ID: 350
4TH AVE & VIRGINIA ST
Wednesday, February 11, 2015
4:00 PM to 6:00 PM



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

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

Interval Start Time	Northbound 4TH AVE				Southbound 4TH AVE				Eastbound VIRGINIA ST				Westbound VIRGINIA ST				Interval Total	Pedestrians & Bicycles In Crosswalk (By Location)						
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R		North	South	East	West			
4:00 PM	0	0	238	45	0	0	0	0	0	8	105	0	0	0	0	0	0	0	0	396	63	52	74	72
4:15 PM	0	0	231	49	0	0	0	0	0	9	102	0	0	0	0	0	0	0	0	391	37	37	62	92
4:30 PM	0	0	256	55	0	0	0	0	0	12	114	0	0	0	0	0	0	0	0	437	66	44	83	111
4:45 PM	0	0	290	42	0	0	0	0	0	19	114	0	0	0	0	0	0	0	0	465	49	43	100	94
5:00 PM	0	0	275	39	0	0	0	0	0	13	124	0	0	0	0	0	0	0	0	451	98	41	125	119
5:15 PM	0	0	310	52	0	0	0	0	0	24	122	0	0	0	0	0	0	0	0	508	92	60	112	116
5:30 PM	0	0	358	49	0	0	0	0	0	14	120	0	0	0	0	0	0	0	0	541	90	41	102	95
5:45 PM	0	0	311	43	0	0	0	0	0	24	136	0	0	0	0	0	0	0	0	514	70	48	87	81
Total Survey	0	0	2,269	374	0	0	0	0	0	123	937	0	0	0	0	0	0	0	0	3,703	565	366	745	780

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

By Approach	Northbound 4TH AVE				Southbound 4TH AVE				Eastbound VIRGINIA ST				Westbound VIRGINIA ST				Total	Pedestrians & Bicycles In Crosswalk (By Location)			
	In	Out	Total	HV	In	Out	Total	HV	In	Out	Total	HV	In	Out	Total	HV		North	South	East	West
Volume	1,437	0	1,437	30	0	1,329	1,329	0	577	0	577	30	0	685	685	0	2,014	350	190	426	411
%HV	2.1%				0.0%				5.2%				0.0%				3.0%				
PHF	0.88				0.00				0.90				0.00				0.93				

By Movement	Northbound 4TH AVE				Southbound 4TH AVE				Eastbound VIRGINIA ST				Westbound VIRGINIA ST				Total				
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R					
Volume	0	0	1,254	183	0	0	0	0	0	75	502	0	0	0	0	0	2,014				
%HV	0.0%	0.0%	1.8%	4.4%	0.0%	0.0%	0.0%	0.0%	0.0%	4.0%	5.4%	0.0%	0.0%	0.0%	0.0%	0.0%	3.0%				
PHF	0.00	0.00	0.88	0.88	0.00	0.00	0.00	0.00	0.00	0.78	0.92	0.00	0.00	0.00	0.00	0.00	0.93				

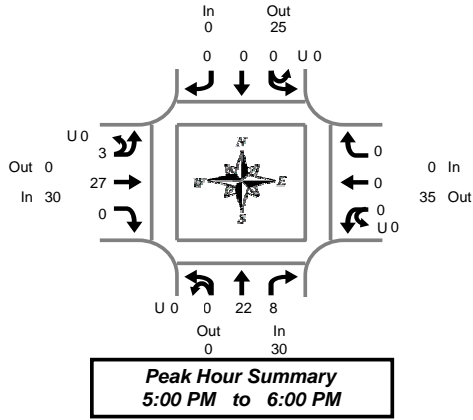
Rolling Hour Summary 4:00 PM to 6:00 PM

Interval Start Time	Northbound 4TH AVE				Southbound 4TH AVE				Eastbound VIRGINIA ST				Westbound VIRGINIA ST				Interval Total	Pedestrians & Bicycles In Crosswalk (By Location)			
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R		North	South	East	West
4:00 PM	0	0	1,015	191	0	0	0	0	0	48	435	0	0	0	0	0	1,689	215	176	319	369
4:15 PM	0	0	1,052	185	0	0	0	0	0	53	454	0	0	0	0	0	1,744	250	165	370	416
4:30 PM	0	0	1,131	188	0	0	0	0	0	68	474	0	0	0	0	0	1,861	305	188	420	440
4:45 PM	0	0	1,233	182	0	0	0	0	0	70	480	0	0	0	0	0	1,965	329	185	439	424
5:00 PM	0	0	1,254	183	0	0	0	0	0	75	502	0	0	0	0	0	2,014	350	190	426	411

Heavy Vehicle Summary



Eric Boivin
(303) 668-0220



4TH AVE & VIRGINIA ST

Wednesday, February 11, 2015

4:00 PM to 6:00 PM

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

Interval Start Time	Northbound 4TH AVE					Southbound 4TH AVE					Eastbound VIRGINIA ST					Westbound VIRGINIA ST					Interval Total
	U	L	T	R	Total	U	L	T	R	Total	U	L	T	R	Total	U	L	T	R	Total	
4:00 PM	0	0	8	5	13	0	0	0	0	0	0	0	6	0	6	0	0	0	0	0	19
4:15 PM	0	0	10	4	14	0	0	0	0	0	0	0	5	0	5	0	0	0	0	0	19
4:30 PM	0	0	9	5	14	0	0	0	0	0	0	1	8	0	9	0	0	0	0	0	23
4:45 PM	0	0	5	2	7	0	0	0	0	0	0	1	5	0	6	0	0	0	0	0	13
5:00 PM	0	0	3	1	4	0	0	0	0	0	0	0	7	0	7	0	0	0	0	0	11
5:15 PM	0	0	10	2	12	0	0	0	0	0	0	2	6	0	8	0	0	0	0	0	20
5:30 PM	0	0	4	2	6	0	0	0	0	0	0	0	8	0	8	0	0	0	0	0	14
5:45 PM	0	0	5	3	8	0	0	0	0	0	0	1	6	0	7	0	0	0	0	0	15
Total Survey	0	0	54	24	78	0	0	0	0	0	0	5	51	0	56	0	0	0	0	0	24

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

By Approach	Northbound 4TH AVE			Southbound 4TH AVE			Eastbound VIRGINIA ST			Westbound VIRGINIA ST			Total
	In	Out	Total	In	Out	Total	In	Out	Total	In	Out	Total	
Volume	30	0	30	0	25	25	30	0	30	0	35	35	60

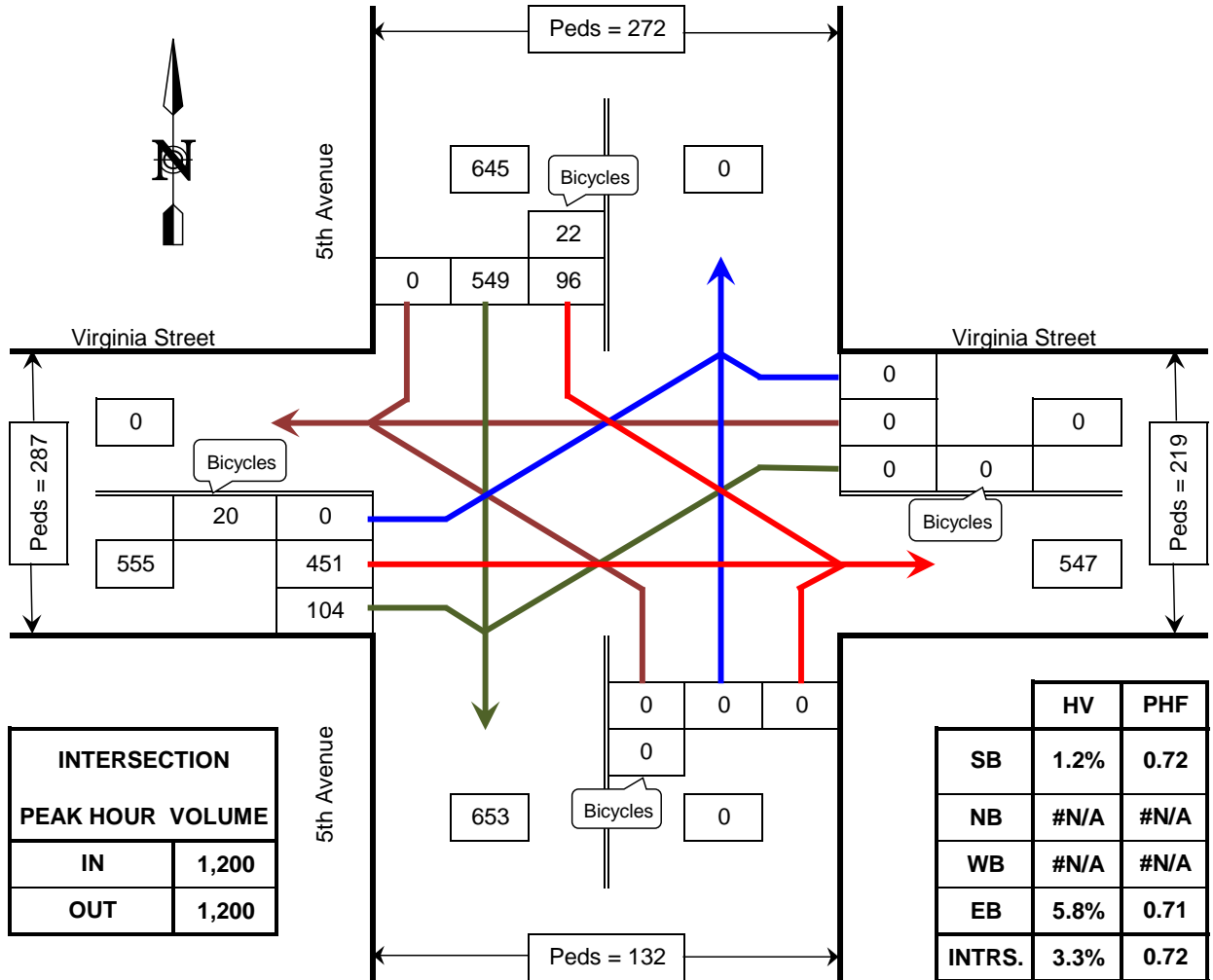
By Movement	Northbound 4TH AVE					Southbound 4TH AVE					Eastbound VIRGINIA ST					Westbound VIRGINIA ST					Total					
	U	L	T	R	Total	U	L	T	R	Total	U	L	T	R	Total	U	L	T	R	Total						
Volume	0	0	22	8	30	0	0	0	0	0	0	3	27	0	30	0	0	0	0	0	0	0	0	0	0	60

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

Interval Start Time	Northbound 4TH AVE					Southbound 4TH AVE					Eastbound VIRGINIA ST					Westbound VIRGINIA ST					Interval Total
	U	L	T	R	Total	U	L	T	R	Total	U	L	T	R	Total	U	L	T	R	Total	
4:00 PM	0	0	32	16	48	0	0	0	0	0	0	2	24	0	26	0	0	0	0	0	74
4:15 PM	0	0	27	12	39	0	0	0	0	0	0	2	25	0	27	0	0	0	0	0	66
4:30 PM	0	0	27	10	37	0	0	0	0	0	0	4	26	0	30	0	0	0	0	0	67
4:45 PM	0	0	22	7	29	0	0	0	0	0	0	3	26	0	29	0	0	0	0	0	58
5:00 PM	0	0	22	8	30	0	0	0	0	0	0	3	27	0	30	0	0	0	0	0	60

TURNING MOVEMENTS DIAGRAM

8:00 AM - 9:00 AM PEAK HOUR: 8:00 AM TO 9:00 AM



PHF = Peak Hour Factor
HV = Heavy Vehicles

**Virginia Street @ 5th Avenue
Seattle, WA**

COUNTED BY: RN/SA

DATE OF COUNT: Tue. 1/20/15

REDUCED BY: CN

TIME OF COUNT: 8:00 AM - 9:00 AM

REDUCTION DATE: Thu. 1/22/15

WEATHER: Sunny

TRAFFIC DATA GATHERING

INTERSECTION TURNING MOVEMENTS REDUCTION SHEET

LOCATION: Virginia Street @ 5th Avenue
Seattle, WA

DATE OF COUNT: Tue. 1/20/15
TIME OF COUNT: 8:00 AM - 9:00 AM

COUNTED BY: RN/SA
WEATHER: Sunny

TIME INTERVAL ENDING AT	FROM NORTH ON 5th Avenue						FROM SOUTH ON 5th Avenue						FROM EAST ON Virginia Street						FROM WEST ON Virginia Street						INTERVAL TOTALS	
	Peds	HV	Bicycle	Left	Thru	Right	Peds	HV	Bicycle	Left	Thru	Right	Peds	HV	Bicycle	Left	Thru	Right	Peds	HV	Bicycle	Left	Thru	Right		
05:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
05:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
06:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
06:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
06:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
06:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:15 AM	70	2	2	24	137	0	37	0	0	0	0	0	68	0	0	0	0	0	88	6	3	0	108	22	291	
08:30 AM	100	5	10	33	190	0	41	0	0	0	0	0	64	0	0	0	0	0	93	13	7	0	157	38	418	
08:45 AM	38	1	5	12	91	0	19	0	0	0	0	0	36	0	0	0	0	0	50	4	4	0	54	15	172	
09:00 AM	64	0	5	27	131	0	35	0	0	0	0	0	51	0	0	0	0	0	56	9	6	0	132	29	319	
PEAK HOUR TOTALS	272	8	22	96	549	0	132	0	0	0	0	0	219	0	0	0	0	287	32	20	0	451	104	INTERSECTION		
ALL MOVEMENTS	645						0						0						555						1200	
% HV	1.2%						#N/A						#N/A						5.8%						3.3%	
PEAK HOUR FACTOR	0.72						#N/A						#N/A						0.71						0.72	

PHF = Peak Hour Factor

8:00 AM - 9:00 AM PEAK HOUR: 8:00 AM TO 9:00 AM

REDUCED BY: CN

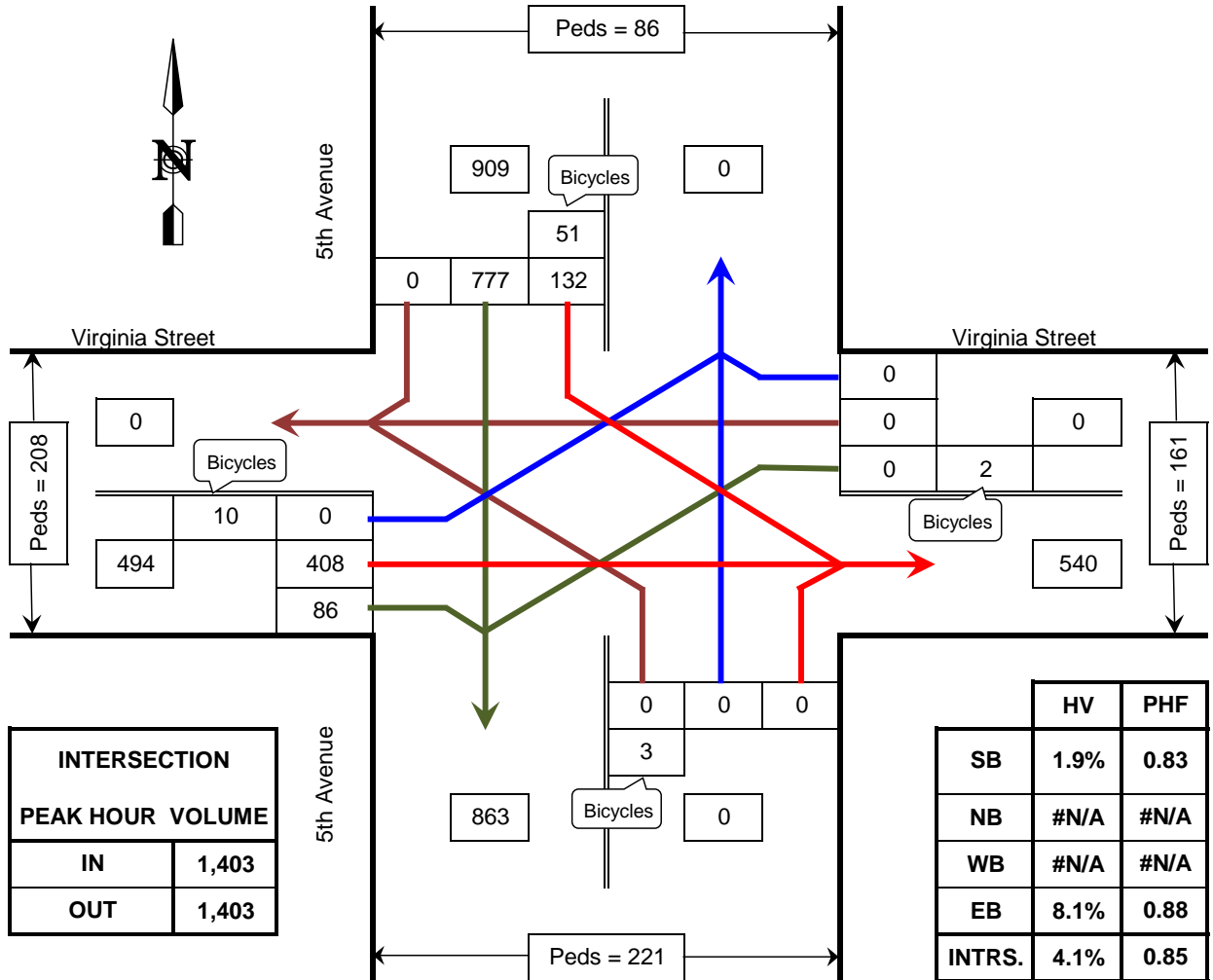
DATE OF REDUCTION: 1/22/2015

ROLLING HOUR COUNT

TIME INTERVAL	FROM NORTH ON 5th Avenue						FROM SOUTH ON 5th Avenue						FROM EAST ON Virginia Street						FROM WEST ON Virginia Street						INTERVAL TOTALS
	Peds	HV	Bicycle	Left	Thru	Right	Peds	HV	Bicycle	Left	Thru	Right	Peds	HV	Bicycle	Left	Thru	Right	Peds	HV	Bicycle	Left	Thru	Right	
5:00 AM - 6:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 AM - 6:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 AM - 6:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 AM - 6:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:00 AM - 7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:15 AM - 7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:30 AM - 7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:45 AM - 7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:00 AM - 8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM - 8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM - 8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM - 8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM - 9:00 AM	272	8	22	96	549	0	132	0	0	0	0	0	219	0	0	0	0	0	287	32	20	0	451	104	1200

TURNING MOVEMENTS DIAGRAM

5:00 PM - 6:00 PM PEAK HOUR: 5:00 PM TO 6:00 PM



Virginia Street @ 5th Avenue
Seattle, WA

PHF = Peak Hour Factor
HV = Heavy Vehicles

COUNTED BY: RN/SA
 REDUCED BY: CN
 REDUCTION DATE: Thu. 1/22/15

DATE OF COUNT: Tue. 1/20/15
 TIME OF COUNT: 5:00 PM - 6:00 PM
 WEATHER: Sunny

TRAFFIC DATA GATHERING

INTERSECTION TURNING MOVEMENTS REDUCTION SHEET

LOCATION: Virginia Street @ 5th Avenue
Seattle, WA

DATE OF COUNT: Tue. 1/20/15
TIME OF COUNT: 5:00 PM - 6:00 PM

COUNTED BY: RN/SA
WEATHER: Sunny

TIME INTERVAL ENDING AT	FROM NORTH ON 5th Avenue						FROM SOUTH ON 5th Avenue						FROM EAST ON Virginia Street						FROM WEST ON Virginia Street						INTERVAL TOTALS	
	Peds	HV	Bicycle	Left	Thru	Right	Peds	HV	Bicycle	Left	Thru	Right	Peds	HV	Bicycle	Left	Thru	Right	Peds	HV	Bicycle	Left	Thru	Right		
02:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
02:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:15 PM	17	5	11	33	231	0	45	0	0	0	0	0	40	0	1	0	0	0	37	8	3	0	81	17	362	
05:30 PM	14	1	17	27	99	0	39	0	1	0	0	0	36	0	1	0	0	0	52	8	0	0	105	16	247	
05:45 PM	25	3	12	32	213	0	72	0	0	0	0	0	41	0	0	0	0	0	58	12	4	0	105	30	380	
06:00 PM	30	8	11	40	234	0	65	0	2	0	0	0	44	0	0	0	0	0	61	12	3	0	117	23	414	
PEAK HOUR TOTALS	86	17	51	132	777	0	221	0	3	0	0	0	161	0	2	0	0	0	208	40	10	0	408	86	INTERSECTION	
ALL MOVEMENTS	909						0						0						494						1403	
% HV	1.9%						#N/A						#N/A						8.1%						4.1%	
PEAK HOUR FACTOR	0.83						#N/A						#N/A						0.88						0.85	

PHF = Peak Hour Factor

5:00 PM - 6:00 PM PEAK HOUR: 5:00 PM TO 6:00 PM

REDUCED BY: CN

DATE OF REDUCTION: 1/22/2015

ROLLING HOUR COUNT

TIME INTERVAL	FROM NORTH ON 5th Avenue						FROM SOUTH ON 5th Avenue						FROM EAST ON Virginia Street						FROM WEST ON Virginia Street						INTERVAL TOTALS	
	Peds	HV	Bicycle	Left	Thru	Right	Peds	HV	Bicycle	Left	Thru	Right	Peds	HV	Bicycle	Left	Thru	Right	Peds	HV	Bicycle	Left	Thru	Right		
2:00 PM - 3:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:15 PM - 3:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:30 PM - 3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:45 PM - 3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:00 PM - 4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:15 PM - 4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:30 PM - 4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:45 PM - 4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:00 PM - 5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM - 5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM - 5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM - 5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM - 6:00 PM	86	17	51	132	777	0	221	0	3	0	0	0	161	0	2	0	0	0	208	40	10	0	408	86	1403	

Peak Hour Summary

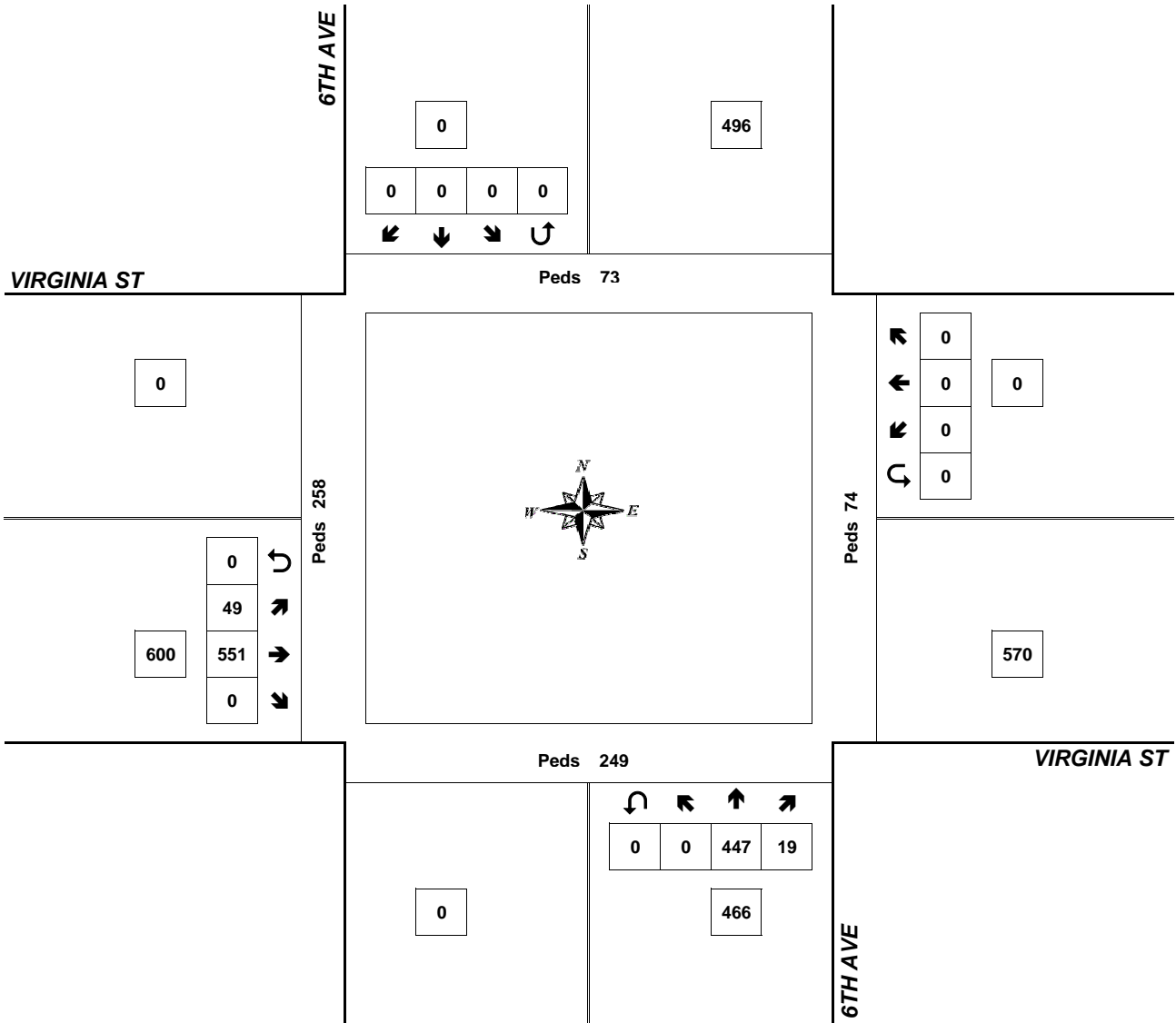
Site ID: 435



Eric Boivin
(303) 668-0220

6TH AVE & VIRGINIA ST

7:45 AM to 8:45 AM
Wednesday, February 11, 2015



Approach	PHF	HV%	Volume
EB	0.90	8.3%	600
WB	0.00	0.0%	0
NB	0.92	3.4%	466
SB	0.00	0.0%	0
Intersection	0.96	6.2%	1,066

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

Total Vehicle Summary



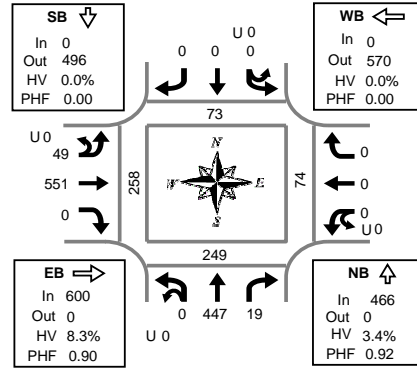
Eric Boivin
(303) 668-0220

Site ID: 435

6TH AVE & VIRGINIA ST

Wednesday, February 11, 2015

7:00 AM to 9:00 AM



Peak Hour Summary
7:45 AM to 8:45 AM

15-Minute Interval Summary

7:00 AM to 9:00 AM

Interval Start Time	Northbound 6TH AVE				Southbound 6TH AVE				Eastbound VIRGINIA ST				Westbound VIRGINIA ST				Interval Total	Pedestrians & Bicycles In Crosswalk (By Location)						
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R		North	South	East	West			
7:00 AM	0	0	86	3	0	0	0	0	0	7	74	0	0	0	0	0	0	0	0	170	10	21	16	28
7:15 AM	0	0	64	3	0	0	0	0	0	0	10	90	0	0	0	0	0	0	0	167	4	58	3	52
7:30 AM	0	0	83	3	0	0	0	0	0	0	13	104	0	0	0	0	0	0	0	203	10	52	11	46
7:45 AM	0	0	117	3	0	0	0	0	0	0	15	142	0	0	0	0	0	0	0	277	20	49	21	56
8:00 AM	0	0	122	5	0	0	0	0	0	0	8	134	0	0	0	0	0	0	0	269	12	58	11	63
8:15 AM	0	0	99	6	0	0	0	0	0	0	12	155	0	0	0	0	0	0	0	272	21	55	21	61
8:30 AM	0	0	109	5	0	0	0	0	0	0	14	120	0	0	0	0	0	0	0	248	20	87	21	78
8:45 AM	0	0	115	5	0	0	0	0	0	0	13	112	0	0	0	0	0	0	0	245	13	79	14	87
Total Survey	0	0	795	33	0	0	0	0	0	0	92	931	0	0	0	0	0	0	0	1,851	110	459	118	471

Peak Hour Summary

7:45 AM to 8:45 AM

By Approach	Northbound 6TH AVE				Southbound 6TH AVE				Eastbound VIRGINIA ST				Westbound VIRGINIA ST				Total	Pedestrians & Bicycles In Crosswalk (By Location)			
	In	Out	Total	HV	In	Out	Total	HV	In	Out	Total	HV	In	Out	Total	HV		North	South	East	West
Volume	466	0	466	16	0	496	496	0	600	0	600	50	0	570	570	0	1,066	73	249	74	258
%HV			3.4%				0.0%				8.3%				0.0%		6.2%				
PHF			0.92				0.00				0.90				0.00		0.96				

By Movement	Northbound 6TH AVE				Southbound 6TH AVE				Eastbound VIRGINIA ST				Westbound VIRGINIA ST				Total				
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R					
Volume	0	0	447	19	0	0	0	0	0	49	551	0	0	0	0	0	1,066				
%HV	0.0%	0.0%	3.6%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	10.2%	8.2%	0.0%	0.0%	0.0%	0.0%	0.0%	6.2%				
PHF	0.00	0.00	0.92	0.79	0.00	0.00	0.00	0.00	0.00	0.82	0.89	0.00	0.00	0.00	0.00	0.00	0.96				

Rolling Hour Summary

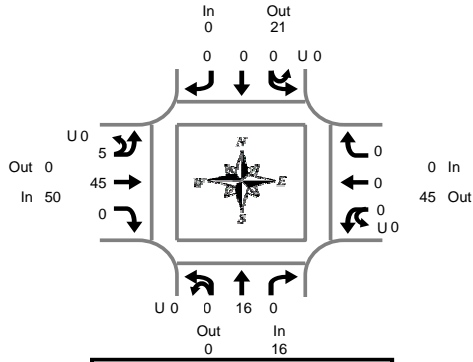
7:00 AM to 9:00 AM

Interval Start Time	Northbound 6TH AVE				Southbound 6TH AVE				Eastbound VIRGINIA ST				Westbound VIRGINIA ST				Interval Total	Pedestrians & Bicycles In Crosswalk (By Location)			
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R		North	South	East	West
7:00 AM	0	0	350	12	0	0	0	0	0	45	410	0	0	0	0	0	817	44	180	51	182
7:15 AM	0	0	386	14	0	0	0	0	0	46	470	0	0	0	0	0	916	46	217	46	217
7:30 AM	0	0	421	17	0	0	0	0	0	48	535	0	0	0	0	0	1,021	63	214	64	226
7:45 AM	0	0	447	19	0	0	0	0	0	49	551	0	0	0	0	0	1,066	73	249	74	258
8:00 AM	0	0	445	21	0	0	0	0	0	47	521	0	0	0	0	0	1,034	66	279	67	289

Heavy Vehicle Summary



Eric Boivin
(303) 668-0220



**Peak Hour Summary
7:45 AM to 8:45 AM**

6TH AVE & VIRGINIA ST

Wednesday, February 11, 2015

7:00 AM to 9:00 AM

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

Interval Start Time	Northbound 6TH AVE					Southbound 6TH AVE					Eastbound VIRGINIA ST					Westbound VIRGINIA ST					Interval Total	
	U	L	T	R	Total	U	L	T	R	Total	U	L	T	R	Total	U	L	T	R	Total		
7:00 AM	0	0	3	0	3	0	0	0	0	0	0	0	8	0	8	0	0	0	0	0	0	11
7:15 AM	0	0	11	0	11	0	0	0	0	0	0	2	11	0	13	0	0	0	0	0	0	24
7:30 AM	0	0	2	0	2	0	0	0	0	0	0	0	8	0	8	0	0	0	0	0	0	10
7:45 AM	0	0	5	0	5	0	0	0	0	0	0	2	13	0	15	0	0	0	0	0	0	20
8:00 AM	0	0	4	0	4	0	0	0	0	0	0	1	10	0	11	0	0	0	0	0	0	15
8:15 AM	0	0	4	0	4	0	0	0	0	0	0	1	12	0	13	0	0	0	0	0	0	17
8:30 AM	0	0	3	0	3	0	0	0	0	0	0	1	10	0	11	0	0	0	0	0	0	14
8:45 AM	0	0	7	0	7	0	0	0	0	0	0	2	7	0	9	0	0	0	0	0	0	16
Total Survey	0	0	39	0	39	0	0	0	0	0	0	9	79	0	88	0	0	0	0	0	0	0

Peak Hour Summary
7:45 AM to 8:45 AM

By Approach	Northbound 6TH AVE			Southbound 6TH AVE			Eastbound VIRGINIA ST			Westbound VIRGINIA ST			Total
	In	Out	Total	In	Out	Total	In	Out	Total	In	Out	Total	
Volume	16	0	16	0	21	21	50	0	50	0	45	45	66

By Movement	Northbound 6TH AVE					Southbound 6TH AVE					Eastbound VIRGINIA ST					Westbound VIRGINIA ST					Total					
	U	L	T	R	Total	U	L	T	R	Total	U	L	T	R	Total	U	L	T	R	Total						
Volume	0	0	16	0	16	0	0	0	0	0	0	5	45	0	50	0	0	0	0	0	0	0	0	0	0	66

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

Interval Start Time	Northbound 6TH AVE					Southbound 6TH AVE					Eastbound VIRGINIA ST					Westbound VIRGINIA ST					Interval Total	
	U	L	T	R	Total	U	L	T	R	Total	U	L	T	R	Total	U	L	T	R	Total		
7:00 AM	0	0	21	0	21	0	0	0	0	0	0	4	40	0	44	0	0	0	0	0	0	65
7:15 AM	0	0	22	0	22	0	0	0	0	0	0	5	42	0	47	0	0	0	0	0	0	69
7:30 AM	0	0	15	0	15	0	0	0	0	0	0	4	43	0	47	0	0	0	0	0	0	62
7:45 AM	0	0	16	0	16	0	0	0	0	0	0	5	45	0	50	0	0	0	0	0	0	66
8:00 AM	0	0	18	0	18	0	0	0	0	0	0	5	39	0	44	0	0	0	0	0	0	62

Peak Hour Summary

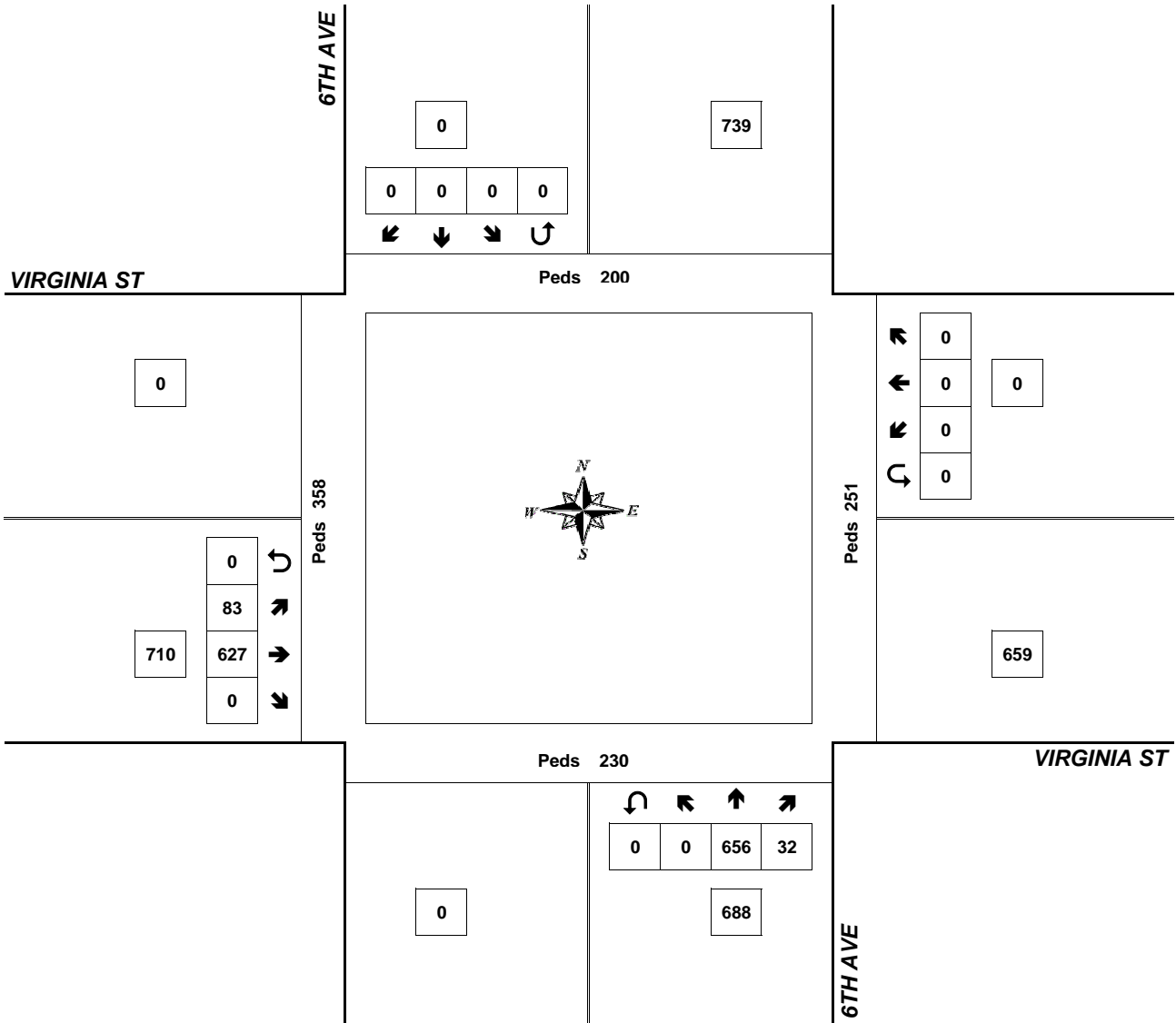
Site ID: 435



Eric Boivin
(303) 668-0220

6TH AVE & VIRGINIA ST

5:00 PM to 6:00 PM
Wednesday, February 11, 2015



Approach	PHF	HV%	Volume
EB	0.96	4.9%	710
WB	0.00	0.0%	0
NB	0.97	2.2%	688
SB	0.00	0.0%	0
Intersection	1.00	3.6%	1,398

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

Total Vehicle Summary



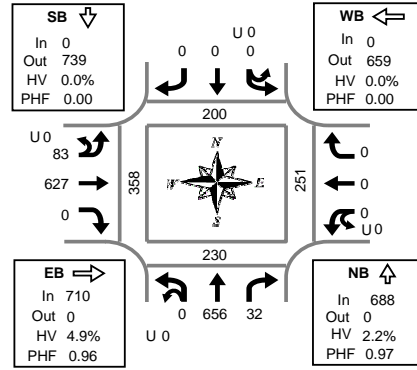
Eric Boivin
(303) 668-0220

Site ID: 435

6TH AVE & VIRGINIA ST

Wednesday, February 11, 2015

4:00 PM to 6:00 PM



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

15-Minute Interval Summary

4:00 PM to 6:00 PM

Interval Start Time	Northbound 6TH AVE				Southbound 6TH AVE				Eastbound VIRGINIA ST				Westbound VIRGINIA ST				Interval Total	Pedestrians & Bicycles In Crosswalk (By Location)						
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R		North	South	East	West			
4:00 PM	0	0	111	7	0	0	0	0	0	19	127	0	0	0	0	0	0	0	0	264	22	49	23	78
4:15 PM	0	0	110	9	0	0	0	0	0	0	13	135	0	0	0	0	0	0	0	267	18	36	21	52
4:30 PM	0	0	146	10	0	0	0	0	0	10	153	0	0	0	0	0	0	0	0	319	30	53	32	70
4:45 PM	0	0	154	4	0	0	0	0	0	18	162	0	0	0	0	0	0	0	0	338	31	31	35	60
5:00 PM	0	0	160	11	0	0	0	0	0	18	160	0	0	0	0	0	0	0	0	349	38	55	55	95
5:15 PM	0	0	167	6	0	0	0	0	0	19	157	0	0	0	0	0	0	0	0	349	53	59	69	111
5:30 PM	0	0	173	5	0	0	0	0	0	19	153	0	0	0	0	0	0	0	0	350	53	45	63	88
5:45 PM	0	0	156	10	0	0	0	0	0	27	157	0	0	0	0	0	0	0	0	350	56	71	64	64
Total Survey	0	0	1,177	62	0	0	0	0	0	143	1,204	0	0	0	0	0	0	0	0	2,586	301	399	362	618

Peak Hour Summary

5:00 PM to 6:00 PM

By Approach	Northbound 6TH AVE				Southbound 6TH AVE				Eastbound VIRGINIA ST				Westbound VIRGINIA ST				Total	Pedestrians & Bicycles In Crosswalk (By Location)			
	In	Out	Total	HV	In	Out	Total	HV	In	Out	Total	HV	In	Out	Total	HV		North	South	East	West
Volume	688	0	688	15	0	739	739	0	710	0	710	35	0	659	659	0	1,398	200	230	251	358
%HV		2.2%				0.0%				4.9%				0.0%			3.6%				
PHF		0.97				0.00				0.96				0.00			1.00				

By Movement	Northbound 6TH AVE				Southbound 6TH AVE				Eastbound VIRGINIA ST				Westbound VIRGINIA ST				Total
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R	
Volume	0	0	656	32	0	0	0	0	0	83	627	0	0	0	0	0	1,398
%HV	0.0%	0.0%	2.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	4.8%	4.9%	0.0%	0.0%	0.0%	0.0%	0.0%	3.6%
PHF	0.00	0.00	0.95	0.73	0.00	0.00	0.00	0.00	0.00	0.77	0.98	0.00	0.00	0.00	0.00	0.00	1.00

Rolling Hour Summary

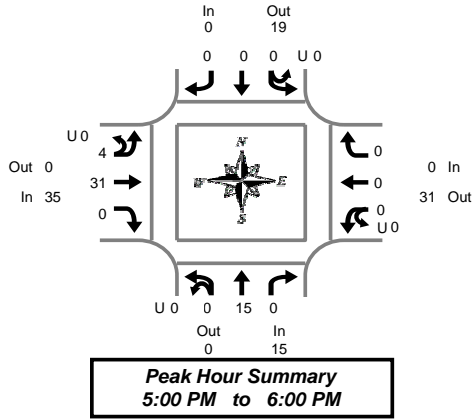
4:00 PM to 6:00 PM

Interval Start Time	Northbound 6TH AVE				Southbound 6TH AVE				Eastbound VIRGINIA ST				Westbound VIRGINIA ST				Interval Total	Pedestrians & Bicycles In Crosswalk (By Location)			
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R		North	South	East	West
4:00 PM	0	0	521	30	0	0	0	0	0	60	577	0	0	0	0	0	1,188	101	169	111	260
4:15 PM	0	0	570	34	0	0	0	0	0	59	610	0	0	0	0	0	1,273	117	175	143	277
4:30 PM	0	0	627	31	0	0	0	0	0	65	632	0	0	0	0	0	1,355	152	198	191	336
4:45 PM	0	0	654	26	0	0	0	0	0	74	632	0	0	0	0	0	1,386	175	190	222	354
5:00 PM	0	0	656	32	0	0	0	0	0	83	627	0	0	0	0	0	1,398	200	230	251	358

Heavy Vehicle Summary



Eric Boivin
(303) 668-0220



6TH AVE & VIRGINIA ST

Wednesday, February 11, 2015

4:00 PM to 6:00 PM

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

Interval Start Time	Northbound 6TH AVE					Southbound 6TH AVE					Eastbound VIRGINIA ST					Westbound VIRGINIA ST					Interval Total	
	U	L	T	R	Total	U	L	T	R	Total	U	L	T	R	Total	U	L	T	R	Total		
4:00 PM	0	0	3	0	3	0	0	0	0	0	0	0	10	0	10	0	0	0	0	0	0	13
4:15 PM	0	0	3	0	3	0	0	0	0	0	0	0	11	0	11	0	0	0	0	0	0	14
4:30 PM	0	0	3	0	3	0	0	0	0	0	0	1	12	0	13	0	0	0	0	0	0	16
4:45 PM	0	0	5	0	5	0	0	0	0	0	0	1	6	0	7	0	0	0	0	0	0	12
5:00 PM	0	0	6	0	6	0	0	0	0	0	0	0	9	0	9	0	0	0	0	0	0	15
5:15 PM	0	0	4	0	4	0	0	0	0	0	0	3	6	0	9	0	0	0	0	0	0	13
5:30 PM	0	0	4	0	4	0	0	0	0	0	0	1	6	0	7	0	0	0	0	0	0	11
5:45 PM	0	0	1	0	1	0	0	0	0	0	0	0	10	0	10	0	0	0	0	0	0	11
Total Survey	0	0	29	0	29	0	0	0	0	0	0	6	70	0	76	0	0	0	0	0	0	0

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

By Approach	Northbound 6TH AVE			Southbound 6TH AVE			Eastbound VIRGINIA ST			Westbound VIRGINIA ST			Total
	In	Out	Total	In	Out	Total	In	Out	Total	In	Out	Total	
Volume	15	0	15	0	19	19	35	0	35	0	31	31	50

By Movement	Northbound 6TH AVE					Southbound 6TH AVE					Eastbound VIRGINIA ST					Westbound VIRGINIA ST					Total					
	U	L	T	R	Total	U	L	T	R	Total	U	L	T	R	Total	U	L	T	R	Total						
Volume	0	0	15	0	15	0	0	0	0	0	0	4	31	0	35	0	0	0	0	0	0	0	0	0	0	50

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

Interval Start Time	Northbound 6TH AVE					Southbound 6TH AVE					Eastbound VIRGINIA ST					Westbound VIRGINIA ST					Interval Total	
	U	L	T	R	Total	U	L	T	R	Total	U	L	T	R	Total	U	L	T	R	Total		
4:00 PM	0	0	14	0	14	0	0	0	0	0	0	2	39	0	41	0	0	0	0	0	0	55
4:15 PM	0	0	17	0	17	0	0	0	0	0	0	2	38	0	40	0	0	0	0	0	0	57
4:30 PM	0	0	18	0	18	0	0	0	0	0	0	5	33	0	38	0	0	0	0	0	0	56
4:45 PM	0	0	19	0	19	0	0	0	0	0	0	5	27	0	32	0	0	0	0	0	0	51
5:00 PM	0	0	15	0	15	0	0	0	0	0	0	4	31	0	35	0	0	0	0	0	0	50

Peak Hour Summary

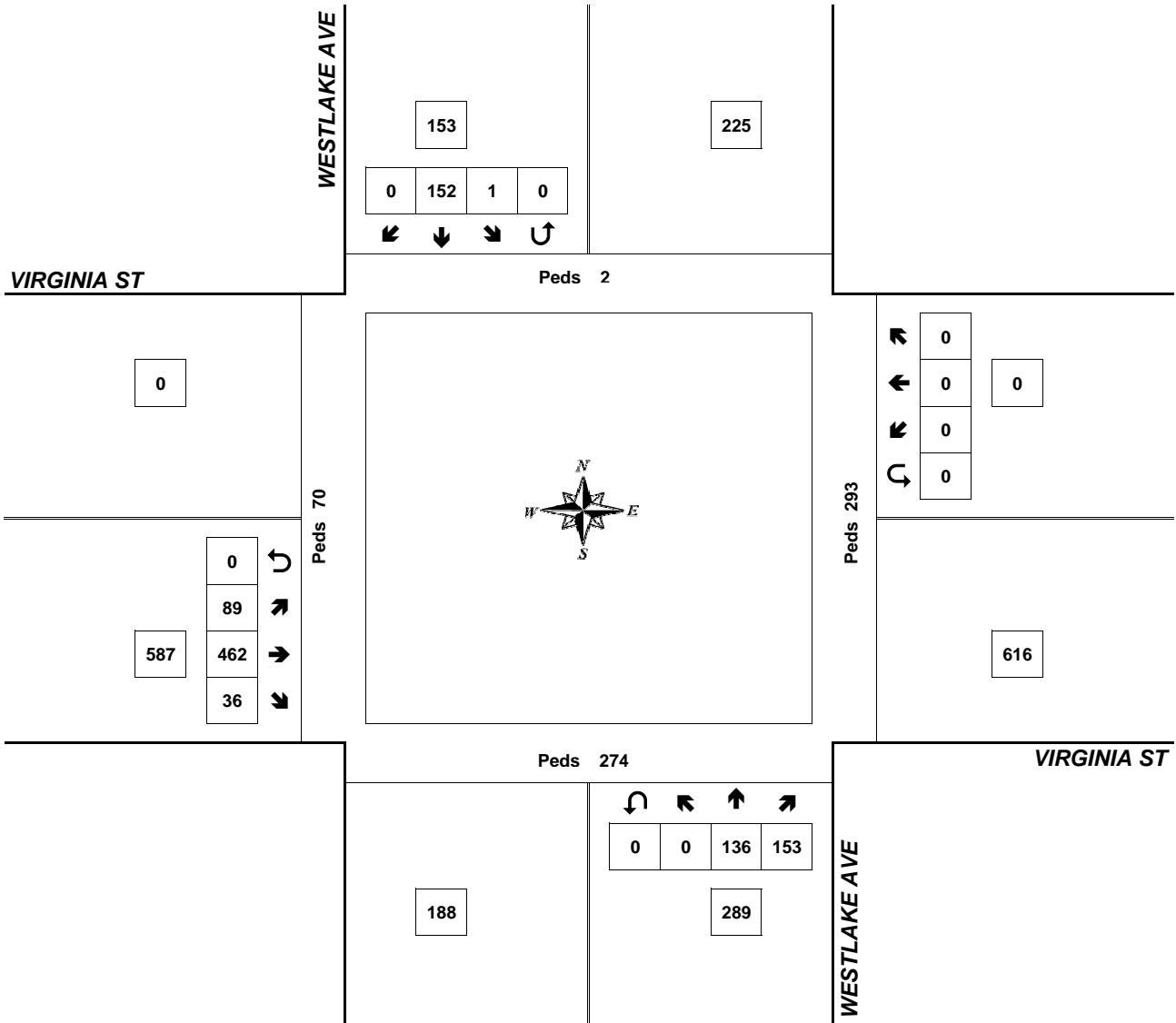
Site ID: 477



Eric Boivin
(303) 668-0220

WESTLAKE AVE & VIRGINIA ST

8:00 AM to 9:00 AM
Thursday, February 12, 2015



Approach	PHF	HV%	Volume
EB	0.87	6.3%	587
WB	0.00	0.0%	0
NB	0.91	6.2%	289
SB	0.81	10.5%	153
Intersection	0.90	6.9%	1,029

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

Total Vehicle Summary



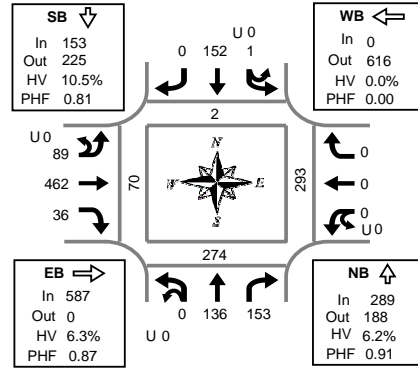
Eric Boivin
(303) 668-0220

Site ID: 477

WESTLAKE AVE & VIRGINIA ST

Thursday, February 12, 2015

7:00 AM to 9:00 AM



**Peak Hour Summary
8:00 AM to 9:00 AM**

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

Interval Start Time	Northbound WESTLAKE AVE				Southbound WESTLAKE AVE				Eastbound VIRGINIA ST				Westbound VIRGINIA ST				Interval Total	Pedestrians & Bicycles In Crosswalk (By Location)						
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R		North	South	East	West			
7:00 AM	0	0	36	25	0	0	23	0	0	12	62	5	0	0	0	0	0	0	0	163	0	30	38	8
7:15 AM	0	0	21	19	0	0	33	0	0	16	62	6	0	0	0	0	0	0	0	157	0	34	49	23
7:30 AM	0	0	30	28	0	0	25	0	0	14	89	3	0	0	0	0	0	0	0	189	0	33	52	11
7:45 AM	0	0	41	37	0	0	39	0	0	17	111	6	0	0	0	0	0	0	0	251	0	65	73	18
8:00 AM	0	0	31	33	0	0	36	0	0	20	102	7	0	0	0	0	0	0	0	229	1	57	74	29
8:15 AM	0	0	35	36	0	0	47	0	0	27	129	13	0	0	0	0	0	0	0	287	0	64	73	10
8:30 AM	0	0	34	45	0	0	29	0	0	17	113	7	0	0	0	0	0	0	0	245	1	71	70	13
8:45 AM	0	0	36	39	0	1	40	0	0	25	118	9	0	0	0	0	0	0	0	268	0	82	76	18
Total Survey	0	0	264	262	0	1	272	0	0	148	786	56	0	0	0	0	0	0	0	1,789	2	436	505	130

Peak Hour Summary 8:00 AM to 9:00 AM

By Approach	Northbound WESTLAKE AVE				Southbound WESTLAKE AVE				Eastbound VIRGINIA ST				Westbound VIRGINIA ST				Total	Pedestrians & Bicycles In Crosswalk (By Location)			
	In	Out	Total	HV	In	Out	Total	HV	In	Out	Total	HV	In	Out	Total	HV		North	South	East	West
Volume	289	188	477	18	153	225	378	16	587	0	587	37	0	616	616	0	1,029	2	274	293	70
%HV	6.2%				10.5%				6.3%				0.0%				6.9%				
PHF	0.91				0.81				0.87				0.00				0.90				

By Movement	Northbound WESTLAKE AVE				Southbound WESTLAKE AVE				Eastbound VIRGINIA ST				Westbound VIRGINIA ST				Total
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R	
Volume	0	0	136	153	0	1	152	0	0	89	462	36	0	0	0	0	1,029
%HV	0.0%	0.0%	8.1%	4.6%	0.0%	0.0%	10.5%	0.0%	0.0%	4.5%	6.7%	5.6%	0.0%	0.0%	0.0%	0.0%	6.9%
PHF	0.00	0.00	0.94	0.85	0.00	0.25	0.81	0.00	0.00	0.82	0.90	0.69	0.00	0.00	0.00	0.00	0.90

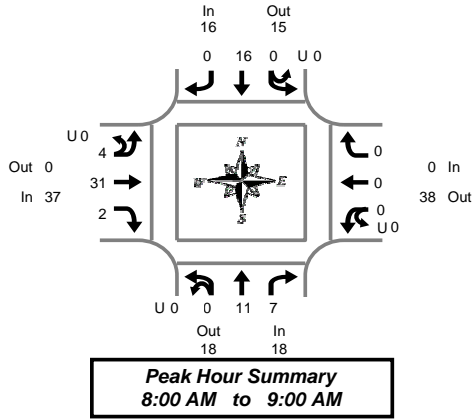
Rolling Hour Summary 7:00 AM to 9:00 AM

Interval Start Time	Northbound WESTLAKE AVE				Southbound WESTLAKE AVE				Eastbound VIRGINIA ST				Westbound VIRGINIA ST				Interval Total	Pedestrians & Bicycles In Crosswalk (By Location)			
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R		North	South	East	West
7:00 AM	0	0	128	109	0	0	120	0	0	59	324	20	0	0	0	0	760	0	162	212	60
7:15 AM	0	0	123	117	0	0	133	0	0	67	364	22	0	0	0	0	826	1	189	248	81
7:30 AM	0	0	137	134	0	0	147	0	0	78	431	29	0	0	0	0	956	1	219	272	68
7:45 AM	0	0	141	151	0	0	151	0	0	81	455	33	0	0	0	0	1,012	2	257	290	70
8:00 AM	0	0	136	153	0	1	152	0	0	89	462	36	0	0	0	0	1,029	2	274	293	70

Heavy Vehicle Summary



Eric Boivin
(303) 668-0220



WESTLAKE AVE & VIRGINIA ST

Thursday, February 12, 2015
7:00 AM to 9:00 AM

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

Interval Start Time	Northbound WESTLAKE AVE					Southbound WESTLAKE AVE					Eastbound VIRGINIA ST					Westbound VIRGINIA ST					Interval Total
	U	L	T	R	Total	U	L	T	R	Total	U	L	T	R	Total	U	L	T	R	Total	
7:00 AM	0	0	2	0	2	0	0	2	0	2	0	1	7	0	8	0	0	0	0	0	12
7:15 AM	0	0	3	0	3	0	0	3	0	3	0	1	6	0	7	0	0	0	0	0	13
7:30 AM	0	0	2	0	2	0	0	5	0	5	0	2	8	0	10	0	0	0	0	0	17
7:45 AM	0	0	2	0	2	0	0	2	0	2	0	3	8	0	11	0	0	0	0	0	15
8:00 AM	0	0	3	3	6	0	0	3	0	3	0	0	6	0	6	0	0	0	0	0	15
8:15 AM	0	0	2	1	3	0	0	4	0	4	0	1	9	0	10	0	0	0	0	0	17
8:30 AM	0	0	3	2	5	0	0	4	0	4	0	2	7	1	10	0	0	0	0	0	19
8:45 AM	0	0	3	1	4	0	0	5	0	5	0	1	9	1	11	0	0	0	0	0	20
Total Survey	0	0	20	7	27	0	0	28	0	28	0	11	60	2	73	0	0	0	0	0	9

Peak Hour Summary 8:00 AM to 9:00 AM

By Approach	Northbound WESTLAKE AVE			Southbound WESTLAKE AVE			Eastbound VIRGINIA ST			Westbound VIRGINIA ST			Total
	In	Out	Total	In	Out	Total	In	Out	Total	In	Out	Total	
Volume	18	18	36	16	15	31	37	0	37	0	38	38	71

By Movement	Northbound WESTLAKE AVE					Southbound WESTLAKE AVE					Eastbound VIRGINIA ST					Westbound VIRGINIA ST					Total
	U	L	T	R	Total	U	L	T	R	Total	U	L	T	R	Total	U	L	T	R	Total	
Volume	0	0	11	7	18	0	0	16	0	16	0	4	31	2	37	0	0	0	0	0	71

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

Interval Start Time	Northbound WESTLAKE AVE					Southbound WESTLAKE AVE					Eastbound VIRGINIA ST					Westbound VIRGINIA ST					Interval Total
	U	L	T	R	Total	U	L	T	R	Total	U	L	T	R	Total	U	L	T	R	Total	
7:00 AM	0	0	9	0	9	0	0	12	0	12	0	7	29	0	36	0	0	0	0	0	57
7:15 AM	0	0	10	3	13	0	0	13	0	13	0	6	28	0	34	0	0	0	0	0	60
7:30 AM	0	0	9	4	13	0	0	14	0	14	0	6	31	0	37	0	0	0	0	0	64
7:45 AM	0	0	10	6	16	0	0	13	0	13	0	6	30	1	37	0	0	0	0	0	66
8:00 AM	0	0	11	7	18	0	0	16	0	16	0	4	31	2	37	0	0	0	0	0	71

Peak Hour Summary

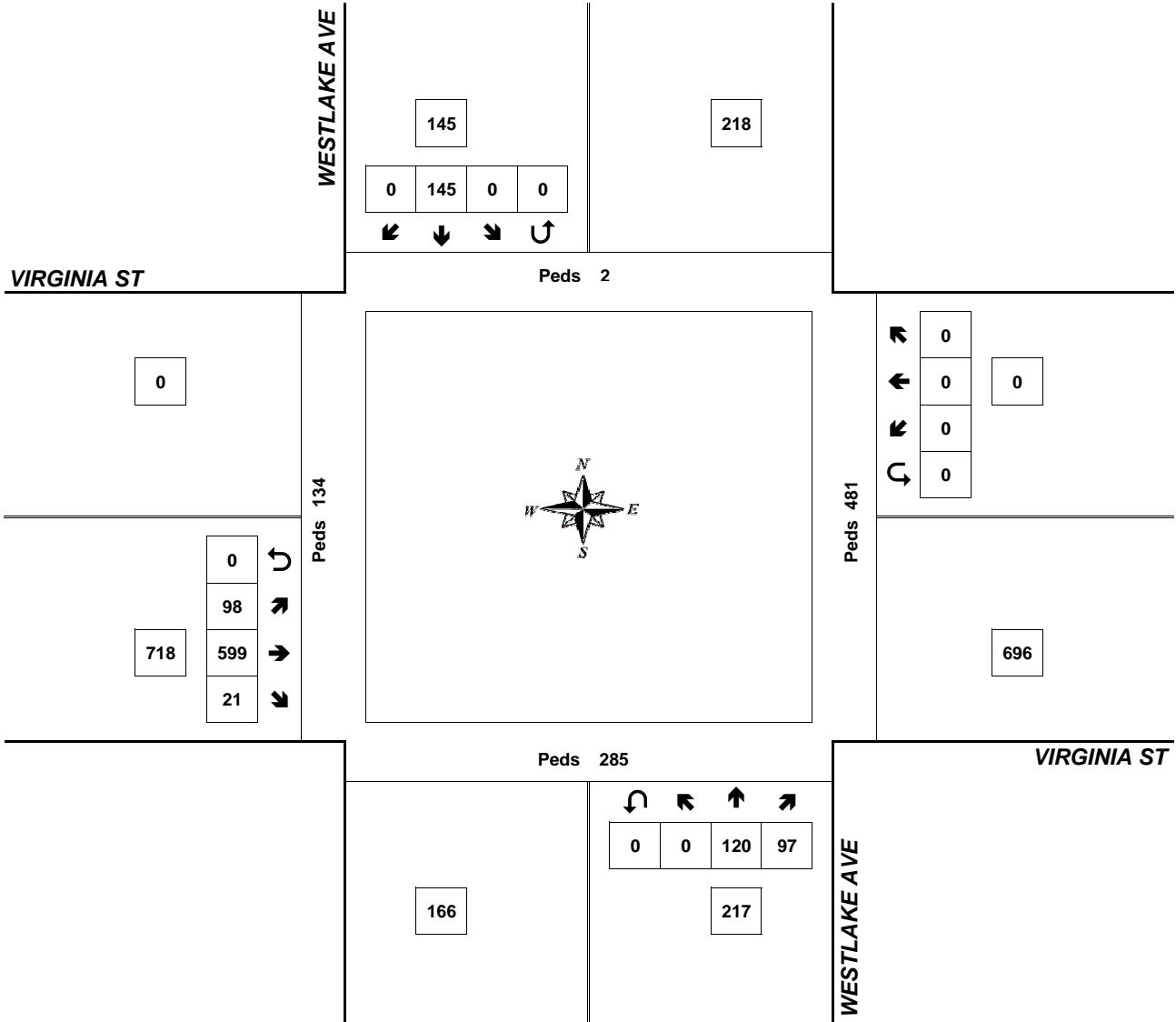
Site ID: 477



Eric Boivin
(303) 668-0220

WESTLAKE AVE & VIRGINIA ST

4:45 PM to 5:45 PM
Thursday, February 12, 2015



Approach	PHF	HV%	Volume
EB	0.94	4.3%	718
WB	0.00	0.0%	0
NB	0.83	3.2%	217
SB	0.88	6.2%	145
Intersection	0.96	4.4%	1,080

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

Total Vehicle Summary



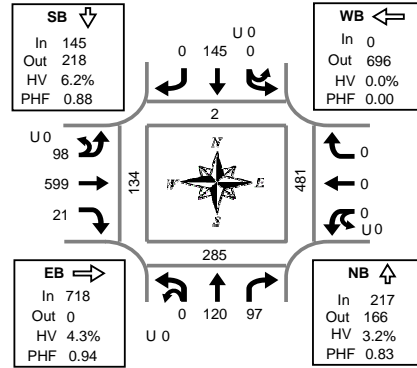
Eric Boivin
(303) 668-0220

Site ID: 477

WESTLAKE AVE & VIRGINIA ST

Thursday, February 12, 2015

4:00 PM to 6:00 PM



Peak Hour Summary 4:45 PM to 5:45 PM

15-Minute Interval Summary

4:00 PM to 6:00 PM

Interval Start Time	Northbound WESTLAKE AVE				Southbound WESTLAKE AVE				Eastbound VIRGINIA ST				Westbound VIRGINIA ST				Interval Total	Pedestrians & Bicycles In Crosswalk (By Location)						
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R		North	South	East	West			
4:00 PM	0	0	24	17	0	0	40	0	0	21	132	3	0	0	0	0	0	0	0	237	0	67	77	26
4:15 PM	0	0	28	17	0	0	30	0	0	22	126	6	0	0	0	0	0	0	0	229	1	46	91	38
4:30 PM	0	0	38	22	0	0	29	0	0	19	135	6	0	0	0	0	0	0	0	249	1	60	87	30
4:45 PM	0	0	35	30	0	0	36	0	0	22	136	8	0	0	0	0	0	0	0	267	1	61	95	30
5:00 PM	0	0	32	23	0	0	35	0	0	31	155	4	0	0	0	0	0	0	0	280	0	82	128	32
5:15 PM	0	0	33	23	0	0	41	0	0	22	154	2	0	0	0	0	0	0	0	275	1	71	135	38
5:30 PM	0	0	20	21	0	0	33	0	0	23	154	7	0	0	0	0	0	0	0	258	0	71	123	34
5:45 PM	0	0	33	22	0	1	28	0	0	18	133	1	0	0	0	0	0	0	0	236	0	70	122	37
Total Survey	0	0	243	175	0	1	272	0	0	178	1,125	37	0	0	0	0	0	0	0	2,031	4	528	858	265

Peak Hour Summary

4:45 PM to 5:45 PM

By Approach	Northbound WESTLAKE AVE				Southbound WESTLAKE AVE				Eastbound VIRGINIA ST				Westbound VIRGINIA ST				Total	Pedestrians & Bicycles In Crosswalk (By Location)			
	In	Out	Total	HV	In	Out	Total	HV	In	Out	Total	HV	In	Out	Total	HV		North	South	East	West
Volume	217	166	383	7	145	218	363	9	718	0	718	31	0	696	696	0	1,080	2	285	481	134
%HV	3.2%				6.2%				4.3%				0.0%				4.4%				
PHF	0.83				0.88				0.94				0.00				0.96				

By Movement	Northbound WESTLAKE AVE				Southbound WESTLAKE AVE				Eastbound VIRGINIA ST				Westbound VIRGINIA ST				Total				
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R					
Volume	0	0	120	97	0	0	145	0	0	98	599	21	0	0	0	0	1,080				
%HV	0.0%	0.0%	5.0%	1.0%	0.0%	0.0%	6.2%	0.0%	0.0%	3.1%	4.7%	0.0%	0.0%	0.0%	0.0%	0.0%	4.4%				
PHF	0.00	0.00	0.86	0.81	0.00	0.00	0.88	0.00	0.00	0.79	0.97	0.66	0.00	0.00	0.00	0.00	0.96				

Rolling Hour Summary

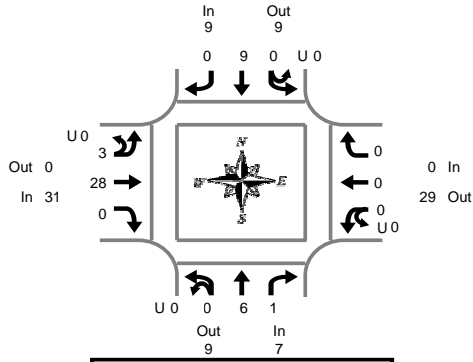
4:00 PM to 6:00 PM

Interval Start Time	Northbound WESTLAKE AVE				Southbound WESTLAKE AVE				Eastbound VIRGINIA ST				Westbound VIRGINIA ST				Interval Total	Pedestrians & Bicycles In Crosswalk (By Location)			
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R		North	South	East	West
4:00 PM	0	0	125	86	0	0	135	0	0	84	529	23	0	0	0	0	982	3	234	350	124
4:15 PM	0	0	133	92	0	0	130	0	0	94	552	24	0	0	0	0	1,025	3	249	401	130
4:30 PM	0	0	138	98	0	0	141	0	0	94	580	20	0	0	0	0	1,071	3	274	445	130
4:45 PM	0	0	120	97	0	0	145	0	0	98	599	21	0	0	0	0	1,080	2	285	481	134
5:00 PM	0	0	118	89	0	1	137	0	0	94	596	14	0	0	0	0	1,049	1	294	508	141

Heavy Vehicle Summary



Eric Boivin
(303) 668-0220



WESTLAKE AVE & VIRGINIA ST

Thursday, February 12, 2015

4:00 PM to 6:00 PM

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

Interval Start Time	Northbound WESTLAKE AVE					Southbound WESTLAKE AVE					Eastbound VIRGINIA ST					Westbound VIRGINIA ST					Interval Total
	U	L	T	R	Total	U	L	T	R	Total	U	L	T	R	Total	U	L	T	R	Total	
4:00 PM	0	0	1	0	1	0	0	2	0	2	0	1	9	0	10	0	0	0	0	0	13
4:15 PM	0	0	3	0	3	0	0	1	0	1	0	1	6	0	7	0	0	0	0	0	11
4:30 PM	0	0	2	1	3	0	0	2	0	2	0	1	12	0	13	0	0	0	0	0	18
4:45 PM	0	0	3	0	3	0	0	2	0	2	0	0	6	0	6	0	0	0	0	0	11
5:00 PM	0	0	3	1	4	0	0	4	0	4	0	1	9	0	10	0	0	0	0	0	18
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	2	6	0	8	0	0	0	0	0	8
5:30 PM	0	0	0	0	0	0	0	3	0	3	0	0	7	0	7	0	0	0	0	0	10
5:45 PM	0	0	2	0	2	0	0	1	0	1	0	0	6	0	6	0	0	0	0	0	9
Total Survey	0	0	14	2	16	0	0	15	0	15	0	6	61	0	67	0	0	0	0	0	2

Peak Hour Summary
4:45 PM to 5:45 PM

By Approach	Northbound WESTLAKE AVE			Southbound WESTLAKE AVE			Eastbound VIRGINIA ST			Westbound VIRGINIA ST			Total
	In	Out	Total	In	Out	Total	In	Out	Total	In	Out	Total	
Volume	7	9	16	9	9	18	31	0	31	0	29	29	47

By Movement	Northbound WESTLAKE AVE					Southbound WESTLAKE AVE					Eastbound VIRGINIA ST					Westbound VIRGINIA ST					Total
	U	L	T	R	Total	U	L	T	R	Total	U	L	T	R	Total	U	L	T	R	Total	
Volume	0	0	6	1	7	0	0	9	0	9	0	3	28	0	31	0	0	0	0	0	47

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

Interval Start Time	Northbound WESTLAKE AVE					Southbound WESTLAKE AVE					Eastbound VIRGINIA ST					Westbound VIRGINIA ST					Interval Total
	U	L	T	R	Total	U	L	T	R	Total	U	L	T	R	Total	U	L	T	R	Total	
4:00 PM	0	0	9	1	10	0	0	7	0	7	0	3	33	0	36	0	0	0	0	0	53
4:15 PM	0	0	11	2	13	0	0	9	0	9	0	3	33	0	36	0	0	0	0	0	58
4:30 PM	0	0	8	2	10	0	0	8	0	8	0	4	33	0	37	0	0	0	0	0	55
4:45 PM	0	0	6	1	7	0	0	9	0	9	0	3	28	0	31	0	0	0	0	0	47
5:00 PM	0	0	5	1	6	0	0	8	0	8	0	3	28	0	31	0	0	0	0	0	45

Peak Hour Summary

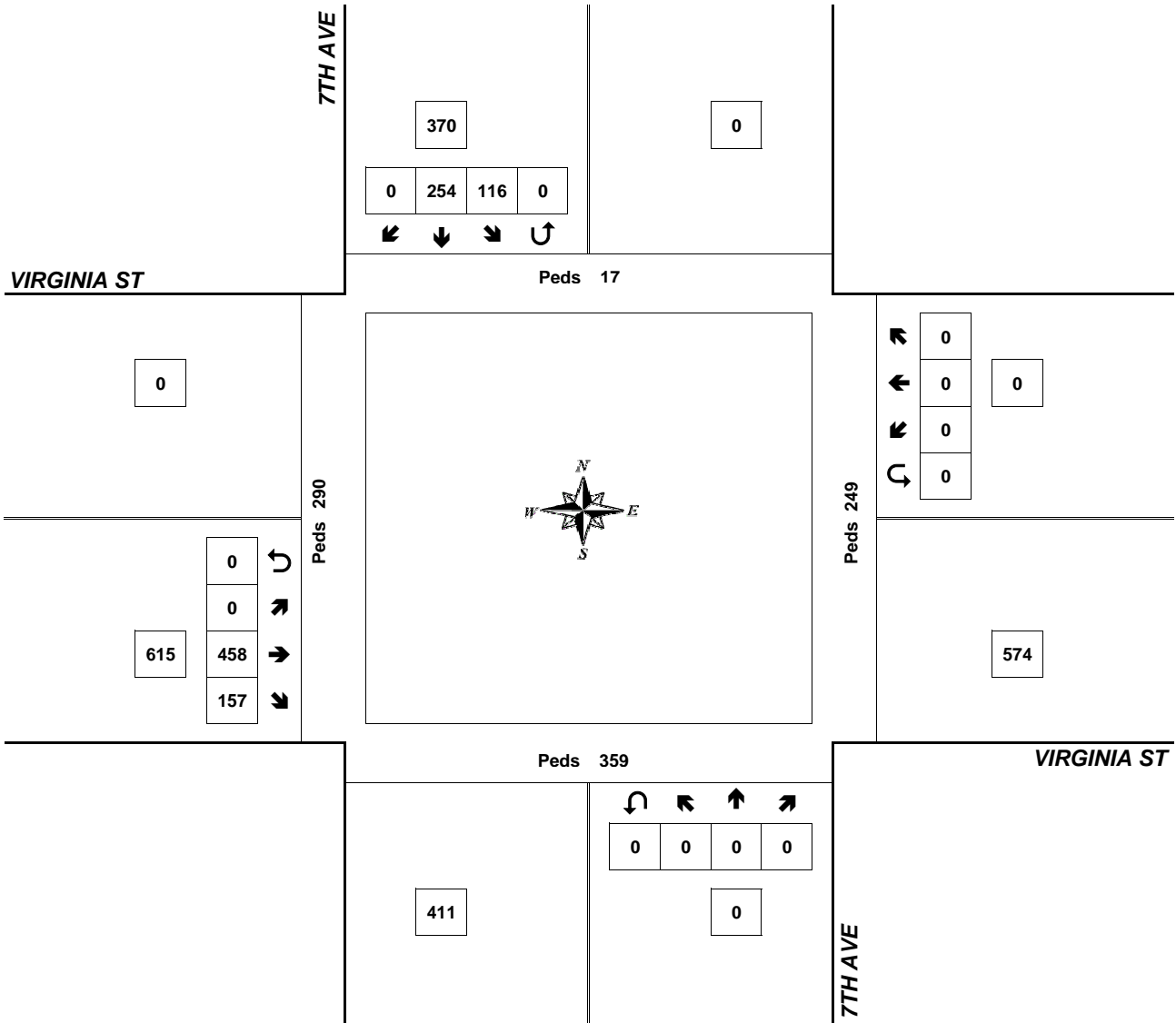
Site ID: 476



Eric Boivin
(303) 668-0220

7TH AVE & VIRGINIA ST

8:00 AM to 9:00 AM
Thursday, February 12, 2015



Approach	PHF	HV%	Volume
EB	0.94	5.7%	615
WB	0.00	0.0%	0
NB	0.00	0.0%	0
SB	0.96	1.4%	370
Intersection	0.95	4.1%	985

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

Total Vehicle Summary



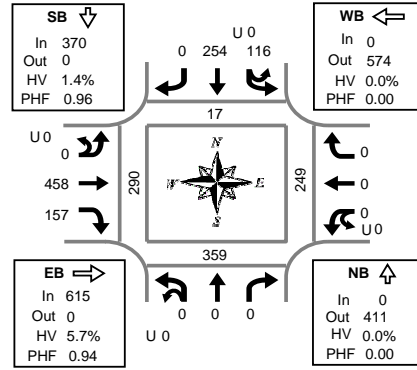
Eric Boivin
(303) 668-0220

Site ID: 476

7TH AVE & VIRGINIA ST

Thursday, February 12, 2015

7:00 AM to 9:00 AM



Peak Hour Summary
8:00 AM to 9:00 AM

15-Minute Interval Summary

7:00 AM to 9:00 AM

Interval Start Time	Northbound 7TH AVE				Southbound 7TH AVE				Eastbound VIRGINIA ST				Westbound VIRGINIA ST				Interval Total	Pedestrians & Bicycles In Crosswalk (By Location)					
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R		North	South	East	West		
7:00 AM	0	0	0	0	0	25	22	0	0	0	62	19	0	0	0	0	0	0	128	0	33	27	23
7:15 AM	0	0	0	0	0	17	35	0	0	0	61	22	0	0	0	0	0	0	135	1	38	31	57
7:30 AM	0	0	0	0	0	19	52	0	0	0	70	32	0	0	0	0	0	0	173	2	48	58	47
7:45 AM	0	0	0	0	0	24	52	0	0	0	115	36	0	0	0	0	0	0	227	5	73	44	71
8:00 AM	0	0	0	0	0	28	60	0	0	0	100	37	0	0	0	0	0	0	225	5	64	54	77
8:15 AM	0	0	0	0	0	32	60	0	0	0	115	38	0	0	0	0	0	0	245	4	89	66	70
8:30 AM	0	0	0	0	0	25	69	0	0	0	123	38	0	0	0	0	0	0	255	4	105	68	70
8:45 AM	0	0	0	0	0	31	65	0	0	0	120	44	0	0	0	0	0	0	260	4	101	61	73
Total Survey	0	0	0	0	0	201	415	0	0	0	766	266	0	0	0	0	0	0	1,648	25	551	409	488

Peak Hour Summary

8:00 AM to 9:00 AM

By Approach	Northbound 7TH AVE				Southbound 7TH AVE				Eastbound VIRGINIA ST				Westbound VIRGINIA ST				Total	Pedestrians & Bicycles In Crosswalk (By Location)			
	In	Out	Total	HV	In	Out	Total	HV	In	Out	Total	HV	In	Out	Total	HV		North	South	East	West
Volume	0	411	411	0	370	0	370	5	615	0	615	35	0	574	574	0	985	17	359	249	290
%HV	0.0%				1.4%				5.7%				0.0%				4.1%				
PHF	0.00				0.96				0.94				0.00				0.95				

By Movement	Northbound 7TH AVE				Southbound 7TH AVE				Eastbound VIRGINIA ST				Westbound VIRGINIA ST				Total
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R	
Volume	0	0	0	0	0	116	254	0	0	0	458	157	0	0	0	0	985
%HV	0.0%	0.0%	0.0%	0.0%	0.0%	2.6%	0.8%	0.0%	0.0%	0.0%	4.4%	9.6%	0.0%	0.0%	0.0%	0.0%	4.1%
PHF	0.00	0.00	0.00	0.00	0.00	0.91	0.92	0.00	0.00	0.00	0.93	0.89	0.00	0.00	0.00	0.00	0.95

Rolling Hour Summary

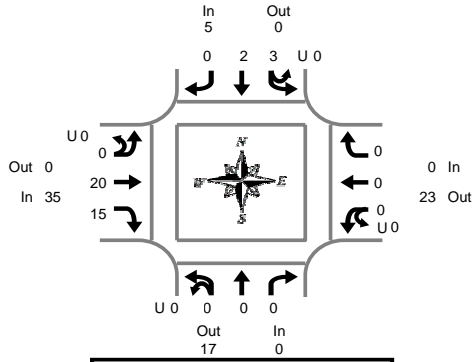
7:00 AM to 9:00 AM

Interval Start Time	Northbound 7TH AVE				Southbound 7TH AVE				Eastbound VIRGINIA ST				Westbound VIRGINIA ST				Interval Total	Pedestrians & Bicycles In Crosswalk (By Location)			
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R		North	South	East	West
7:00 AM	0	0	0	0	0	85	161	0	0	0	308	109	0	0	0	0	663	8	192	160	198
7:15 AM	0	0	0	0	0	88	199	0	0	0	346	127	0	0	0	0	760	13	223	187	252
7:30 AM	0	0	0	0	0	103	224	0	0	0	400	143	0	0	0	0	870	16	274	222	265
7:45 AM	0	0	0	0	0	109	241	0	0	0	453	149	0	0	0	0	952	18	331	232	288
8:00 AM	0	0	0	0	0	116	254	0	0	0	458	157	0	0	0	0	985	17	359	249	290

Heavy Vehicle Summary



Eric Boivin
(303) 668-0220



**Peak Hour Summary
8:00 AM to 9:00 AM**

7TH AVE & VIRGINIA ST

Thursday, February 12, 2015
7:00 AM to 9:00 AM

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

Interval Start Time	Northbound 7TH AVE					Southbound 7TH AVE					Eastbound VIRGINIA ST					Westbound VIRGINIA ST					Interval Total
	U	L	T	R	Total	U	L	T	R	Total	U	L	T	R	Total	U	L	T	R	Total	
7:00 AM	0	0	0	0	0	0	1	0	0	1	0	0	3	2	5	0	0	0	0	0	6
7:15 AM	0	0	0	0	0	0	1	1	0	2	0	0	5	2	7	0	0	0	0	0	9
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	3	5	8	0	0	0	0	0	8
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	4	3	7	0	0	0	0	0	7
8:00 AM	0	0	0	0	0	0	1	1	0	2	0	0	5	5	10	0	0	0	0	0	12
8:15 AM	0	0	0	0	0	0	1	0	0	1	0	0	5	3	8	0	0	0	0	0	9
8:30 AM	0	0	0	0	0	0	1	1	0	2	0	0	4	4	8	0	0	0	0	0	10
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	6	3	9	0	0	0	0	0	9
Total Survey	0	0	0	0	0	0	5	3	0	8	0	0	35	27	62	0	0	0	0	0	27

Peak Hour Summary
8:00 AM to 9:00 AM

By Approach	Northbound 7TH AVE			Southbound 7TH AVE			Eastbound VIRGINIA ST			Westbound VIRGINIA ST			Total
	In	Out	Total	In	Out	Total	In	Out	Total	In	Out	Total	
Volume	0	17	17	5	0	5	35	0	35	0	23	23	40

By Movement	Northbound 7TH AVE					Southbound 7TH AVE					Eastbound VIRGINIA ST					Westbound VIRGINIA ST					Total
	U	L	T	R	Total	U	L	T	R	Total	U	L	T	R	Total	U	L	T	R	Total	
Volume	0	0	0	0	0	0	3	2	0	5	0	0	20	15	35	0	0	0	0	0	40

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

Interval Start Time	Northbound 7TH AVE					Southbound 7TH AVE					Eastbound VIRGINIA ST					Westbound VIRGINIA ST					Interval Total
	U	L	T	R	Total	U	L	T	R	Total	U	L	T	R	Total	U	L	T	R	Total	
7:00 AM	0	0	0	0	0	0	2	1	0	3	0	0	15	12	27	0	0	0	0	0	30
7:15 AM	0	0	0	0	0	0	2	2	0	4	0	0	17	15	32	0	0	0	0	0	36
7:30 AM	0	0	0	0	0	0	2	1	0	3	0	0	17	16	33	0	0	0	0	0	36
7:45 AM	0	0	0	0	0	0	3	2	0	5	0	0	18	15	33	0	0	0	0	0	38
8:00 AM	0	0	0	0	0	0	3	2	0	5	0	0	20	15	35	0	0	0	0	0	40

Peak Hour Summary

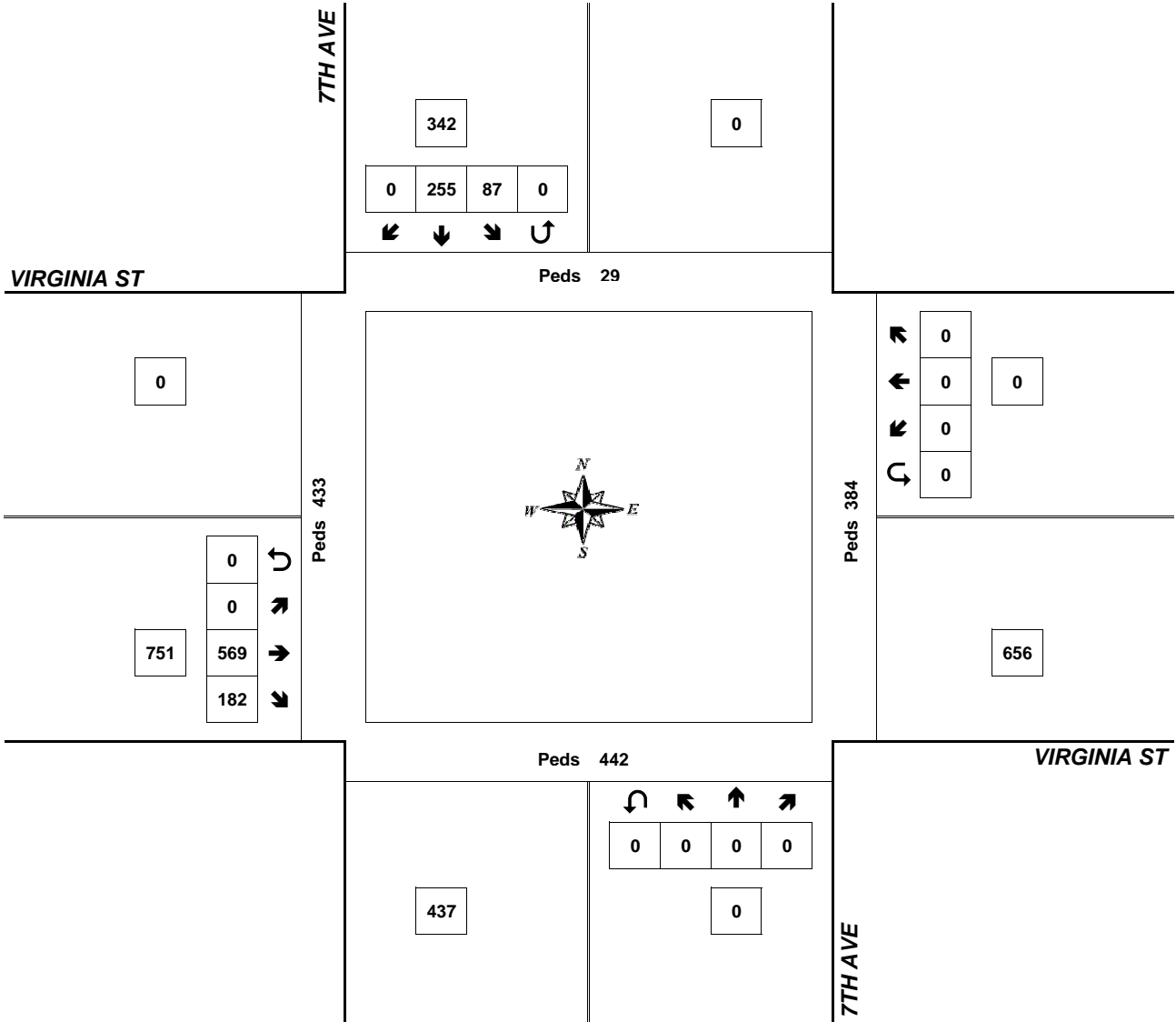
Site ID: 476



Eric Boivin
(303) 668-0220

7TH AVE & VIRGINIA ST

5:00 PM to 6:00 PM
Thursday, February 12, 2015



Approach	PHF	HV%	Volume
EB	0.92	4.1%	751
WB	0.00	0.0%	0
NB	0.00	0.0%	0
SB	0.92	0.9%	342
Intersection	0.92	3.1%	1,093

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

Total Vehicle Summary



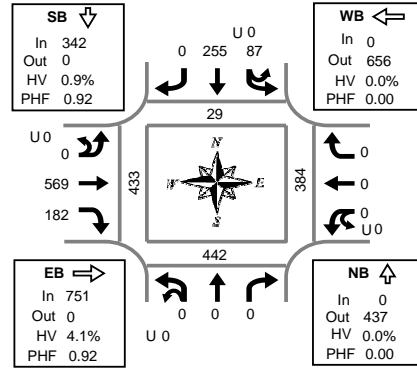
Eric Boivin
(303) 668-0220

Site ID: 476

7TH AVE & VIRGINIA ST

Thursday, February 12, 2015

4:00 PM to 6:00 PM



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

15-Minute Interval Summary

4:00 PM to 6:00 PM

Interval Start Time	Northbound 7TH AVE				Southbound 7TH AVE				Eastbound VIRGINIA ST				Westbound VIRGINIA ST				Interval Total	Pedestrians & Bicycles In Crosswalk (By Location)					
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R		North	South	East	West		
4:00 PM	0	0	0	0	0	18	59	0	0	0	117	37	0	0	0	0	0	0	231	2	71	45	71
4:15 PM	0	0	0	0	0	12	59	0	0	0	117	34	0	0	0	0	0	0	222	2	46	59	93
4:30 PM	0	0	0	0	0	8	62	0	0	0	107	39	0	0	0	0	0	0	216	7	77	60	85
4:45 PM	0	0	0	0	0	16	58	0	0	0	130	46	0	0	0	0	0	0	250	7	109	78	94
5:00 PM	0	0	0	0	0	14	68	0	0	0	150	44	0	0	0	0	0	0	276	13	120	129	93
5:15 PM	0	0	0	0	0	28	55	0	0	0	123	50	0	0	0	0	0	0	256	9	109	106	141
5:30 PM	0	0	0	0	0	17	67	0	0	0	136	45	0	0	0	0	0	0	265	4	104	89	106
5:45 PM	0	0	0	0	0	28	65	0	0	0	160	43	0	0	0	0	0	0	296	3	109	60	93
Total Survey	0	0	0	0	0	141	493	0	0	0	1,040	338	0	0	0	0	0	0	2,012	47	745	626	776

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

By Approach	Northbound 7TH AVE				Southbound 7TH AVE				Eastbound VIRGINIA ST				Westbound VIRGINIA ST				Total	Pedestrians & Bicycles In Crosswalk (By Location)						
	In	Out	Total	HV	In	Out	Total	HV	In	Out	Total	HV	In	Out	Total	HV		North	South	East	West			
Volume	0	437	437	0	342	0	342	3	751	0	751	31	0	656	656	0	0	0	0	1,093	29	442	384	433
%HV		0.0%				0.9%				4.1%				0.0%						3.1%				
PHF		0.00				0.92				0.92				0.00						0.92				

By Movement	Northbound 7TH AVE				Southbound 7TH AVE				Eastbound VIRGINIA ST				Westbound VIRGINIA ST				Total		
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R			
Volume	0	0	0	0	0	87	255	0	0	0	569	182	0	0	0	0	0	0	1,093
%HV	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	1.2%	0.0%	0.0%	0.0%	2.5%	9.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	3.1%
PHF	0.00	0.00	0.00	0.00	0.00	0.78	0.94	0.00	0.00	0.00	0.89	0.91	0.00	0.00	0.00	0.00	0.00	0.00	0.92

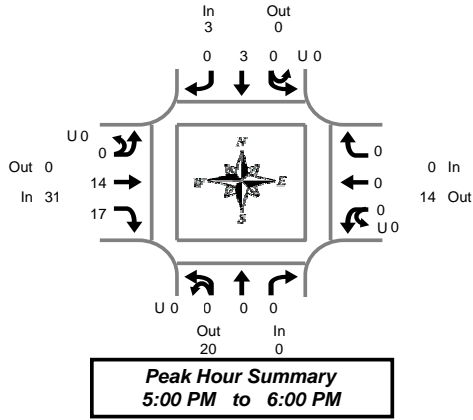
Rolling Hour Summary 4:00 PM to 6:00 PM

Interval Start Time	Northbound 7TH AVE				Southbound 7TH AVE				Eastbound VIRGINIA ST				Westbound VIRGINIA ST				Interval Total	Pedestrians & Bicycles In Crosswalk (By Location)					
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R		North	South	East	West		
4:00 PM	0	0	0	0	0	54	238	0	0	0	471	156	0	0	0	0	0	0	919	18	303	242	343
4:15 PM	0	0	0	0	0	50	247	0	0	0	504	163	0	0	0	0	0	0	964	29	352	326	365
4:30 PM	0	0	0	0	0	66	243	0	0	0	510	179	0	0	0	0	0	0	998	36	415	373	413
4:45 PM	0	0	0	0	0	75	248	0	0	0	539	185	0	0	0	0	0	0	1,047	33	442	402	434
5:00 PM	0	0	0	0	0	87	255	0	0	0	569	182	0	0	0	0	0	0	1,093	29	442	384	433

Heavy Vehicle Summary



Eric Boivin
(303) 668-0220



7TH AVE & VIRGINIA ST

Thursday, February 12, 2015
4:00 PM to 6:00 PM

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

Interval Start Time	Northbound 7TH AVE					Southbound 7TH AVE					Eastbound VIRGINIA ST					Westbound VIRGINIA ST					Interval Total
	U	L	T	R	Total	U	L	T	R	Total	U	L	T	R	Total	U	L	T	R	Total	
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	4	5	9	0	0	0	0	0	9
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	2	4	6	0	0	0	0	0	6
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	8	4	12	0	0	0	0	0	12
4:45 PM	0	0	0	0	0	0	0	2	0	2	0	0	3	5	8	0	0	0	0	0	10
5:00 PM	0	0	0	0	0	0	0	1	0	1	0	0	6	5	11	0	0	0	0	0	12
5:15 PM	0	0	0	0	0	0	0	1	0	1	0	0	1	5	6	0	0	0	0	0	7
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	2	4	6	0	0	0	0	0	6
5:45 PM	0	0	0	0	0	0	0	1	0	1	0	0	5	3	8	0	0	0	0	0	9
Total Survey	0	0	0	0	0	0	0	5	0	5	0	0	31	35	66	0	0	0	0	0	35

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

By Approach	Northbound 7TH AVE			Southbound 7TH AVE			Eastbound VIRGINIA ST			Westbound VIRGINIA ST			Total
	In	Out	Total	In	Out	Total	In	Out	Total	In	Out	Total	
Volume	0	20	20	3	0	3	31	0	31	0	14	14	34

By Movement	Northbound 7TH AVE					Southbound 7TH AVE					Eastbound VIRGINIA ST					Westbound VIRGINIA ST					Total
	U	L	T	R	Total	U	L	T	R	Total	U	L	T	R	Total	U	L	T	R	Total	
Volume	0	0	0	0	0	0	0	3	0	3	0	0	14	17	31	0	0	0	0	0	34

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

Interval Start Time	Northbound 7TH AVE					Southbound 7TH AVE					Eastbound VIRGINIA ST					Westbound VIRGINIA ST					Interval Total
	U	L	T	R	Total	U	L	T	R	Total	U	L	T	R	Total	U	L	T	R	Total	
4:00 PM	0	0	0	0	0	0	0	2	0	2	0	0	17	18	35	0	0	0	0	0	37
4:15 PM	0	0	0	0	0	0	0	3	0	3	0	0	19	18	37	0	0	0	0	0	40
4:30 PM	0	0	0	0	0	0	0	4	0	4	0	0	18	19	37	0	0	0	0	0	41
4:45 PM	0	0	0	0	0	0	0	4	0	4	0	0	12	19	31	0	0	0	0	0	35
5:00 PM	0	0	0	0	0	0	0	3	0	3	0	0	14	17	31	0	0	0	0	0	34

Peak Hour Summary

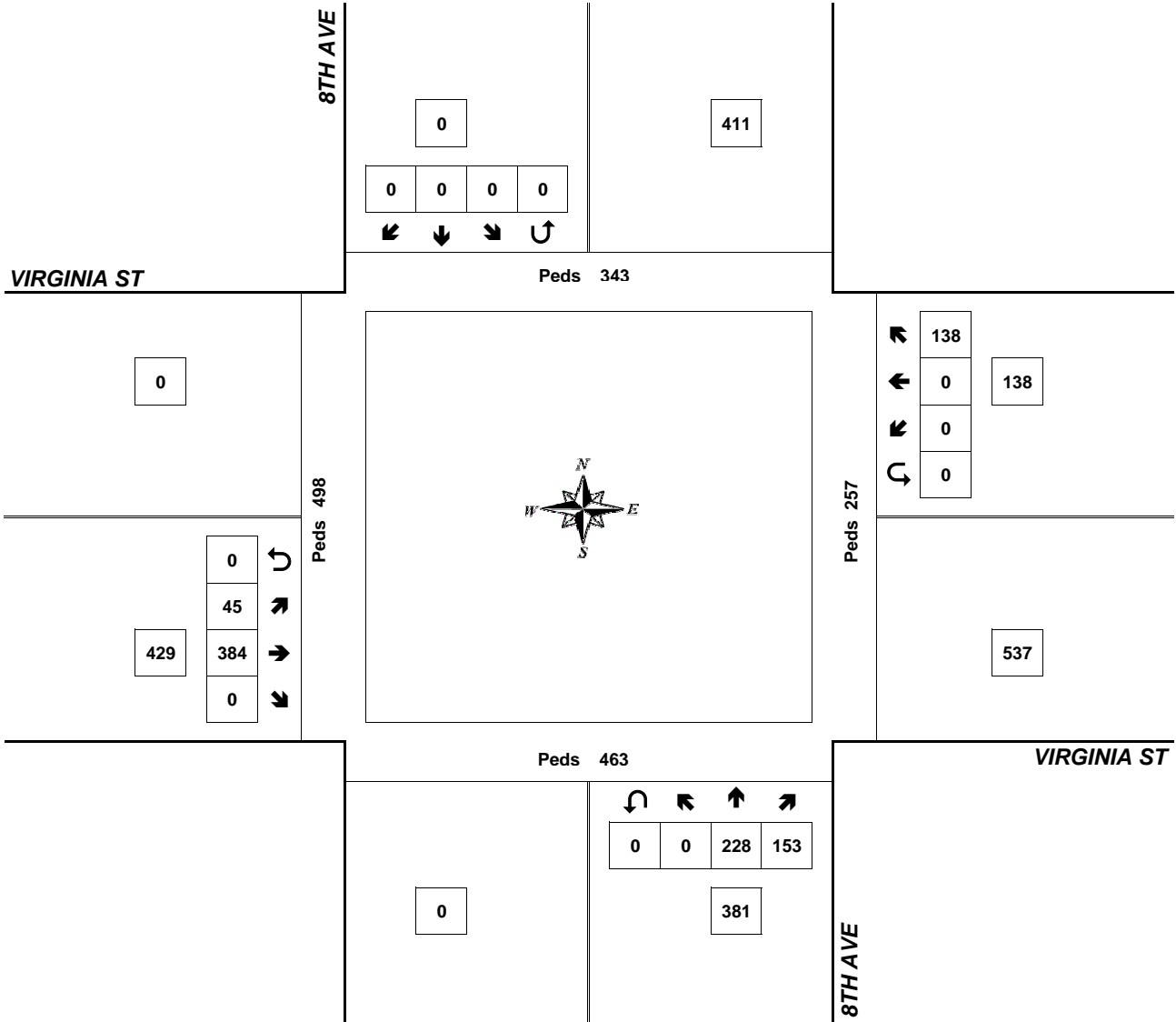
Site ID: 505



Eric Boivin
(303) 668-0220

8TH AVE & VIRGINIA ST

8:00 AM to 9:00 AM
Thursday, February 12, 2015



Approach	PHF	HV%	Volume
EB	0.97	5.8%	429
WB	0.84	5.1%	138
NB	0.86	8.7%	381
SB	0.00	0.0%	0
Intersection	0.90	6.9%	948

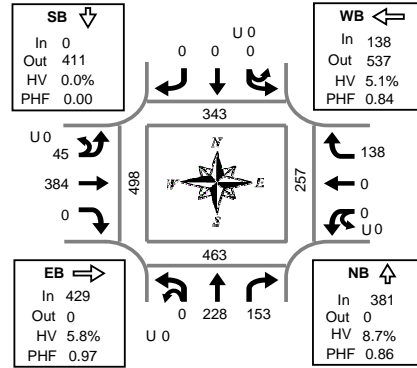
Count Period: 7:00 AM to 9:00 AM

Total Vehicle Summary



Eric Boivin
(303) 668-0220

Site ID: 505
8TH AVE & VIRGINIA ST
 Thursday, February 12, 2015
 7:00 AM to 9:00 AM



Peak Hour Summary
8:00 AM to 9:00 AM

15-Minute Interval Summary

7:00 AM to 9:00 AM

Interval Start Time	Northbound 8TH AVE				Southbound 8TH AVE				Eastbound VIRGINIA ST				Westbound VIRGINIA ST				Interval Total	Pedestrians & Bicycles In Crosswalk (By Location)			
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R		North	South	East	West
7:00 AM	0	0	32	34	0	0	0	0	0	7	68	0	0	0	0	18	159	26	49	22	43
7:15 AM	0	0	43	25	0	0	0	0	0	5	51	0	0	0	0	14	138	34	47	29	41
7:30 AM	0	0	44	38	0	0	0	0	0	11	75	0	0	0	22	190	31	66	29	84	
7:45 AM	0	0	49	39	0	0	0	0	0	14	80	0	0	0	15	197	60	103	49	113	
8:00 AM	0	0	48	43	0	0	0	0	0	9	89	0	0	0	35	224	81	92	53	87	
8:15 AM	0	0	55	40	0	0	0	0	0	11	100	0	0	0	28	234	83	125	58	128	
8:30 AM	0	0	60	24	0	0	0	0	0	11	99	0	0	0	34	228	90	118	71	127	
8:45 AM	0	0	65	46	0	0	0	0	0	14	96	0	0	0	41	262	89	128	75	156	
Total Survey	0	0	396	289	0	0	0	0	0	82	658	0	0	0	207	1,632	494	728	386	779	

Peak Hour Summary

8:00 AM to 9:00 AM

By Approach	Northbound 8TH AVE				Southbound 8TH AVE				Eastbound VIRGINIA ST				Westbound VIRGINIA ST				Total	Pedestrians & Bicycles In Crosswalk (By Location)				
	In	Out	Total	HV	In	Out	Total	HV	In	Out	Total	HV	In	Out	Total	HV		North	South	East	West	
Volume	381	0	381	33	0	411	411	0	0	429	0	429	25	138	537	675	7	948	343	463	257	498
%HV	8.7%				0.0%				5.8%				5.1%				6.9%					
PHF	0.86				0.00				0.97				0.84				0.90					

By Movement	Northbound 8TH AVE				Southbound 8TH AVE				Eastbound VIRGINIA ST				Westbound VIRGINIA ST				Total				
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R					
Volume	0	0	228	153	0	0	0	0	0	45	384	0	0	0	0	138	948				
%HV	0.0%	0.0%	8.3%	9.2%	0.0%	0.0%	0.0%	0.0%	0.0%	15.6%	4.7%	0.0%	0.0%	0.0%	0.0%	5.1%	6.9%				
PHF	0.00	0.00	0.88	0.83	0.00	0.00	0.00	0.00	0.00	0.80	0.96	0.00	0.00	0.00	0.84	0.90					

Rolling Hour Summary

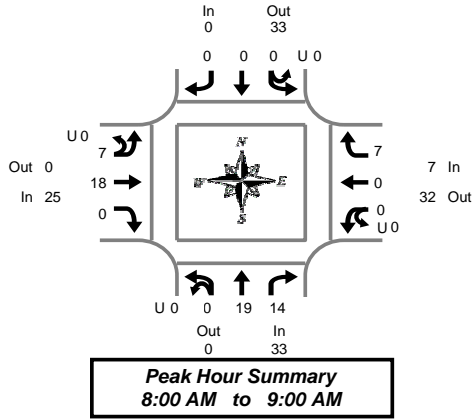
7:00 AM to 9:00 AM

Interval Start Time	Northbound 8TH AVE				Southbound 8TH AVE				Eastbound VIRGINIA ST				Westbound VIRGINIA ST				Interval Total	Pedestrians & Bicycles In Crosswalk (By Location)			
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R		North	South	East	West
7:00 AM	0	0	168	136	0	0	0	0	0	37	274	0	0	0	69	684	151	265	129	281	
7:15 AM	0	0	184	145	0	0	0	0	0	39	295	0	0	0	86	749	206	308	160	325	
7:30 AM	0	0	196	160	0	0	0	0	0	45	344	0	0	0	100	845	255	386	189	412	
7:45 AM	0	0	212	146	0	0	0	0	0	45	368	0	0	0	112	883	314	438	231	455	
8:00 AM	0	0	228	153	0	0	0	0	0	45	384	0	0	0	138	948	343	463	257	498	

Heavy Vehicle Summary



Eric Boivin
(303) 668-0220



8TH AVE & VIRGINIA ST

Thursday, February 12, 2015
7:00 AM to 9:00 AM

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

Interval Start Time	Northbound 8TH AVE					Southbound 8TH AVE					Eastbound VIRGINIA ST					Westbound VIRGINIA ST					Interval Total	
	U	L	T	R	Total	U	L	T	R	Total	U	L	T	R	Total	U	L	T	R	Total		
7:00 AM	0	0	8	6	14	0	0	0	0	0	0	1	3	0	4	0	0	0	0	2	2	20
7:15 AM	0	0	5	3	8	0	0	0	0	0	0	1	4	0	5	0	0	0	0	0	0	13
7:30 AM	0	0	4	4	8	0	0	0	0	0	0	1	3	0	4	0	0	0	0	2	2	14
7:45 AM	0	0	5	4	9	0	0	0	0	0	0	1	4	0	5	0	0	0	0	0	0	14
8:00 AM	0	0	4	4	8	0	0	0	0	0	0	2	4	0	6	0	0	0	0	2	2	16
8:15 AM	0	0	4	2	6	0	0	0	0	0	0	4	3	0	7	0	0	0	0	2	2	15
8:30 AM	0	0	4	4	8	0	0	0	0	0	0	0	4	0	4	0	0	0	0	1	1	13
8:45 AM	0	0	7	4	11	0	0	0	0	0	0	1	7	0	8	0	0	0	0	2	2	21
Total Survey	0	0	41	31	72	0	0	0	0	0	0	11	32	0	43	0	0	0	11	11	42	

Peak Hour Summary 8:00 AM to 9:00 AM

By Approach	Northbound 8TH AVE			Southbound 8TH AVE			Eastbound VIRGINIA ST			Westbound VIRGINIA ST			Total
	In	Out	Total	In	Out	Total	In	Out	Total	In	Out	Total	
Volume	33	0	33	0	33	33	25	0	25	7	32	39	65

By Movement	Northbound 8TH AVE					Southbound 8TH AVE					Eastbound VIRGINIA ST					Westbound VIRGINIA ST					Total	
	U	L	T	R	Total	U	L	T	R	Total	U	L	T	R	Total	U	L	T	R	Total		
Volume	0	0	19	14	33	0	0	0	0	0	0	7	18	0	25	0	0	0	0	7	7	65

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

Interval Start Time	Northbound 8TH AVE					Southbound 8TH AVE					Eastbound VIRGINIA ST					Westbound VIRGINIA ST					Interval Total
	U	L	T	R	Total	U	L	T	R	Total	U	L	T	R	Total	U	L	T	R	Total	
7:00 AM	0	0	22	17	39	0	0	0	0	0	0	4	14	0	18	0	0	0	4	4	61
7:15 AM	0	0	18	15	33	0	0	0	0	0	0	5	15	0	20	0	0	0	4	4	57
7:30 AM	0	0	17	14	31	0	0	0	0	0	0	8	14	0	22	0	0	0	6	6	59
7:45 AM	0	0	17	14	31	0	0	0	0	0	0	7	15	0	22	0	0	0	5	5	58
8:00 AM	0	0	19	14	33	0	0	0	0	0	0	7	18	0	25	0	0	0	7	7	65

Peak Hour Summary

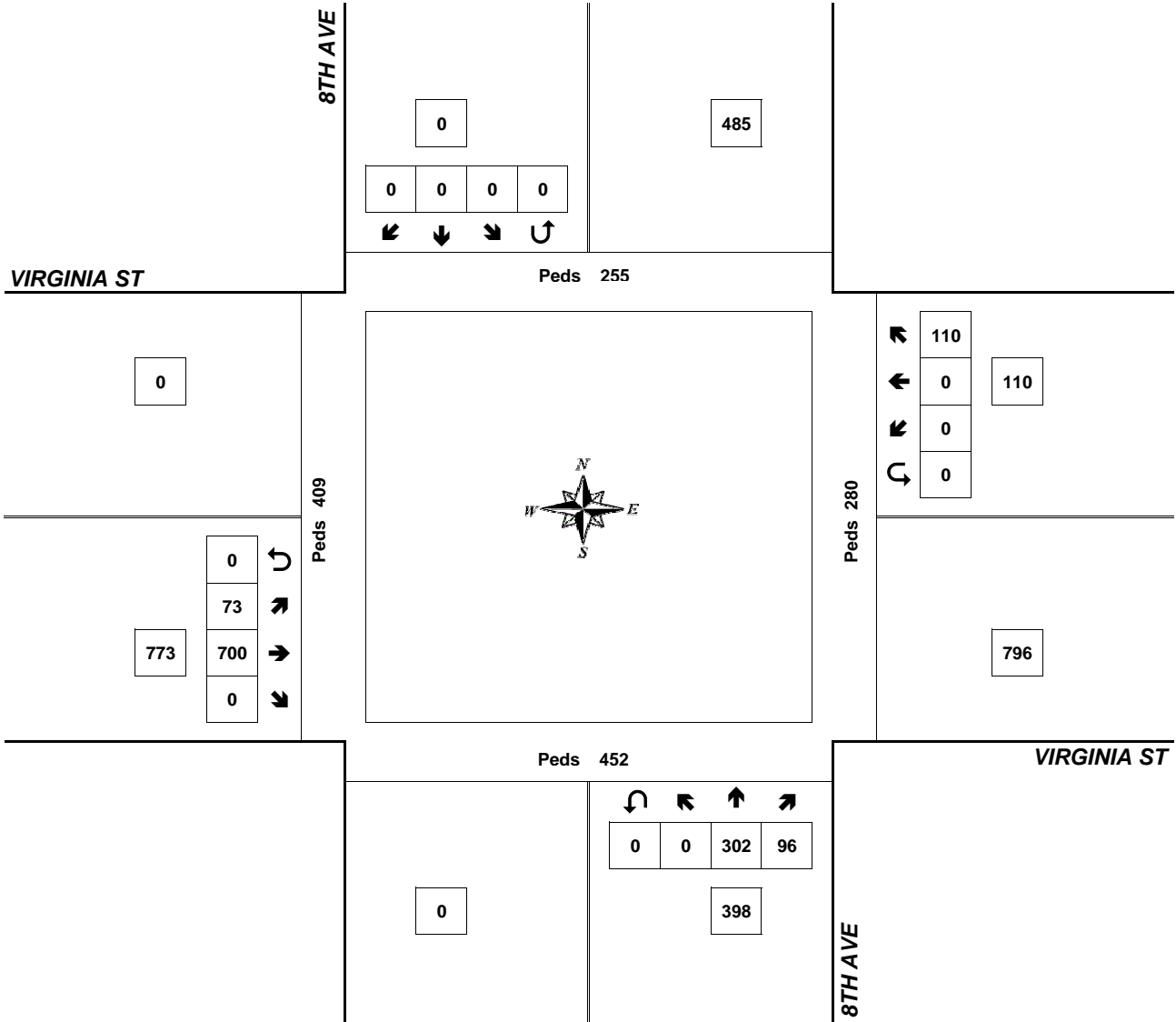
Site ID: 505



Eric Boivin
(303) 668-0220

8TH AVE & VIRGINIA ST

5:00 PM to 6:00 PM
Thursday, February 12, 2015



Approach	PHF	HV%	Volume
EB	0.92	1.7%	773
WB	0.81	0.9%	110
NB	0.87	9.5%	398
SB	0.00	0.0%	0
Intersection	0.94	4.1%	1,281

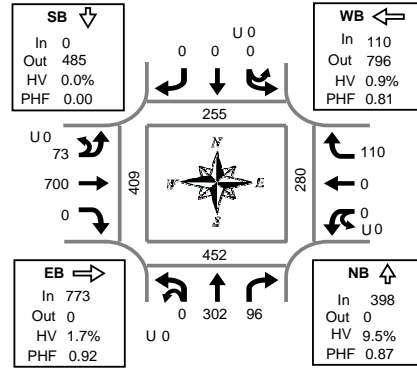
Count Period: 4:00 PM to 6:00 PM

Total Vehicle Summary



Eric Boivin
(303) 668-0220

Site ID: 505
8TH AVE & VIRGINIA ST
 Thursday, February 12, 2015
 4:00 PM to 6:00 PM



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

15-Minute Interval Summary

4:00 PM to 6:00 PM

Interval Start Time	Northbound 8TH AVE				Southbound 8TH AVE				Eastbound VIRGINIA ST				Westbound VIRGINIA ST				Interval Total	Pedestrians & Bicycles In Crosswalk (By Location)			
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R		North	South	East	West
4:00 PM	0	0	67	32	0	0	0	0	0	12	134	0	0	0	0	20	265	49	83	47	90
4:15 PM	0	0	69	24	0	0	0	0	0	9	139	0	0	0	0	15	256	72	69	62	74
4:30 PM	0	0	73	30	0	0	0	0	0	16	134	0	0	0	9	262	82	80	74	96	
4:45 PM	0	0	55	29	0	0	0	0	0	21	142	0	0	0	33	280	52	112	55	105	
5:00 PM	0	0	66	34	0	0	0	0	0	18	176	0	0	0	23	317	64	112	72	118	
5:15 PM	0	0	92	23	0	0	0	0	0	19	172	0	0	0	34	340	80	111	81	101	
5:30 PM	0	0	65	20	0	0	0	0	0	18	159	0	0	0	24	286	62	114	70	93	
5:45 PM	0	0	79	19	0	0	0	0	0	18	193	0	0	0	29	338	49	115	57	97	
Total Survey	0	0	566	211	0	0	0	0	0	131	1,249	0	0	0	187	2,344	510	796	518	774	

Peak Hour Summary

5:00 PM to 6:00 PM

By Approach	Northbound 8TH AVE				Southbound 8TH AVE				Eastbound VIRGINIA ST				Westbound VIRGINIA ST				Total	Pedestrians & Bicycles In Crosswalk (By Location)			
	In	Out	Total	HV	In	Out	Total	HV	In	Out	Total	HV	In	Out	Total	HV		North	South	East	West
Volume	398	0	398	38	0	485	485	0	773	0	773	13	110	796	906	1	1,281	255	452	280	409
%HV	9.5%				0.0%				1.7%				0.9%				4.1%				
PHF	0.87				0.00				0.92				0.81				0.94				

By Movement	Northbound 8TH AVE				Southbound 8TH AVE				Eastbound VIRGINIA ST				Westbound VIRGINIA ST				Total				
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R					
Volume	0	0	302	96	0	0	0	0	0	73	700	0	0	0	0	110	1,281				
%HV	0.0%	0.0%	10.9%	5.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	1.9%	0.0%	0.0%	0.0%	0.0%	0.9%	4.1%				
PHF	0.00	0.00	0.82	0.71	0.00	0.00	0.00	0.00	0.00	0.96	0.91	0.00	0.00	0.00	0.00	0.81	0.94				

Rolling Hour Summary

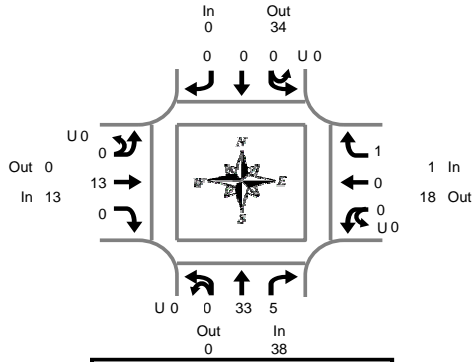
4:00 PM to 6:00 PM

Interval Start Time	Northbound 8TH AVE				Southbound 8TH AVE				Eastbound VIRGINIA ST				Westbound VIRGINIA ST				Interval Total	Pedestrians & Bicycles In Crosswalk (By Location)			
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R		North	South	East	West
4:00 PM	0	0	264	115	0	0	0	0	0	58	549	0	0	0	77	1,063	255	344	238	365	
4:15 PM	0	0	263	117	0	0	0	0	0	64	591	0	0	0	80	1,115	270	373	263	393	
4:30 PM	0	0	286	116	0	0	0	0	0	74	624	0	0	0	99	1,199	278	415	282	420	
4:45 PM	0	0	278	106	0	0	0	0	0	76	649	0	0	0	114	1,223	258	449	278	417	
5:00 PM	0	0	302	96	0	0	0	0	0	73	700	0	0	0	110	1,281	255	452	280	409	

Heavy Vehicle Summary



Eric Boivin
(303) 668-0220



8TH AVE & VIRGINIA ST

Thursday, February 12, 2015

4:00 PM to 6:00 PM

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

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

Interval Start Time	Northbound 8TH AVE					Southbound 8TH AVE					Eastbound VIRGINIA ST					Westbound VIRGINIA ST					Interval Total
	U	L	T	R	Total	U	L	T	R	Total	U	L	T	R	Total	U	L	T	R	Total	
4:00 PM	0	0	12	5	17	0	0	0	0	0	0	2	4	0	6	0	0	0	1	1	24
4:15 PM	0	0	13	0	13	0	0	0	0	0	0	0	2	0	2	0	0	0	0	0	15
4:30 PM	0	0	11	2	13	0	0	0	0	0	0	2	5	0	7	0	0	0	0	0	20
4:45 PM	0	0	10	2	12	0	0	0	0	0	0	0	3	0	3	0	0	0	1	1	16
5:00 PM	0	0	8	1	9	0	0	0	0	0	0	0	5	0	5	0	0	0	0	0	14
5:15 PM	0	0	10	0	10	0	0	0	0	0	0	0	1	0	1	0	0	0	1	1	12
5:30 PM	0	0	8	2	10	0	0	0	0	0	0	0	2	0	2	0	0	0	0	0	12
5:45 PM	0	0	7	2	9	0	0	0	0	0	0	0	5	0	5	0	0	0	0	0	14
Total Survey	0	0	79	14	93	0	0	0	0	0	0	4	27	0	31	0	0	0	3	3	17

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

By Approach	Northbound 8TH AVE			Southbound 8TH AVE			Eastbound VIRGINIA ST			Westbound VIRGINIA ST			Total
	In	Out	Total	In	Out	Total	In	Out	Total	In	Out	Total	
Volume	38	0	38	0	34	34	13	0	13	1	18	19	52

By Movement	Northbound 8TH AVE					Southbound 8TH AVE					Eastbound VIRGINIA ST					Westbound VIRGINIA ST					Total
	U	L	T	R	Total	U	L	T	R	Total	U	L	T	R	Total	U	L	T	R	Total	
Volume	0	0	33	5	38	0	0	0	0	0	0	0	13	0	13	0	0	0	1	1	52

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

Interval Start Time	Northbound 8TH AVE					Southbound 8TH AVE					Eastbound VIRGINIA ST					Westbound VIRGINIA ST					Interval Total
	U	L	T	R	Total	U	L	T	R	Total	U	L	T	R	Total	U	L	T	R	Total	
4:00 PM	0	0	46	9	55	0	0	0	0	0	0	4	14	0	18	0	0	0	2	2	75
4:15 PM	0	0	42	5	47	0	0	0	0	0	0	2	15	0	17	0	0	0	1	1	65
4:30 PM	0	0	39	5	44	0	0	0	0	0	0	2	14	0	16	0	0	0	2	2	62
4:45 PM	0	0	36	5	41	0	0	0	0	0	0	0	11	0	11	0	0	0	2	2	54
5:00 PM	0	0	33	5	38	0	0	0	0	0	0	0	13	0	13	0	0	0	1	1	52

Peak Hour Summary

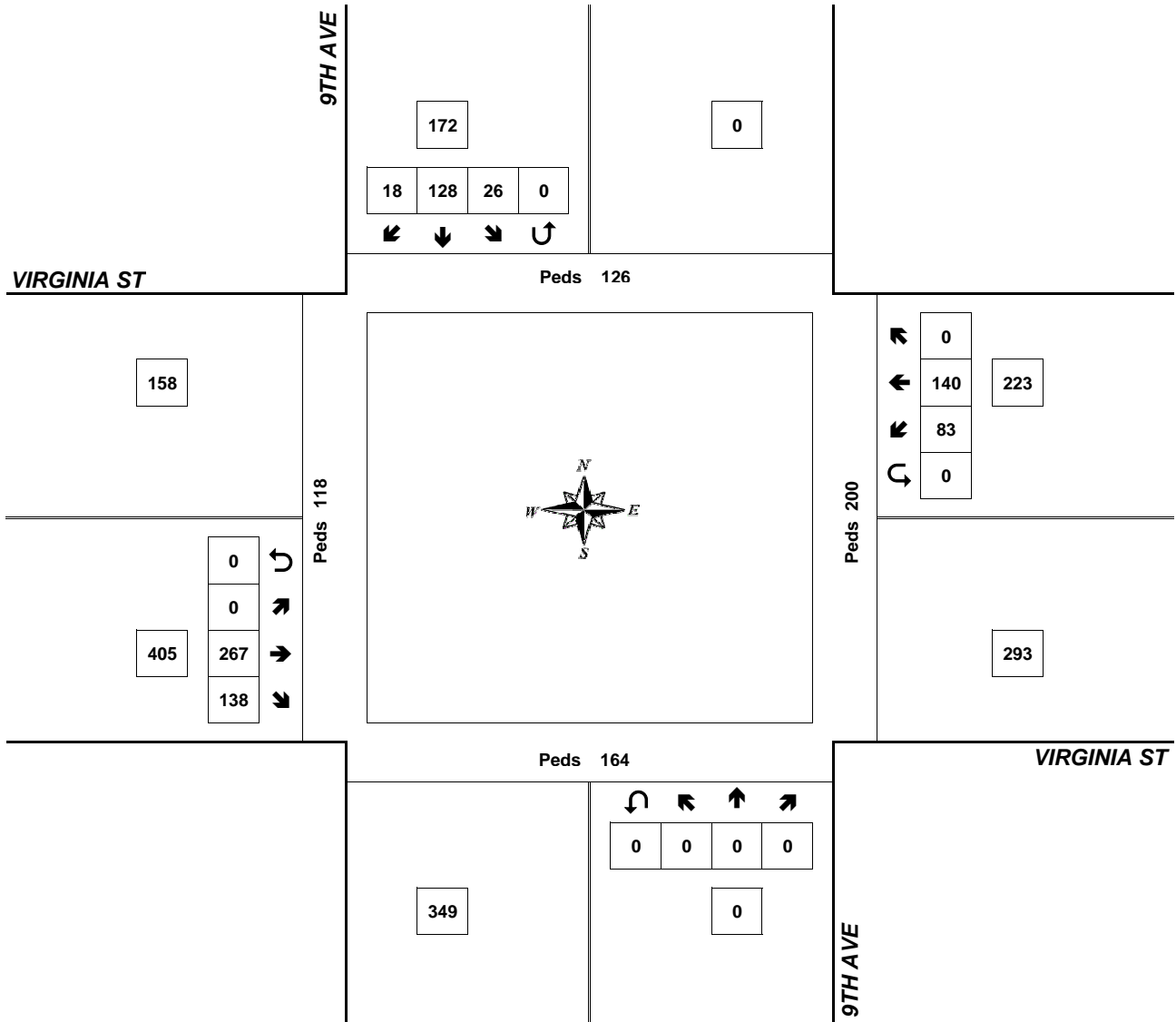
Site ID: 555



Eric Boivin
(303) 668-0220

9TH AVE & VIRGINIA ST

8:00 AM to 9:00 AM
Thursday, February 12, 2015



Approach	PHF	HV%	Volume
EB	0.93	8.9%	405
WB	0.88	6.7%	223
NB	0.00	0.0%	0
SB	0.80	6.4%	172
Intersection	0.93	7.8%	800

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

Total Vehicle Summary



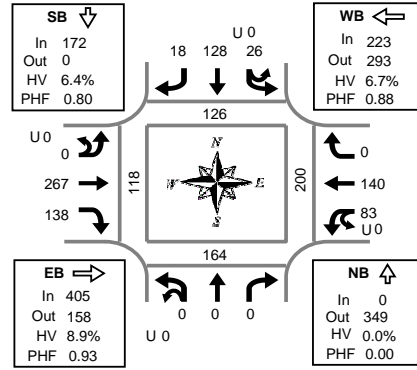
Eric Boivin
(303) 668-0220

Site ID: 555

9TH AVE & VIRGINIA ST

Thursday, February 12, 2015

7:00 AM to 9:00 AM



**Peak Hour Summary
8:00 AM to 9:00 AM**

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

Interval Start Time	Northbound 9TH AVE				Southbound 9TH AVE				Eastbound VIRGINIA ST				Westbound VIRGINIA ST				Interval Total	Pedestrians & Bicycles In Crosswalk (By Location)			
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R		North	South	East	West
7:00 AM	0	0	0	0	0	2	17	5	0	0	36	42	0	10	18	0	130	9	32	24	25
7:15 AM	0	0	0	0	0	6	19	7	0	0	37	25	0	5	9	0	108	15	37	33	16
7:30 AM	0	0	0	0	0	6	21	6	0	0	53	31	0	8	20	0	145	8	23	40	18
7:45 AM	0	0	0	0	0	8	26	3	0	0	59	34	0	16	19	0	165	20	38	45	23
8:00 AM	0	0	0	0	0	8	29	3	0	0	60	35	0	24	33	0	192	24	44	43	28
8:15 AM	0	0	0	0	0	7	29	0	0	0	66	37	0	22	36	0	197	24	31	53	28
8:30 AM	0	0	0	0	0	7	42	5	0	0	67	31	0	15	30	0	197	32	40	47	32
8:45 AM	0	0	0	0	0	4	28	10	0	0	74	35	0	22	41	0	214	46	49	57	30
Total Survey	0	0	0	0	0	48	211	39	0	0	452	270	0	122	206	0	1,348	178	294	342	200

Peak Hour Summary 8:00 AM to 9:00 AM

By Approach	Northbound 9TH AVE				Southbound 9TH AVE				Eastbound VIRGINIA ST				Westbound VIRGINIA ST				Total	Pedestrians & Bicycles In Crosswalk (By Location)			
	In	Out	Total	HV	In	Out	Total	HV	In	Out	Total	HV	In	Out	Total	HV		North	South	East	West
Volume	0	349	349	0	172	0	172	11	405	158	563	36	223	293	516	15	800	126	164	200	118
%HV		0.0%				6.4%				8.9%				6.7%			7.8%				
PHF		0.00				0.80				0.93				0.88			0.93				

By Movement	Northbound 9TH AVE				Southbound 9TH AVE				Eastbound VIRGINIA ST				Westbound VIRGINIA ST				Total				
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R					
Volume	0	0	0	0	0	26	128	18	0	0	267	138	0	83	140	0	800				
%HV	0.0%	0.0%	0.0%	0.0%	0.0%	3.8%	7.0%	5.6%	0.0%	0.0%	7.1%	12.3%	0.0%	13.3%	2.9%	0.0%	7.8%				
PHF	0.00	0.00	0.00	0.00	0.00	0.81	0.76	0.45	0.00	0.00	0.90	0.93	0.00	0.86	0.85	0.00	0.93				

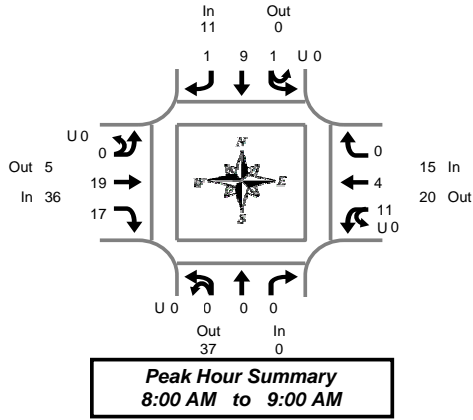
Rolling Hour Summary 7:00 AM to 9:00 AM

Interval Start Time	Northbound 9TH AVE				Southbound 9TH AVE				Eastbound VIRGINIA ST				Westbound VIRGINIA ST				Interval Total	Pedestrians & Bicycles In Crosswalk (By Location)			
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R		North	South	East	West
7:00 AM	0	0	0	0	0	22	83	21	0	0	185	132	0	39	66	0	548	52	130	142	82
7:15 AM	0	0	0	0	0	28	95	19	0	0	209	125	0	53	81	0	610	67	142	161	85
7:30 AM	0	0	0	0	0	29	105	12	0	0	238	137	0	70	108	0	699	76	136	181	97
7:45 AM	0	0	0	0	0	30	126	11	0	0	252	137	0	77	118	0	751	100	153	188	111
8:00 AM	0	0	0	0	0	26	128	18	0	0	267	138	0	83	140	0	800	126	164	200	118

Heavy Vehicle Summary



Eric Boivin
(303) 668-0220



9TH AVE & VIRGINIA ST

Thursday, February 12, 2015
7:00 AM to 9:00 AM

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

Interval Start Time	Northbound 9TH AVE					Southbound 9TH AVE					Eastbound VIRGINIA ST					Westbound VIRGINIA ST					Interval Total
	U	L	T	R	Total	U	L	T	R	Total	U	L	T	R	Total	U	L	T	R	Total	
7:00 AM	0	0	0	0	0	0	0	2	0	2	0	0	4	6	10	0	2	2	0	4	16
7:15 AM	0	0	0	0	0	0	1	2	0	3	0	0	4	4	8	0	2	0	0	2	13
7:30 AM	0	0	0	0	0	0	0	2	1	3	0	0	4	5	9	0	3	0	0	3	15
7:45 AM	0	0	0	0	0	0	0	3	0	3	0	0	6	3	9	0	2	0	0	2	14
8:00 AM	0	0	0	0	0	0	0	4	1	5	0	0	5	4	9	0	3	2	0	5	19
8:15 AM	0	0	0	0	0	0	1	1	0	2	0	0	3	3	6	0	3	0	0	3	11
8:30 AM	0	0	0	0	0	0	0	3	0	3	0	0	5	4	9	0	2	1	0	3	15
8:45 AM	0	0	0	0	0	0	0	1	0	1	0	0	6	6	12	0	3	1	0	4	17
Total Survey	0	0	0	0	0	0	2	18	2	22	0	0	37	35	72	0	20	6	0	26	37

Peak Hour Summary
8:00 AM to 9:00 AM

By Approach	Northbound 9TH AVE			Southbound 9TH AVE			Eastbound VIRGINIA ST			Westbound VIRGINIA ST			Total
	In	Out	Total	In	Out	Total	In	Out	Total	In	Out	Total	
Volume	0	37	37	11	0	11	36	5	41	15	20	35	62

By Movement	Northbound 9TH AVE					Southbound 9TH AVE					Eastbound VIRGINIA ST					Westbound VIRGINIA ST					Total
	U	L	T	R	Total	U	L	T	R	Total	U	L	T	R	Total	U	L	T	R	Total	
Volume	0	0	0	0	0	0	1	9	1	11	0	0	19	17	36	0	11	4	0	15	62

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

Interval Start Time	Northbound 9TH AVE					Southbound 9TH AVE					Eastbound VIRGINIA ST					Westbound VIRGINIA ST					Interval Total
	U	L	T	R	Total	U	L	T	R	Total	U	L	T	R	Total	U	L	T	R	Total	
7:00 AM	0	0	0	0	0	0	1	9	1	11	0	0	18	18	36	0	9	2	0	11	58
7:15 AM	0	0	0	0	0	0	1	11	2	14	0	0	19	16	35	0	10	2	0	12	61
7:30 AM	0	0	0	0	0	0	1	10	2	13	0	0	18	15	33	0	11	2	0	13	59
7:45 AM	0	0	0	0	0	0	1	11	1	13	0	0	19	14	33	0	10	3	0	13	59
8:00 AM	0	0	0	0	0	0	1	9	1	11	0	0	19	17	36	0	11	4	0	15	62

Peak Hour Summary

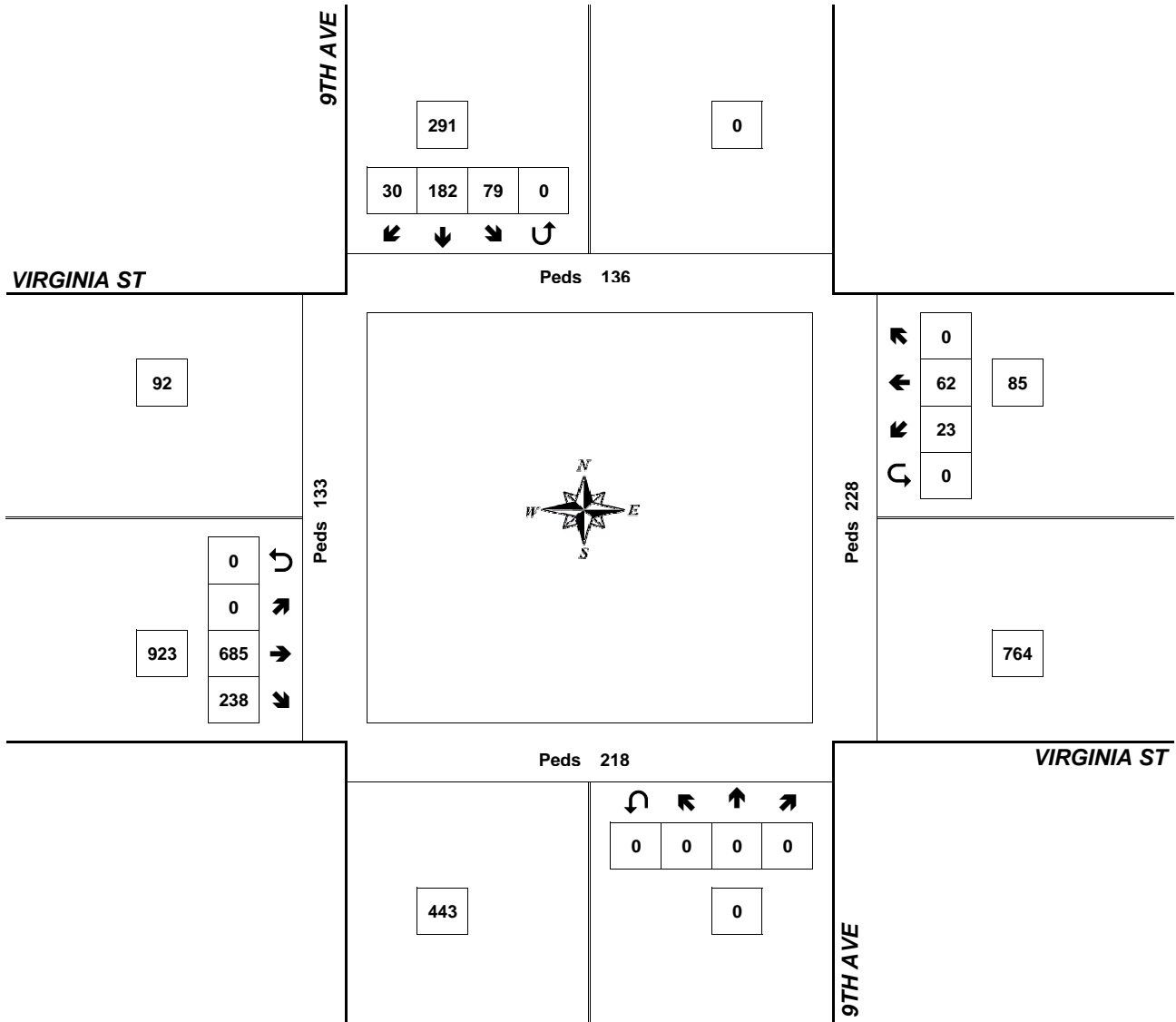
Site ID: 555



Eric Boivin
(303) 668-0220

9TH AVE & VIRGINIA ST

5:00 PM to 6:00 PM
Thursday, February 12, 2015



Approach	PHF	HV%	Volume
EB	0.93	1.8%	923
WB	0.76	3.5%	85
NB	0.00	0.0%	0
SB	0.84	3.4%	291
Intersection	0.94	2.3%	1,299

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

Total Vehicle Summary



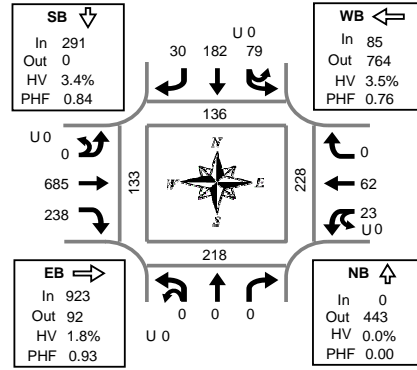
Eric Boivin
(303) 668-0220

Site ID: 555

9TH AVE & VIRGINIA ST

Thursday, February 12, 2015

4:00 PM to 6:00 PM



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

15-Minute Interval Summary

4:00 PM to 6:00 PM

Interval Start Time	Northbound 9TH AVE				Southbound 9TH AVE				Eastbound VIRGINIA ST				Westbound VIRGINIA ST				Interval Total	Pedestrians & Bicycles In Crosswalk (By Location)			
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R		North	South	East	West
4:00 PM	0	0	0	0	0	10	40	5	0	1	132	56	0	7	9	0	260	20	41	52	13
4:15 PM	0	0	0	0	0	11	40	5	0	0	133	57	0	5	6	0	257	21	33	43	18
4:30 PM	0	0	0	0	0	14	36	2	0	0	132	55	0	8	5	0	252	32	35	59	30
4:45 PM	0	0	0	0	0	12	48	12	0	0	135	60	0	8	15	0	290	31	46	50	20
5:00 PM	0	0	0	0	0	14	38	7	0	0	180	59	0	5	12	0	315	33	64	67	36
5:15 PM	0	0	0	0	0	16	41	8	0	0	167	56	0	7	21	0	316	40	52	69	30
5:30 PM	0	0	0	0	0	25	60	2	0	0	148	66	0	5	16	0	322	33	48	40	31
5:45 PM	0	0	0	0	0	24	43	13	0	0	190	57	0	6	13	0	346	30	54	52	36
Total Survey	0	0	0	0	0	126	346	54	0	1	1,217	466	0	51	97	0	2,358	240	373	432	214

Peak Hour Summary

5:00 PM to 6:00 PM

By Approach	Northbound 9TH AVE				Southbound 9TH AVE				Eastbound VIRGINIA ST				Westbound VIRGINIA ST				Total	Pedestrians & Bicycles In Crosswalk (By Location)			
	In	Out	Total	HV	In	Out	Total	HV	In	Out	Total	HV	In	Out	Total	HV		North	South	East	West
Volume	0	443	443	0	291	0	291	10	923	92	1,015	17	85	764	849	3	1,299	136	218	228	133
%HV		0.0%				3.4%				1.8%				3.5%			2.3%				
PHF		0.00				0.84				0.93				0.76			0.94				

By Movement	Northbound 9TH AVE				Southbound 9TH AVE				Eastbound VIRGINIA ST				Westbound VIRGINIA ST				Total
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R	
Volume	0	0	0	0	0	79	182	30	0	0	685	238	0	23	62	0	1,299
%HV	0.0%	0.0%	0.0%	0.0%	0.0%	1.3%	4.4%	3.3%	0.0%	0.0%	1.3%	3.4%	0.0%	8.7%	1.6%	0.0%	2.3%
PHF	0.00	0.00	0.00	0.00	0.00	0.79	0.76	0.58	0.00	0.00	0.90	0.90	0.00	0.82	0.74	0.00	0.94

Rolling Hour Summary

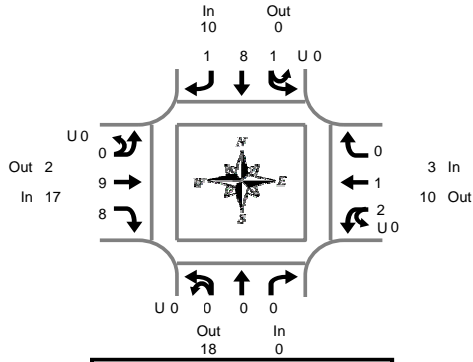
4:00 PM to 6:00 PM

Interval Start Time	Northbound 9TH AVE				Southbound 9TH AVE				Eastbound VIRGINIA ST				Westbound VIRGINIA ST				Interval Total	Pedestrians & Bicycles In Crosswalk (By Location)			
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R		North	South	East	West
4:00 PM	0	0	0	0	0	47	164	24	0	1	532	228	0	28	35	0	1,059	104	155	204	81
4:15 PM	0	0	0	0	0	51	162	26	0	0	580	231	0	26	38	0	1,114	117	178	219	104
4:30 PM	0	0	0	0	0	56	163	29	0	0	614	230	0	28	53	0	1,173	136	197	245	116
4:45 PM	0	0	0	0	0	67	187	29	0	0	630	241	0	25	64	0	1,243	137	210	226	117
5:00 PM	0	0	0	0	0	79	182	30	0	0	685	238	0	23	62	0	1,299	136	218	228	133

Heavy Vehicle Summary



Eric Boivin
(303) 668-0220



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

9TH AVE & VIRGINIA ST

Thursday, February 12, 2015

4:00 PM to 6:00 PM

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

Interval Start Time	Northbound 9TH AVE					Southbound 9TH AVE					Eastbound VIRGINIA ST					Westbound VIRGINIA ST					Interval Total
	U	L	T	R	Total	U	L	T	R	Total	U	L	T	R	Total	U	L	T	R	Total	
4:00 PM	0	0	0	0	0	0	0	1	1	2	0	0	5	4	9	0	1	0	0	1	12
4:15 PM	0	0	0	0	0	0	0	2	0	2	0	0	3	0	3	0	1	0	0	1	6
4:30 PM	0	0	0	0	0	0	0	5	0	5	0	0	2	5	7	0	1	0	0	1	13
4:45 PM	0	0	0	0	0	0	0	3	1	4	0	0	3	4	7	0	0	1	0	1	12
5:00 PM	0	0	0	0	0	0	0	1	1	2	0	0	3	3	6	0	1	0	0	1	9
5:15 PM	0	0	0	0	0	0	0	3	0	3	0	0	1	1	2	0	0	1	0	1	5
5:30 PM	0	0	0	0	0	0	1	2	0	3	0	0	3	1	4	0	1	0	0	1	8
5:45 PM	0	0	0	0	0	0	0	2	0	2	0	0	3	3	6	0	0	0	0	0	8
Total Survey	0	0	0	0	0	0	1	19	3	23	0	0	22	21	43	0	5	2	0	7	24

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

By Approach	Northbound 9TH AVE			Southbound 9TH AVE			Eastbound VIRGINIA ST			Westbound VIRGINIA ST			Total
	In	Out	Total	In	Out	Total	In	Out	Total	In	Out	Total	
Volume	0	18	18	10	0	10	17	2	19	3	10	13	30

By Movement	Northbound 9TH AVE					Southbound 9TH AVE					Eastbound VIRGINIA ST					Westbound VIRGINIA ST					Total
	U	L	T	R	Total	U	L	T	R	Total	U	L	T	R	Total	U	L	T	R	Total	
Volume	0	0	0	0	0	0	1	8	1	10	0	0	9	8	17	0	2	1	0	3	30

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

Interval Start Time	Northbound 9TH AVE					Southbound 9TH AVE					Eastbound VIRGINIA ST					Westbound VIRGINIA ST					Interval Total
	U	L	T	R	Total	U	L	T	R	Total	U	L	T	R	Total	U	L	T	R	Total	
4:00 PM	0	0	0	0	0	0	0	11	2	13	0	0	13	13	26	0	3	1	0	4	43
4:15 PM	0	0	0	0	0	0	0	11	2	13	0	0	11	12	23	0	3	1	0	4	40
4:30 PM	0	0	0	0	0	0	0	12	2	14	0	0	8	13	21	0	2	2	0	4	39
4:45 PM	0	0	0	0	0	0	1	9	2	12	0	0	9	9	18	0	2	2	0	4	34
5:00 PM	0	0	0	0	0	0	1	8	1	10	0	0	9	8	17	0	2	1	0	3	30

Peak Hour Summary

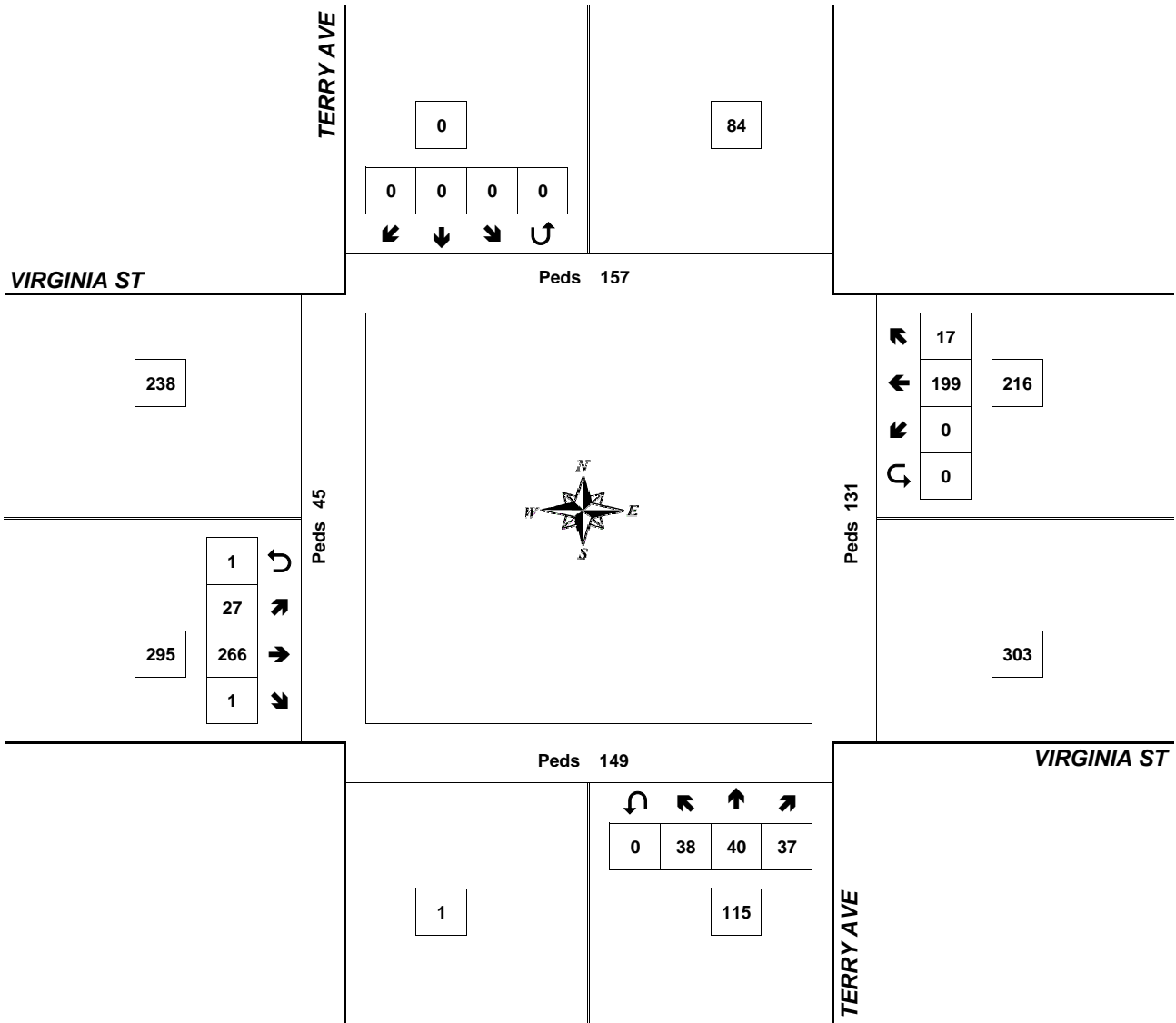
Site ID: 572



Eric Boivin
(303) 668-0220

TERRY AVE & VIRGINIA ST

8:00 AM to 9:00 AM
Thursday, February 12, 2015



Approach	PHF	HV%	Volume
EB	0.96	7.5%	295
WB	0.89	4.2%	216
NB	0.87	11.3%	115
SB	0.00	0.0%	0
Intersection	0.93	7.0%	626

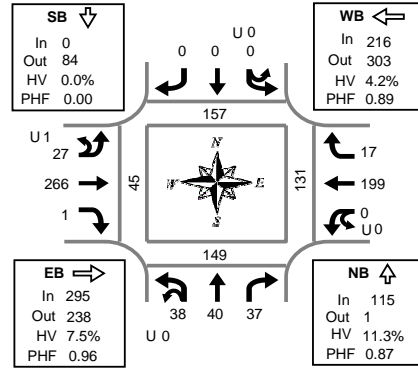
Count Period: 7:00 AM to 9:00 AM

Total Vehicle Summary



Eric Boivin
(303) 668-0220

Site ID: 572
TERRY AVE & VIRGINIA ST
 Thursday, February 12, 2015
 7:00 AM to 9:00 AM



Peak Hour Summary
8:00 AM to 9:00 AM

15-Minute Interval Summary

7:00 AM to 9:00 AM

Interval Start Time	Northbound TERRY AVE				Southbound TERRY AVE				Eastbound VIRGINIA ST				Westbound VIRGINIA ST				Interval Total	Pedestrians & Bicycles In Crosswalk (By Location)			
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R		North	South	East	West
7:00 AM	0	6	3	3	0	0	0	0	0	4	32	0	0	0	17	2	67	11	32	15	7
7:15 AM	0	1	6	1	0	0	0	0	0	2	44	0	0	0	16	2	72	23	25	9	9
7:30 AM	0	2	2	3	0	0	0	0	0	10	48	0	0	0	27	4	96	9	27	20	4
7:45 AM	0	13	3	7	0	0	0	0	0	3	59	0	0	0	40	7	132	18	32	24	6
8:00 AM	0	14	9	8	0	0	0	0	0	6	61	0	0	0	43	9	150	30	32	29	4
8:15 AM	0	9	17	7	0	0	0	0	0	8	67	0	0	0	58	3	169	40	30	35	17
8:30 AM	0	7	7	12	0	0	0	0	1	5	69	1	0	0	40	4	146	34	48	31	11
8:45 AM	0	8	7	10	0	0	0	0	0	8	69	0	0	0	58	1	161	53	39	36	13
Total Survey	0	60	54	51	0	0	0	0	1	46	449	1	0	0	299	32	993	218	265	199	71

Peak Hour Summary

8:00 AM to 9:00 AM

By Approach	Northbound TERRY AVE				Southbound TERRY AVE				Eastbound VIRGINIA ST				Westbound VIRGINIA ST				Total	Pedestrians & Bicycles In Crosswalk (By Location)			
	In	Out	Total	HV	In	Out	Total	HV	In	Out	Total	HV	In	Out	Total	HV		North	South	East	West
Volume	115	1	116	13	0	84	84	0	295	238	533	22	216	303	519	9	626	157	149	131	45
%HV	11.3%				0.0%				7.5%				4.2%				7.0%				
PHF	0.87				0.00				0.96				0.89				0.93				

By Movement	Northbound TERRY AVE				Southbound TERRY AVE				Eastbound VIRGINIA ST				Westbound VIRGINIA ST				Total				
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R					
Volume	0	38	40	37	0	0	0	0	1	27	266	1	0	0	199	17	626				
%HV	0.0%	15.8%	0.0%	18.9%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	7.9%	#####	0.0%	0.0%	4.0%	5.9%	7.0%				
PHF	0.00	0.68	0.59	0.77	0.00	0.00	0.00	0.00	0.25	0.84	0.96	0.25	0.00	0.00	0.86	0.47	0.93				

Rolling Hour Summary

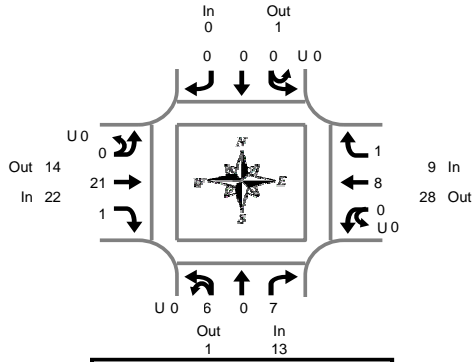
7:00 AM to 9:00 AM

Interval Start Time	Northbound TERRY AVE				Southbound TERRY AVE				Eastbound VIRGINIA ST				Westbound VIRGINIA ST				Interval Total	Pedestrians & Bicycles In Crosswalk (By Location)			
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R		North	South	East	West
7:00 AM	0	22	14	14	0	0	0	0	0	19	183	0	0	0	100	15	367	61	116	68	26
7:15 AM	0	30	20	19	0	0	0	0	0	21	212	0	0	0	126	22	450	80	116	82	23
7:30 AM	0	38	31	25	0	0	0	0	0	27	235	0	0	0	168	23	547	97	121	108	31
7:45 AM	0	43	36	34	0	0	0	0	1	22	256	1	0	0	181	23	597	122	142	119	38
8:00 AM	0	38	40	37	0	0	0	0	1	27	266	1	0	0	199	17	626	157	149	131	45

Heavy Vehicle Summary



Eric Boivin
(303) 668-0220



TERRY AVE & VIRGINIA ST

Thursday, February 12, 2015
7:00 AM to 9:00 AM

**Peak Hour Summary
8:00 AM to 9:00 AM**

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

Interval Start Time	Northbound TERRY AVE					Southbound TERRY AVE					Eastbound VIRGINIA ST					Westbound VIRGINIA ST					Interval Total
	U	L	T	R	Total	U	L	T	R	Total	U	L	T	R	Total	U	L	T	R	Total	
7:00 AM	0	1	0	0	1	0	0	0	0	0	0	0	3	0	3	0	0	2	0	2	6
7:15 AM	0	0	1	0	1	0	0	0	0	0	0	0	5	0	5	0	0	1	0	1	7
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	1	3	0	4	0	0	3	1	4	8
7:45 AM	0	0	1	0	1	0	0	0	0	0	0	0	5	0	5	0	0	3	0	3	9
8:00 AM	0	1	0	1	2	0	0	0	0	0	0	0	5	0	5	0	0	2	0	2	9
8:15 AM	0	1	0	2	3	0	0	0	0	0	0	0	4	0	4	0	0	3	0	3	10
8:30 AM	0	2	0	1	3	0	0	0	0	0	0	0	6	1	7	0	0	1	0	1	11
8:45 AM	0	2	0	3	5	0	0	0	0	0	0	0	6	0	6	0	0	2	1	3	14
Total Survey	0	7	2	7	16	0	0	0	0	0	0	1	37	1	39	0	0	17	2	19	10

Peak Hour Summary 8:00 AM to 9:00 AM

By Approach	Northbound TERRY AVE			Southbound TERRY AVE			Eastbound VIRGINIA ST			Westbound VIRGINIA ST			Total
	In	Out	Total	In	Out	Total	In	Out	Total	In	Out	Total	
Volume	13	1	14	0	1	1	22	14	36	9	28	37	44

By Movement	Northbound TERRY AVE					Southbound TERRY AVE					Eastbound VIRGINIA ST					Westbound VIRGINIA ST					Total
	U	L	T	R	Total	U	L	T	R	Total	U	L	T	R	Total	U	L	T	R	Total	
Volume	0	6	0	7	13	0	0	0	0	0	0	0	21	1	22	0	0	8	1	9	44

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

Interval Start Time	Northbound TERRY AVE					Southbound TERRY AVE					Eastbound VIRGINIA ST					Westbound VIRGINIA ST					Interval Total
	U	L	T	R	Total	U	L	T	R	Total	U	L	T	R	Total	U	L	T	R	Total	
7:00 AM	0	1	2	0	3	0	0	0	0	0	0	1	16	0	17	0	0	9	1	10	30
7:15 AM	0	1	2	1	4	0	0	0	0	0	0	1	18	0	19	0	0	9	1	10	33
7:30 AM	0	2	1	3	6	0	0	0	0	0	0	1	17	0	18	0	0	11	1	12	36
7:45 AM	0	4	1	4	9	0	0	0	0	0	0	0	20	1	21	0	0	9	0	9	39
8:00 AM	0	6	0	7	13	0	0	0	0	0	0	0	21	1	22	0	0	8	1	9	44

Peak Hour Summary

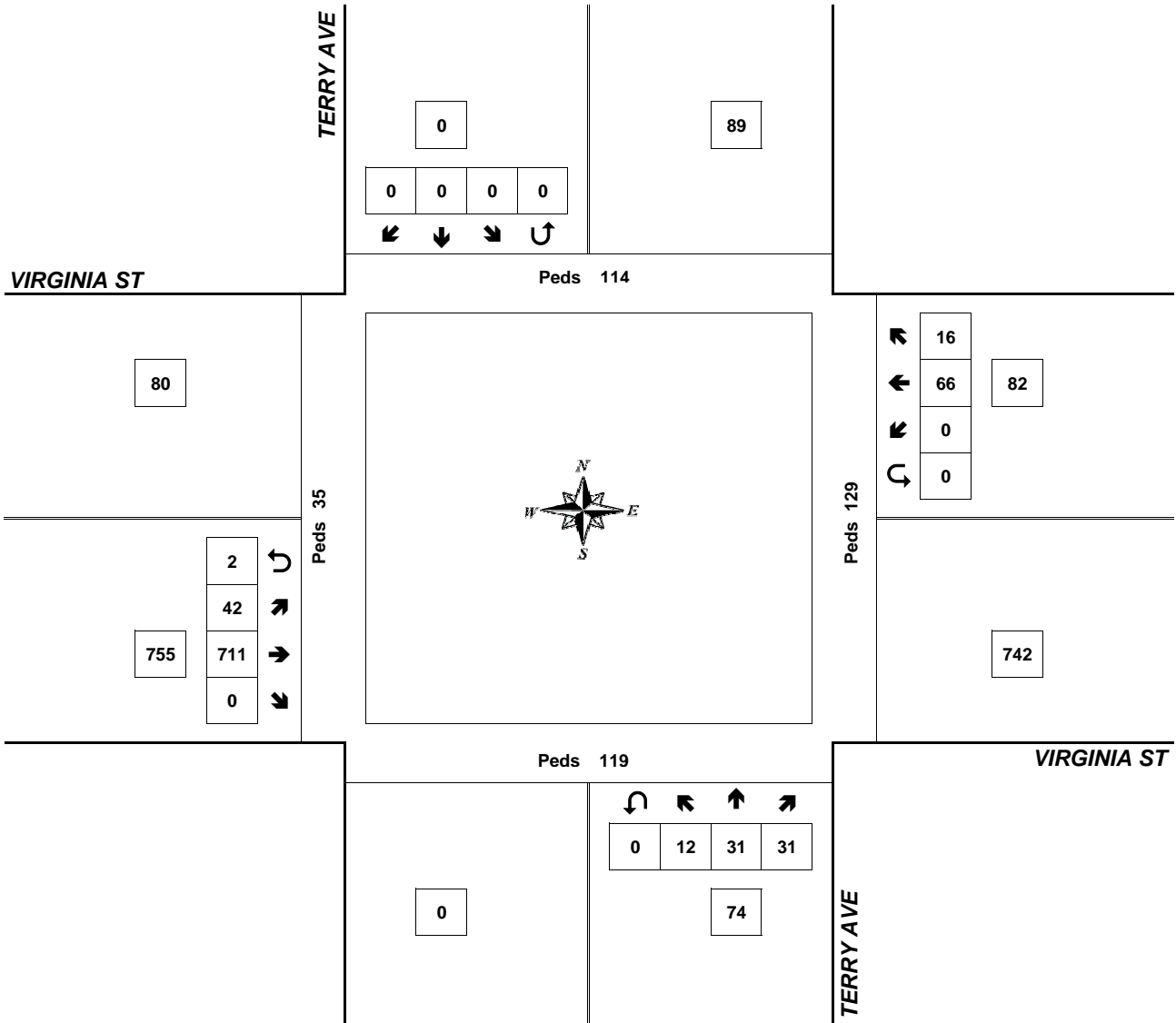
Site ID: 572



Eric Boivin
(303) 668-0220

TERRY AVE & VIRGINIA ST

5:00 PM to 6:00 PM
Thursday, February 12, 2015



Approach	PHF	HV%	Volume
EB	0.91	1.3%	755
WB	0.89	2.4%	82
NB	0.93	1.4%	74
SB	0.00	0.0%	0
Intersection	0.92	1.4%	911

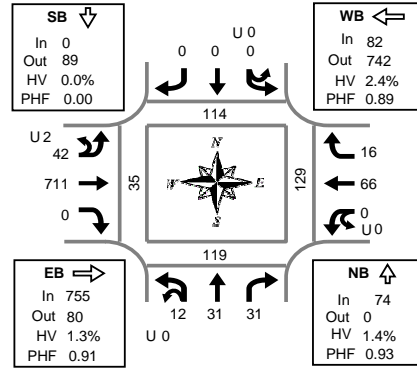
Count Period: 4:00 PM to 6:00 PM

Total Vehicle Summary



Eric Boivin
(303) 668-0220

Site ID: 572
TERRY AVE & VIRGINIA ST
Thursday, February 12, 2015
4:00 PM to 6:00 PM



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

15-Minute Interval Summary

4:00 PM to 6:00 PM

Interval Start Time	Northbound TERRY AVE				Southbound TERRY AVE				Eastbound VIRGINIA ST				Westbound VIRGINIA ST				Interval Total	Pedestrians & Bicycles In Crosswalk (By Location)			
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R		North	South	East	West
4:00 PM	0	0	5	12	0	0	0	0	0	6	136	0	0	0	11	2	172	17	23	22	7
4:15 PM	0	1	5	16	0	0	0	0	0	10	130	0	0	0	11	4	177	18	15	15	10
4:30 PM	0	2	10	12	0	0	0	0	0	7	149	0	0	0	14	4	198	28	12	27	2
4:45 PM	0	5	11	11	0	0	0	0	0	13	144	0	0	0	14	2	200	17	27	22	8
5:00 PM	0	5	8	6	0	0	0	0	0	10	174	0	0	0	17	3	223	34	27	30	15
5:15 PM	0	4	5	11	0	0	0	0	2	11	173	0	0	0	20	3	229	28	28	32	6
5:30 PM	0	2	7	8	0	0	0	0	0	11	166	0	0	0	15	3	212	28	33	32	5
5:45 PM	0	1	11	6	0	0	0	0	0	10	198	0	0	0	14	7	247	24	31	35	9
Total Survey	0	20	62	82	0	0	0	0	2	78	1,270	0	0	0	116	28	1,658	194	196	215	62

Peak Hour Summary

5:00 PM to 6:00 PM

By Approach	Northbound TERRY AVE				Southbound TERRY AVE				Eastbound VIRGINIA ST				Westbound VIRGINIA ST				Total	Pedestrians & Bicycles In Crosswalk (By Location)			
	In	Out	Total	HV	In	Out	Total	HV	In	Out	Total	HV	In	Out	Total	HV		North	South	East	West
Volume	74	0	74	1	0	89	89	0	755	80	835	10	82	742	824	2	911	114	119	129	35
%HV		1.4%				0.0%				1.3%				2.4%			1.4%				
PHF		0.93				0.00				0.91				0.89			0.92				

By Movement	Northbound TERRY AVE				Southbound TERRY AVE				Eastbound VIRGINIA ST				Westbound VIRGINIA ST				Total				
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R					
Volume	0	12	31	31	0	0	0	0	2	42	711	0	0	0	66	16	911				
%HV	0.0%	8.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	1.4%	0.0%	0.0%	0.0%	3.0%	0.0%	1.4%				
PHF	0.00	0.60	0.70	0.70	0.00	0.00	0.00	0.00	0.25	0.95	0.90	0.00	0.00	0.00	0.83	0.57	0.92				

Rolling Hour Summary

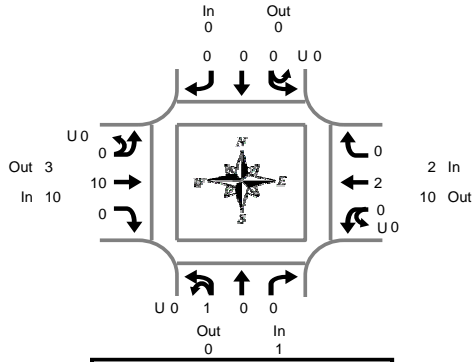
4:00 PM to 6:00 PM

Interval Start Time	Northbound TERRY AVE				Southbound TERRY AVE				Eastbound VIRGINIA ST				Westbound VIRGINIA ST				Interval Total	Pedestrians & Bicycles In Crosswalk (By Location)			
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R		North	South	East	West
4:00 PM	0	8	31	51	0	0	0	0	0	36	559	0	0	0	50	12	747	80	77	86	27
4:15 PM	0	13	34	45	0	0	0	0	0	40	597	0	0	0	56	13	798	97	81	94	35
4:30 PM	0	16	34	40	0	0	0	0	2	41	640	0	0	0	65	12	850	107	94	111	31
4:45 PM	0	16	31	36	0	0	0	0	2	45	657	0	0	0	66	11	864	107	115	116	34
5:00 PM	0	12	31	31	0	0	0	0	2	42	711	0	0	0	66	16	911	114	119	129	35

Heavy Vehicle Summary



Eric Boivin
(303) 668-0220



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

TERRY AVE & VIRGINIA ST

Thursday, February 12, 2015

4:00 PM to 6:00 PM

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

Interval Start Time	Northbound TERRY AVE					Southbound TERRY AVE					Eastbound VIRGINIA ST					Westbound VIRGINIA ST					Interval Total	
	U	L	T	R	Total	U	L	T	R	Total	U	L	T	R	Total	U	L	T	R	Total		
4:00 PM	0	0	1	0	1	0	0	0	0	0	0	0	4	0	4	0	0	1	0	1	6	
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	1	2	0	3	0	0	1	0	1	4
4:30 PM	0	0	0	1	1	0	0	0	0	0	0	0	2	0	2	0	0	2	0	2	5	
4:45 PM	0	0	1	0	1	0	0	0	0	0	0	0	2	0	2	0	0	0	0	0	3	
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	3	0	3	0	0	1	0	1	4	
5:15 PM	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	2	
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	4	0	4	0	0	0	0	0	4	
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	3	0	3	0	0	0	0	0	3	
Total Survey	0	1	2	1	4	0	0	0	0	0	0	1	20	0	21	0	0	6	0	6	1	

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

By Approach	Northbound TERRY AVE			Southbound TERRY AVE			Eastbound VIRGINIA ST			Westbound VIRGINIA ST			Total
	In	Out	Total	In	Out	Total	In	Out	Total	In	Out	Total	
Volume	1	0	1	0	0	0	10	3	13	2	10	12	13

By Movement	Northbound TERRY AVE					Southbound TERRY AVE					Eastbound VIRGINIA ST					Westbound VIRGINIA ST					Total
	U	L	T	R	Total	U	L	T	R	Total	U	L	T	R	Total	U	L	T	R	Total	
Volume	0	1	0	0	1	0	0	0	0	0	0	0	10	0	10	0	0	2	0	2	13

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

Interval Start Time	Northbound TERRY AVE					Southbound TERRY AVE					Eastbound VIRGINIA ST					Westbound VIRGINIA ST					Interval Total
	U	L	T	R	Total	U	L	T	R	Total	U	L	T	R	Total	U	L	T	R	Total	
4:00 PM	0	0	2	1	3	0	0	0	0	0	0	1	10	0	11	0	0	4	0	4	18
4:15 PM	0	0	1	1	2	0	0	0	0	0	0	1	9	0	10	0	0	4	0	4	16
4:30 PM	0	1	1	1	3	0	0	0	0	0	0	0	7	0	7	0	0	4	0	4	14
4:45 PM	0	1	1	0	2	0	0	0	0	0	0	0	9	0	9	0	0	2	0	2	13
5:00 PM	0	1	0	0	1	0	0	0	0	0	0	0	10	0	10	0	0	2	0	2	13

LOCATION: Virginia Street @ Boren Avenue
Seattle, WA

DATE OF COUNT: Thu. 1/22/2015
TIME OF COUNT: 8:00 - 9:00 AM

COUNTED BY: CN/SF
WEATHER: Overcast

TIME INTERVAL ENDING AT	FROM (1) Fairview Avenue (From North)							FROM (2) Virginia Street (From Northeast)							FROM (3) Boren Avenue (From Southeast)							FROM (4) Fairview Avenue (From Southwest)							FROM (5) Boren Avenue (From Northwest)							INTERVAL TOTALS	
	Peds	HV	Bicycle	(2)	(3)	(4)	(5)	Peds	HV	Bicycle	(1)	(2)	(4)	(5)	Peds	HV	Bicycle	(1)	(2)	(4)	(5)	Peds	HV	Bicycle	(1)	(2)	(3)	(5)	Peds	HV	Bicycle	(1)	(2)	(3)	(4)		
07:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:15 AM	0	8	2	0	27	42	2	17	0	0	2	0	0	0	15	6	0	72	63	0	2	11	2	2	24	0	11	0	12	5	0	0	0	68	8	321	
08:30 AM	0	4	0	0	30	26	1	27	0	0	1	0	0	0	14	0	0	80	52	0	0	15	8	3	26	0	10	0	16	4	0	0	0	87	14	327	
08:45 AM	0	9	0	0	43	64	0	20	0	0	4	0	0	0	14	1	4	131	43	1	0	10	9	3	43	0	15	0	16	1	0	0	0	81	14	439	
09:00 AM	0	9	1	0	30	54	3	21	0	0	2	0	0	0	17	7	5	119	10	0	0	30	5	2	45	0	17	0	37	3	0	0	0	78	13	371	
PEAK HOUR TOTALS	0	30	3	0	130	186	6	85	0	0	9	0	0	0	60	14	9	402	168	1	2	66	24	10	138	0	53	0	81	13	0	0	0	314	49	INTERSECTION	
ALL MOVEMENTS	322							9							573							191							363							1458	
% HV	9%							0%							2%							13%							4%							6%	
PHF	0.75							0.56							0.82							0.77							0.90							0.83	

HV = Heavy Vehicles
PHF = Peak Hour Factor
Peds = Pedestrians
REDUCED BY: CN

TURNING MOVEMENTS REDUCTION SHEET
AM PEAK HOUR: FROM 8:00 TO 9:00 AM

DATE OF REDUCTION: 1/24/2015



LOCATION: Virginia Street @ Boren Avenue
Seattle, WA

DATE OF COUNT: Thu. 1/22/2015
TIME OF COUNT: 5:00 - 6:00 AM

COUNTED BY: CN/SF
WEATHER: Overcast

TIME INTERVAL ENDING AT	FROM (1) Fairview Avenue (From North)								FROM (2) Virginia Street (From Northeast)								FROM (3) Boren Avenue (From Southeast)								FROM (4) Fairview Avenue (From Southwest)								FROM (5) Boren Avenue (From Northwest)								INTERVAL TOTALS
	Peds	HV	Bikes	(2)	(3)	(4)	(5)	Peds	HV	Bikes	(1)	(3)	(4)	(5)	Peds	HV	Bikes	(1)	(2)	(4)	(5)	Peds	HV	Bikes	(1)	(2)	(3)	(5)	Peds	HV	Bikes	(1)	(2)	(3)	(4)						
04:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
05:15 PM	0	8	5	0	98	26	0	24	0	2	9	0	0	30	0	5	143	12	0	56	2	5	117	0	44	0	89	0	0	0	0	116	2	567							
05:30 PM	0	1	7	3	64	33	0	19	0	0	12	0	0	27	3	4	121	10	0	48	1	1	127	0	55	1	45	4	0	1	0	119	1	547							
05:45 PM	0	8	1	0	83	19	0	28	0	0	4	0	0	21	0	0	86	8	0	34	4	0	89	0	38	0	26	0	1	1	0	91	1	420							
06:00 PM	0	6	3	0	72	16	0	18	0	0	3	0	0	14	1	0	112	5	0	63	2	2	102	0	51	0	47	1	0	0	0	99	0	460							
PEAK HOUR TOTALS	0	23	16	3	317	94	0	89	0	2	28	0	0	92	4	9	462	35	0	201	9	8	435	0	188	1	207	5	1	2	0	425	4	INTERSECTION							
ALL MOVEMENTS	414								28								497								624								431								1994
% HV	6%								0%								1%								1%								1%								2%
PHF	0.83								0.58								0.80								0.85								0.89								0.88

Peds = Pedestrians
HV = Heavy Vehicles

Bikes = Bicycles
PHF = Peak Hour Factor

TURNING MOVEMENTS REDUCTION SHEET
PM PEAK HOUR: FROM 5:00 TO 6:00 PM

REDUCED BY: CN

DATE OF REDUCTION: 1/24/2015



Peak Hour Summary

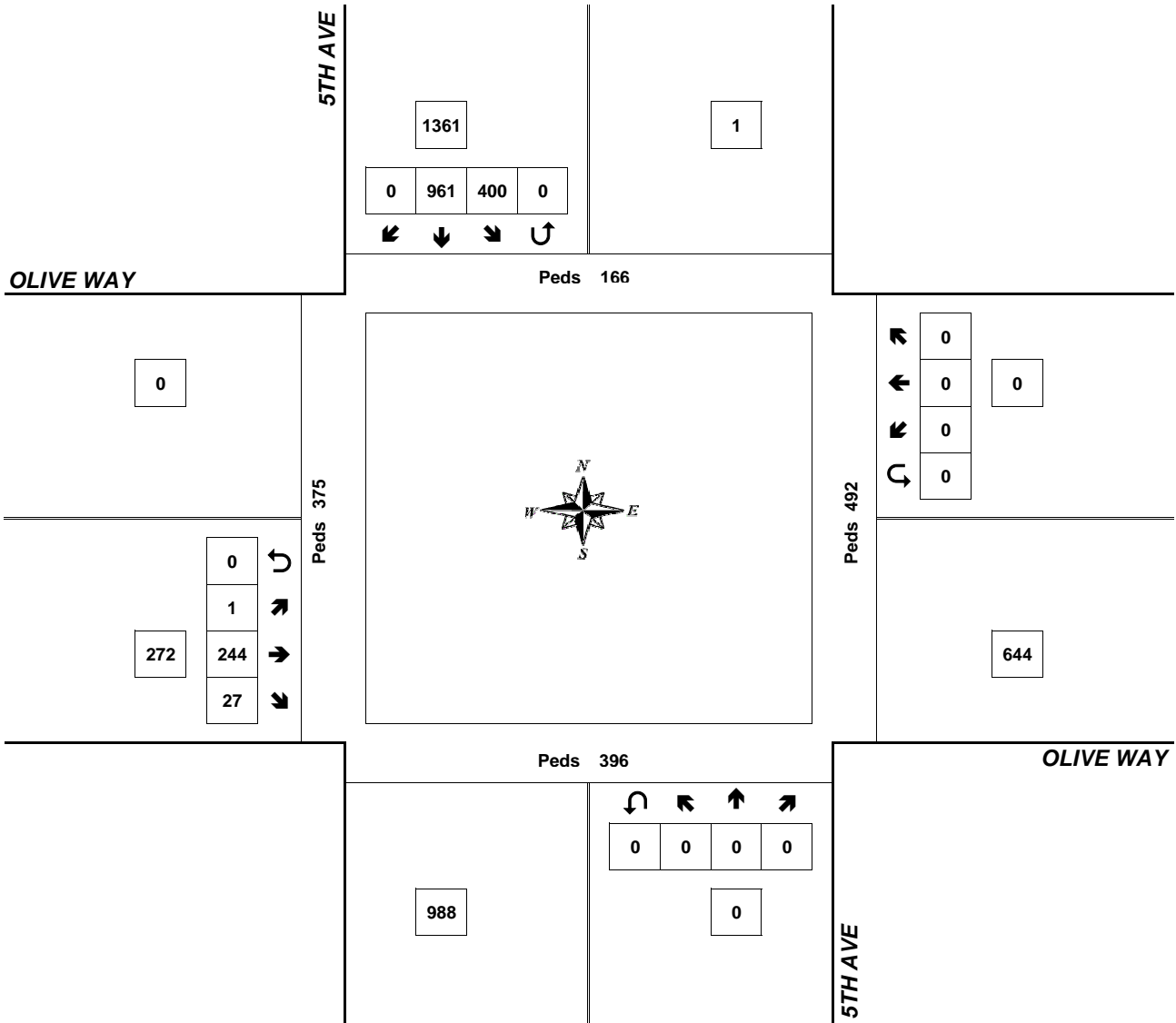
Site ID: 390



Eric Boivin
(303) 668-0220

5TH AVE & OLIVE WAY

7:45 AM to 8:45 AM
Wednesday, February 11, 2015



Approach	PHF	HV%	Volume
EB	0.84	38.2%	272
WB	0.00	0.0%	0
NB	0.00	0.0%	0
SB	0.90	4.5%	1,361
Intersection	0.94	10.1%	1,633

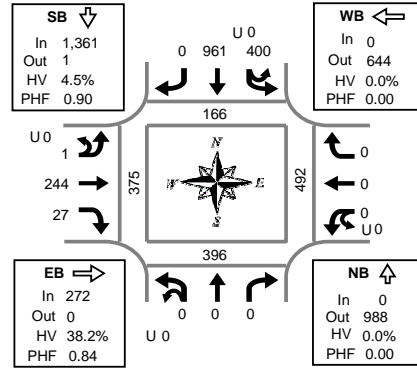
Count Period: 7:00 AM to 9:00 AM

Total Vehicle Summary



Eric Boivin
(303) 668-0220

Site ID: 390
5TH AVE & OLIVE WAY
 Wednesday, February 11, 2015
 7:00 AM to 9:00 AM



Peak Hour Summary
7:45 AM to 8:45 AM

15-Minute Interval Summary

7:00 AM to 9:00 AM

Interval Start Time	Northbound 5TH AVE				Southbound 5TH AVE				Eastbound OLIVE WAY				Westbound OLIVE WAY				Interval Total	Pedestrians & Bicycles In Crosswalk (By Location)						
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R		North	South	East	West			
7:00 AM	0	0	0	0	0	49	187	0	0	0	41	7	0	0	0	0	0	0	0	284	18	71	125	45
7:15 AM	0	0	0	0	0	70	237	0	0	0	53	8	0	0	0	0	0	0	0	368	26	70	145	55
7:30 AM	0	0	0	0	0	77	228	0	0	0	48	8	0	0	0	0	0	0	0	361	25	74	175	59
7:45 AM	0	0	0	0	0	108	269	0	0	0	52	7	0	0	0	0	0	0	0	436	34	93	154	74
8:00 AM	0	0	0	0	0	104	249	0	0	0	61	5	0	0	0	0	0	0	0	419	38	109	116	87
8:15 AM	0	0	0	0	0	91	229	0	0	0	73	8	0	0	0	0	0	0	0	401	36	78	114	95
8:30 AM	0	0	0	0	0	97	214	0	0	1	58	7	0	0	0	0	0	0	0	377	58	116	108	119
8:45 AM	0	0	0	0	0	107	218	0	1	0	57	8	0	0	0	0	0	0	0	391	40	101	118	89
Total Survey	0	0	0	0	0	703	1,831	0	1	1	443	58	0	0	0	0	0	0	0	3,037	275	712	1,055	623

Peak Hour Summary

7:45 AM to 8:45 AM

By Approach	Northbound 5TH AVE				Southbound 5TH AVE				Eastbound OLIVE WAY				Westbound OLIVE WAY				Total	Pedestrians & Bicycles In Crosswalk (By Location)			
	In	Out	Total	HV	In	Out	Total	HV	In	Out	Total	HV	In	Out	Total	HV		North	South	East	West
Volume	0	988	988	0	1,361	1	1,362	61	272	0	272	104	0	644	644	0	1,633	166	396	492	375
%HV		0.0%			4.5%				38.2%				0.0%				10.1%				
PHF		0.00			0.90				0.84				0.00				0.94				

By Movement	Northbound 5TH AVE				Southbound 5TH AVE				Eastbound OLIVE WAY				Westbound OLIVE WAY				Total
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R	
Volume	0	0	0	0	0	400	961	0	0	1	244	27	0	0	0	0	1,633
%HV	0.0%	0.0%	0.0%	0.0%	0.0%	3.3%	5.0%	0.0%	0.0%	0.0%	42.2%	3.7%	0.0%	0.0%	0.0%	0.0%	10.1%
PHF	0.00	0.00	0.00	0.00	0.00	0.93	0.89	0.00	0.00	0.25	0.84	0.84	0.00	0.00	0.00	0.00	0.94

Rolling Hour Summary

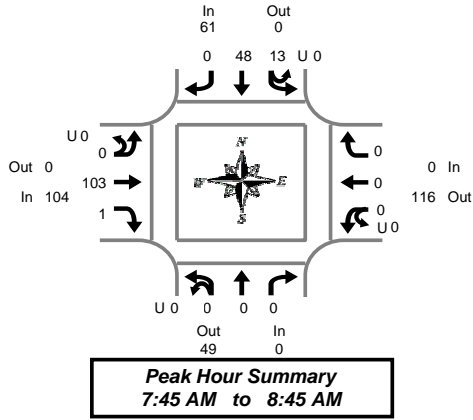
7:00 AM to 9:00 AM

Interval Start Time	Northbound 5TH AVE				Southbound 5TH AVE				Eastbound OLIVE WAY				Westbound OLIVE WAY				Interval Total	Pedestrians & Bicycles In Crosswalk (By Location)			
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R		North	South	East	West
7:00 AM	0	0	0	0	0	304	921	0	0	0	194	30	0	0	0	0	1,449	103	308	599	233
7:15 AM	0	0	0	0	0	359	983	0	0	0	214	28	0	0	0	0	1,584	123	346	590	275
7:30 AM	0	0	0	0	0	380	975	0	0	0	234	28	0	0	0	0	1,617	133	354	559	315
7:45 AM	0	0	0	0	0	400	961	0	0	1	244	27	0	0	0	0	1,633	166	396	492	375
8:00 AM	0	0	0	0	0	399	910	0	1	1	249	28	0	0	0	0	1,588	172	404	456	390

Heavy Vehicle Summary



Eric Boivin
(303) 668-0220



5TH AVE & OLIVE WAY

Wednesday, February 11, 2015
7:00 AM to 9:00 AM

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

Interval Start Time	Northbound 5TH AVE					Southbound 5TH AVE					Eastbound OLIVE WAY					Westbound OLIVE WAY					Interval Total
	U	L	T	R	Total	U	L	T	R	Total	U	L	T	R	Total	U	L	T	R	Total	
7:00 AM	0	0	0	0	0	0	3	13	0	16	0	0	23	0	23	0	0	0	0	0	39
7:15 AM	0	0	0	0	0	0	2	11	0	13	0	0	24	0	24	0	0	0	0	0	37
7:30 AM	0	0	0	0	0	0	1	13	0	14	0	0	20	0	20	0	0	0	0	0	34
7:45 AM	0	0	0	0	0	0	3	11	0	14	0	0	21	1	22	0	0	0	0	0	36
8:00 AM	0	0	0	0	0	0	5	10	0	15	0	0	26	0	26	0	0	0	0	0	41
8:15 AM	0	0	0	0	0	0	2	9	0	11	0	0	34	0	34	0	0	0	0	0	45
8:30 AM	0	0	0	0	0	0	3	18	0	21	0	0	22	0	22	0	0	0	0	0	43
8:45 AM	0	0	0	0	0	0	5	12	0	17	0	0	21	0	21	0	0	0	0	0	38
Total Survey	0	0	0	0	0	0	24	97	0	121	0	0	191	1	192	0	0	0	0	0	1

Peak Hour Summary 7:45 AM to 8:45 AM

By Approach	Northbound 5TH AVE			Southbound 5TH AVE			Eastbound OLIVE WAY			Westbound OLIVE WAY			Total
	In	Out	Total	In	Out	Total	In	Out	Total	In	Out	Total	
Volume	0	49	49	61	0	61	104	0	104	0	116	116	165

By Movement	Northbound 5TH AVE					Southbound 5TH AVE					Eastbound OLIVE WAY					Westbound OLIVE WAY					Total
	U	L	T	R	Total	U	L	T	R	Total	U	L	T	R	Total	U	L	T	R	Total	
Volume	0	0	0	0	0	0	13	48	0	61	0	0	103	1	104	0	0	0	0	0	165

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

Interval Start Time	Northbound 5TH AVE					Southbound 5TH AVE					Eastbound OLIVE WAY					Westbound OLIVE WAY					Interval Total
	U	L	T	R	Total	U	L	T	R	Total	U	L	T	R	Total	U	L	T	R	Total	
7:00 AM	0	0	0	0	0	0	9	48	0	57	0	0	88	1	89	0	0	0	0	0	146
7:15 AM	0	0	0	0	0	0	11	45	0	56	0	0	91	1	92	0	0	0	0	0	148
7:30 AM	0	0	0	0	0	0	11	43	0	54	0	0	101	1	102	0	0	0	0	0	156
7:45 AM	0	0	0	0	0	0	13	48	0	61	0	0	103	1	104	0	0	0	0	0	165
8:00 AM	0	0	0	0	0	0	15	49	0	64	0	0	103	0	103	0	0	0	0	0	167

Peak Hour Summary

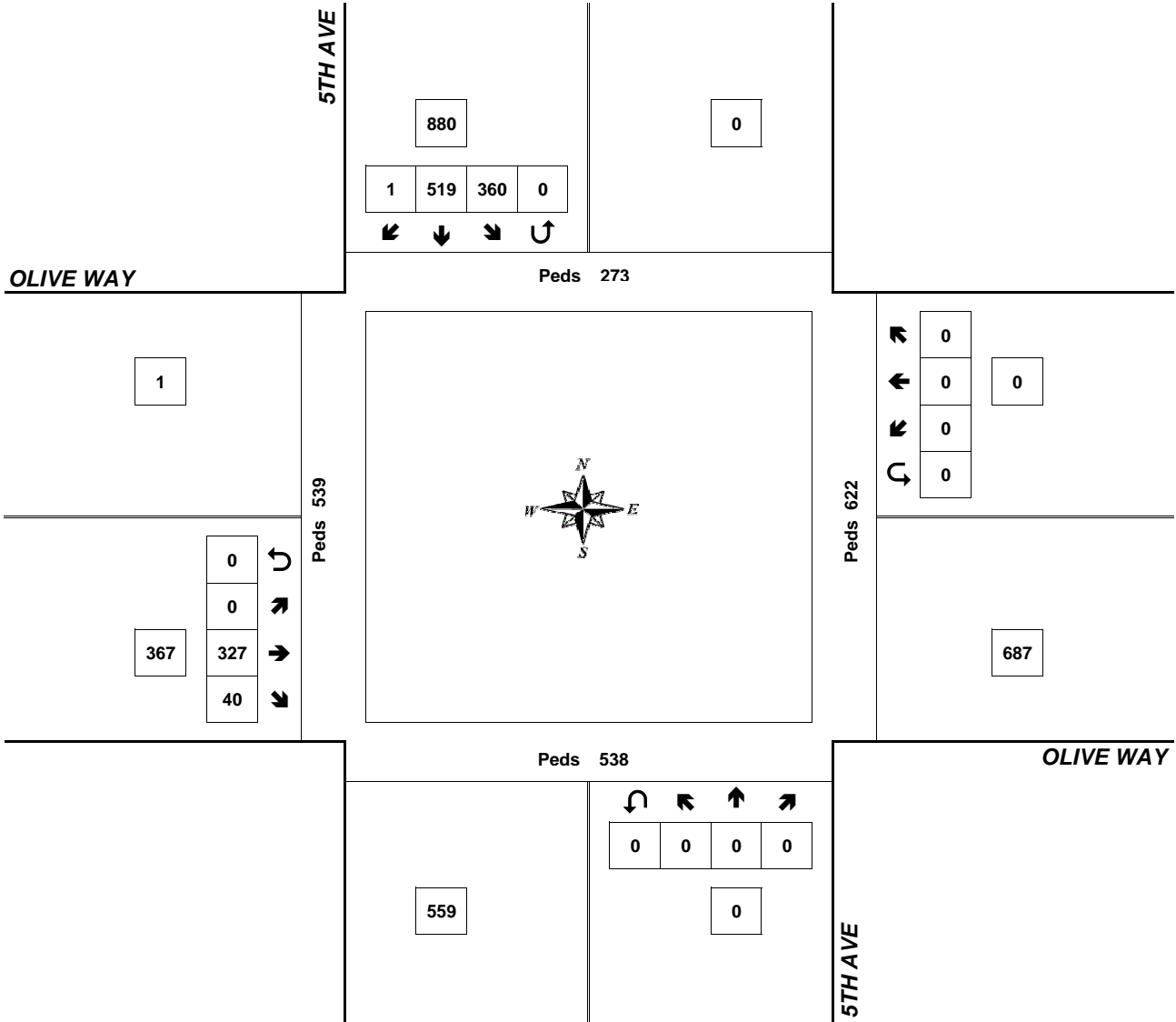
Site ID: 390



Eric Boivin
(303) 668-0220

5TH AVE & OLIVE WAY

4:00 PM to 5:00 PM
Wednesday, February 11, 2015



Approach	PHF	HV%	Volume
EB	0.92	21.3%	367
WB	0.00	0.0%	0
NB	0.00	0.0%	0
SB	0.83	2.4%	880
Intersection	0.85	7.9%	1,247

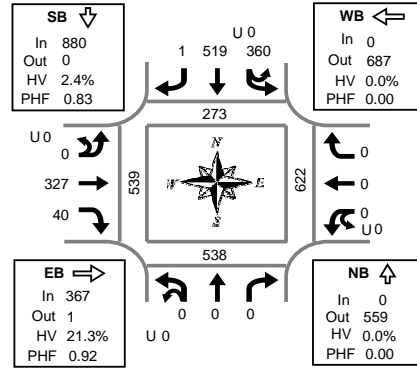
Count Period: 4:00 PM to 6:00 PM

Total Vehicle Summary



Eric Boivin
(303) 668-0220

Site ID: 390
5TH AVE & OLIVE WAY
 Wednesday, February 11, 2015
 4:00 PM to 6:00 PM



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

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

Interval Start Time	Northbound 5TH AVE				Southbound 5TH AVE				Eastbound OLIVE WAY				Westbound OLIVE WAY				Interval Total	Pedestrians & Bicycles In Crosswalk (By Location)				
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R		North	South	East	West	
4:00 PM	0	0	0	0	0	91	174	0	0	0	87	13	0	0	0	0	0	0	58	132	158	122
4:15 PM	0	0	0	0	0	77	137	0	0	0	89	9	0	0	0	0	0	51	123	141	128	
4:30 PM	0	0	0	0	0	91	88	0	0	0	74	6	0	0	0	0	0	79	136	161	153	
4:45 PM	0	0	0	0	0	101	120	1	0	0	77	12	0	0	0	0	0	85	147	162	136	
5:00 PM	0	0	0	0	0	95	123	0	0	0	86	12	0	0	0	0	0	77	183	169	181	
5:15 PM	0	0	0	0	0	101	99	0	0	0	91	13	0	0	0	0	0	51	163	173	184	
5:30 PM	0	0	0	0	0	91	91	0	0	0	84	19	0	0	0	0	0	64	150	125	158	
5:45 PM	0	0	0	0	0	107	113	0	0	0	68	19	0	0	0	0	0	49	150	138	148	
Total Survey	0	0	0	0	0	754	945	1	0	0	656	103	0	0	0	0	0	514	1,184	1,227	1,210	

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

By Approach	Northbound 5TH AVE				Southbound 5TH AVE				Eastbound OLIVE WAY				Westbound OLIVE WAY				Total	Pedestrians & Bicycles In Crosswalk (By Location)			
	In	Out	Total	HV	In	Out	Total	HV	In	Out	Total	HV	In	Out	Total	HV		North	South	East	West
Volume	0	559	559	0	880	0	880	21	367	1	368	78	0	687	687	0	1,247	273	538	622	539
%HV		0.0%				2.4%				21.3%				0.0%			7.9%				
PHF		0.00				0.83				0.92				0.00			0.85				

By Movement	Northbound 5TH AVE				Southbound 5TH AVE				Eastbound OLIVE WAY				Westbound OLIVE WAY				Total
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R	
Volume	0	0	0	0	0	360	519	1	0	0	327	40	0	0	0	0	1,247
%HV	0.0%	0.0%	0.0%	0.0%	0.0%	1.1%	3.3%	0.0%	0.0%	0.0%	23.9%	0.0%	0.0%	0.0%	0.0%	0.0%	7.9%
PHF	0.00	0.00	0.00	0.00	0.00	0.89	0.75	0.25	0.00	0.00	0.92	0.77	0.00	0.00	0.00	0.00	0.85

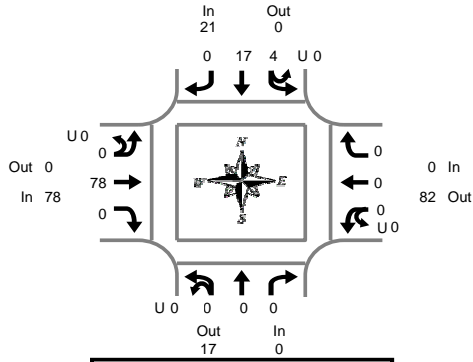
Rolling Hour Summary 4:00 PM to 6:00 PM

Interval Start Time	Northbound 5TH AVE				Southbound 5TH AVE				Eastbound OLIVE WAY				Westbound OLIVE WAY				Interval Total	Pedestrians & Bicycles In Crosswalk (By Location)			
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R		North	South	East	West
4:00 PM	0	0	0	0	0	360	519	1	0	0	327	40	0	0	0	0	1,247	273	538	622	539
4:15 PM	0	0	0	0	0	364	468	1	0	0	326	39	0	0	0	0	1,198	292	589	633	598
4:30 PM	0	0	0	0	0	388	430	1	0	0	328	43	0	0	0	0	1,190	292	629	665	654
4:45 PM	0	0	0	0	0	388	433	1	0	0	338	56	0	0	0	0	1,216	277	643	629	659
5:00 PM	0	0	0	0	0	394	426	0	0	0	329	63	0	0	0	0	1,212	241	646	605	671

Heavy Vehicle Summary



Eric Boivin
(303) 668-0220



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

5TH AVE & OLIVE WAY

Wednesday, February 11, 2015

4:00 PM to 6:00 PM

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

Interval Start Time	Northbound 5TH AVE					Southbound 5TH AVE					Eastbound OLIVE WAY					Westbound OLIVE WAY					Interval Total	
	U	L	T	R	Total	U	L	T	R	Total	U	L	T	R	Total	U	L	T	R	Total		
4:00 PM	0	0	0	0	0	0	1	3	0	4	0	0	18	0	18	0	0	0	0	0	0	22
4:15 PM	0	0	0	0	0	0	1	5	0	6	0	0	24	0	24	0	0	0	0	0	0	30
4:30 PM	0	0	0	0	0	0	1	1	0	2	0	0	18	0	18	0	0	0	0	0	0	20
4:45 PM	0	0	0	0	0	0	1	8	0	9	0	0	18	0	18	0	0	0	0	0	0	27
5:00 PM	0	0	0	0	0	0	2	3	0	5	0	0	19	0	19	0	0	0	0	0	0	24
5:15 PM	0	0	0	0	0	0	0	5	0	5	0	0	17	0	17	0	0	0	0	0	0	22
5:30 PM	0	0	0	0	0	0	0	9	0	9	0	0	15	0	15	0	0	0	0	0	0	24
5:45 PM	0	0	0	0	0	0	2	2	0	4	0	0	19	1	20	0	0	0	0	0	0	24
Total Survey	0	0	0	0	0	0	8	36	0	44	0	0	148	1	149	0	0	0	0	0	0	1

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

By Approach	Northbound 5TH AVE			Southbound 5TH AVE			Eastbound OLIVE WAY			Westbound OLIVE WAY			Total
	In	Out	Total	In	Out	Total	In	Out	Total	In	Out	Total	
Volume	0	17	17	21	0	21	78	0	78	0	82	82	99

By Movement	Northbound 5TH AVE					Southbound 5TH AVE					Eastbound OLIVE WAY					Westbound OLIVE WAY					Total	
	U	L	T	R	Total	U	L	T	R	Total	U	L	T	R	Total	U	L	T	R	Total		
Volume	0	0	0	0	0	0	4	17	0	21	0	0	78	0	78	0	0	0	0	0	0	99

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

Interval Start Time	Northbound 5TH AVE					Southbound 5TH AVE					Eastbound OLIVE WAY					Westbound OLIVE WAY					Interval Total
	U	L	T	R	Total	U	L	T	R	Total	U	L	T	R	Total	U	L	T	R	Total	
4:00 PM	0	0	0	0	0	0	4	17	0	21	0	0	78	0	78	0	0	0	0	0	99
4:15 PM	0	0	0	0	0	0	5	17	0	22	0	0	79	0	79	0	0	0	0	0	101
4:30 PM	0	0	0	0	0	0	4	17	0	21	0	0	72	0	72	0	0	0	0	0	93
4:45 PM	0	0	0	0	0	0	3	25	0	28	0	0	69	0	69	0	0	0	0	0	97
5:00 PM	0	0	0	0	0	0	4	19	0	23	0	0	70	1	71	0	0	0	0	0	94

Peak Hour Summary

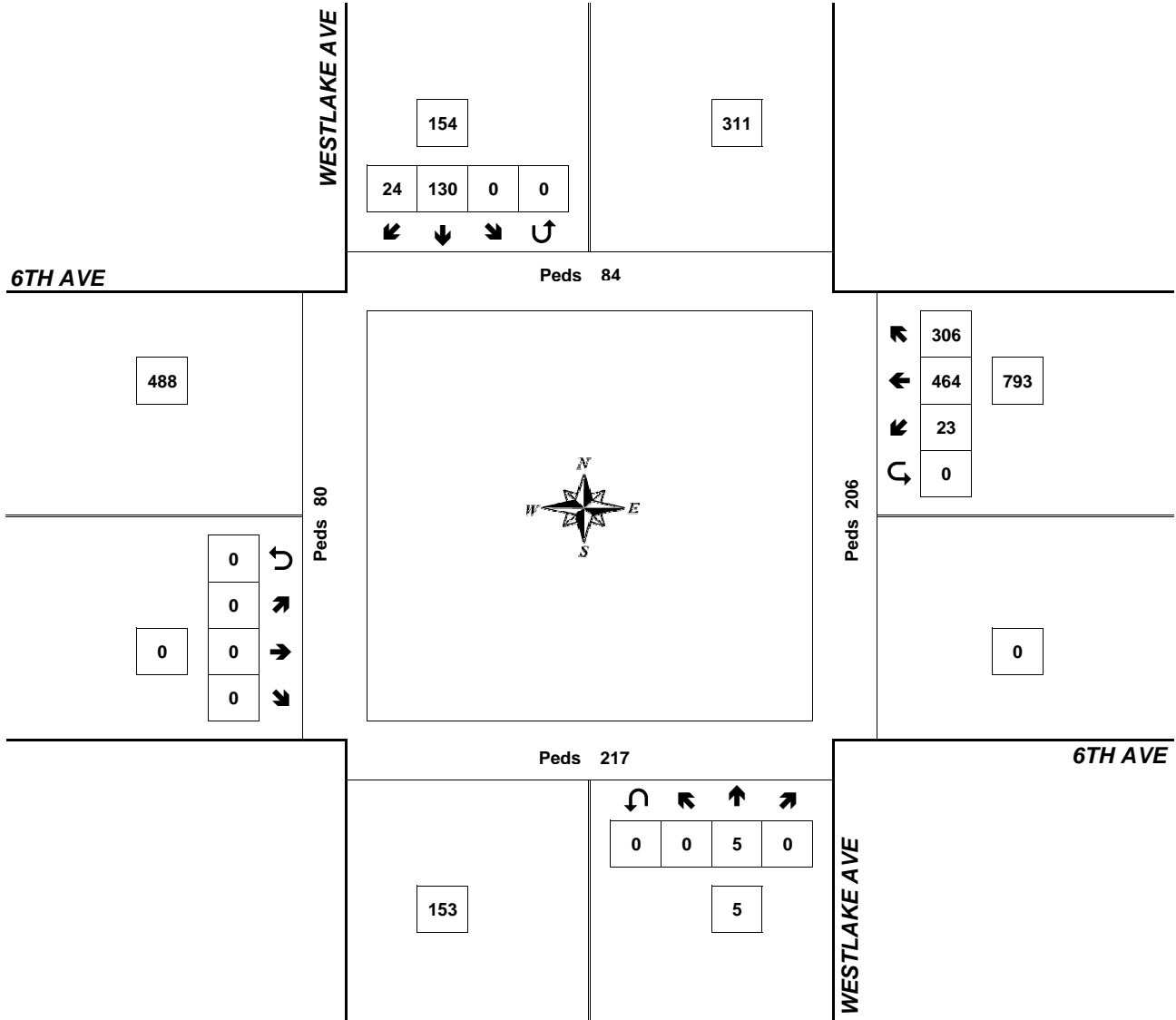
Site ID: 436



Eric Boivin
(303) 668-0220

WESTLAKE AVE & 6TH AVE

8:00 AM to 9:00 AM
Wednesday, February 11, 2015



Approach	PHF	HV%	Volume
EB	0.00	0.0%	0
WB	0.90	3.7%	793
NB	0.63	80.0%	5
SB	0.90	11.7%	154
Intersection	0.90	5.4%	952

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

Total Vehicle Summary



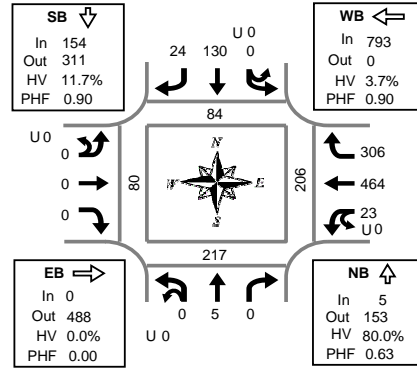
Eric Boivin
(303) 668-0220

Site ID: 436

WESTLAKE AVE & 6TH AVE

Wednesday, February 11, 2015

7:00 AM to 9:00 AM



Peak Hour Summary 8:00 AM to 9:00 AM

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

Interval Start Time	Northbound WESTLAKE AVE				Southbound WESTLAKE AVE				Eastbound 6TH AVE				Westbound 6TH AVE				Interval Total	Pedestrians & Bicycles In Crosswalk (By Location)			
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R		North	South	East	West
7:00 AM	0	0	1	0	0	0	18	5	0	0	0	0	2	79	49	154	7	25	58	9	
7:15 AM	1	0	6	0	0	0	23	5	0	0	0	0	6	64	46	151	17	33	45	12	
7:30 AM	0	1	0	0	0	0	20	3	0	0	0	0	12	76	52	164	19	39	44	17	
7:45 AM	0	1	2	0	0	0	29	7	0	0	0	0	8	111	64	222	8	48	42	16	
8:00 AM	0	0	1	0	0	0	31	10	0	0	0	0	9	123	89	263	16	56	52	26	
8:15 AM	0	0	2	0	0	0	39	4	0	0	0	0	3	107	64	219	27	37	45	13	
8:30 AM	0	0	1	0	0	0	32	6	0	0	0	0	5	116	84	244	23	49	56	22	
8:45 AM	0	0	1	0	0	0	28	4	0	0	0	0	6	118	69	226	18	75	53	19	
Total Survey	1	2	14	0	0	0	220	44	0	0	0	0	51	794	517	1,643	135	362	395	134	

Peak Hour Summary 8:00 AM to 9:00 AM

By Approach	Northbound WESTLAKE AVE				Southbound WESTLAKE AVE				Eastbound 6TH AVE				Westbound 6TH AVE				Total	Pedestrians & Bicycles In Crosswalk (By Location)			
	In	Out	Total	HV	In	Out	Total	HV	In	Out	Total	HV	In	Out	Total	HV		North	South	East	West
Volume	5	153	158	4	154	311	465	18	0	488	488	0	793	0	793	29	952	84	217	206	80
%HV	80.0%				11.7%				0.0%				3.7%				5.4%				
PHF	0.63				0.90				0.00				0.90				0.90				

By Movement	Northbound WESTLAKE AVE				Southbound WESTLAKE AVE				Eastbound 6TH AVE				Westbound 6TH AVE				Total					
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R						
Volume	0	0	5	0	0	0	130	24	0	0	0	0	0	23	464	306	952					
%HV	0.0%	0.0%	80.0%	0.0%	0.0%	0.0%	9.2%	25.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	4.3%	2.8%	4.9%	5.4%				
PHF	0.00	0.00	0.63	0.00	0.00	0.00	0.83	0.80	0.00	0.00	0.00	0.00	0.00	0.00	0.64	0.94	0.86	0.90				

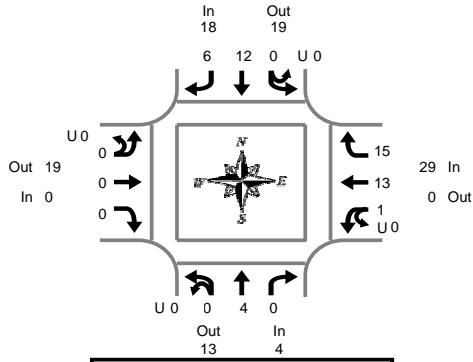
Rolling Hour Summary 7:00 AM to 9:00 AM

Interval Start Time	Northbound WESTLAKE AVE				Southbound WESTLAKE AVE				Eastbound 6TH AVE				Westbound 6TH AVE				Interval Total	Pedestrians & Bicycles In Crosswalk (By Location)			
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R		North	South	East	West
7:00 AM	1	2	9	0	0	0	90	20	0	0	0	0	0	28	330	211	691	51	145	189	54
7:15 AM	1	2	9	0	0	0	103	25	0	0	0	0	0	35	374	251	800	60	176	183	71
7:30 AM	0	2	5	0	0	0	119	24	0	0	0	0	0	32	417	269	868	70	180	183	72
7:45 AM	0	1	6	0	0	0	131	27	0	0	0	0	0	25	457	301	948	74	190	195	77
8:00 AM	0	0	5	0	0	0	130	24	0	0	0	0	0	23	464	306	952	84	217	206	80

Heavy Vehicle Summary



Eric Boivin
(303) 668-0220



WESTLAKE AVE & 6TH AVE

Wednesday, February 11, 2015

7:00 AM to 9:00 AM

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

Interval Start Time	Northbound WESTLAKE AVE					Southbound WESTLAKE AVE					Eastbound 6TH AVE					Westbound 6TH AVE					Interval Total	
	U	L	T	R	Total	U	L	T	R	Total	U	L	T	R	Total	U	L	T	R	Total		
7:00 AM	0	0	1	0	1	0	0	2	0	2	0	0	0	0	0	0	0	3	1	1	4	7
7:15 AM	0	0	2	0	2	0	0	1	2	3	0	0	0	0	0	0	0	0	11	1	12	17
7:30 AM	0	0	0	0	0	0	0	2	1	3	0	0	0	0	0	0	1	1	3	5	8	
7:45 AM	0	0	1	0	1	0	0	3	3	6	0	0	0	0	0	0	0	3	0	3	10	
8:00 AM	0	0	1	0	1	0	0	1	1	2	0	0	0	0	0	0	0	4	3	7	10	
8:15 AM	0	0	2	0	2	0	0	5	2	7	0	0	0	0	0	0	2	2	4	4	13	
8:30 AM	0	0	0	0	0	0	0	4	1	5	0	0	0	0	0	0	2	3	5	10		
8:45 AM	0	0	1	0	1	0	0	2	2	4	0	0	0	0	0	0	1	5	7	13	18	
Total Survey	0	0	8	0	8	0	0	20	12	32	0	0	0	0	0	0	2	31	20	53	32	

Peak Hour Summary 8:00 AM to 9:00 AM

By Approach	Northbound WESTLAKE AVE			Southbound WESTLAKE AVE			Eastbound 6TH AVE			Westbound 6TH AVE			Total
	In	Out	Total	In	Out	Total	In	Out	Total	In	Out	Total	
Volume	4	13	17	18	19	37	0	19	19	29	0	29	51

By Movement	Northbound WESTLAKE AVE					Southbound WESTLAKE AVE					Eastbound 6TH AVE					Westbound 6TH AVE					Total
	U	L	T	R	Total	U	L	T	R	Total	U	L	T	R	Total	U	L	T	R	Total	
Volume	0	0	4	0	4	0	0	12	6	18	0	0	0	0	0	0	1	13	15	29	51

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

Interval Start Time	Northbound WESTLAKE AVE					Southbound WESTLAKE AVE					Eastbound 6TH AVE					Westbound 6TH AVE					Interval Total
	U	L	T	R	Total	U	L	T	R	Total	U	L	T	R	Total	U	L	T	R	Total	
7:00 AM	0	0	4	0	4	0	0	8	6	14	0	0	0	0	0	0	1	18	5	24	42
7:15 AM	0	0	4	0	4	0	0	7	7	14	0	0	0	0	0	0	1	19	7	27	45
7:30 AM	0	0	4	0	4	0	0	11	7	18	0	0	0	0	0	0	1	10	8	19	41
7:45 AM	0	0	4	0	4	0	0	13	7	20	0	0	0	0	0	0	0	11	8	19	43
8:00 AM	0	0	4	0	4	0	0	12	6	18	0	0	0	0	0	0	1	13	15	29	51

Peak Hour Summary

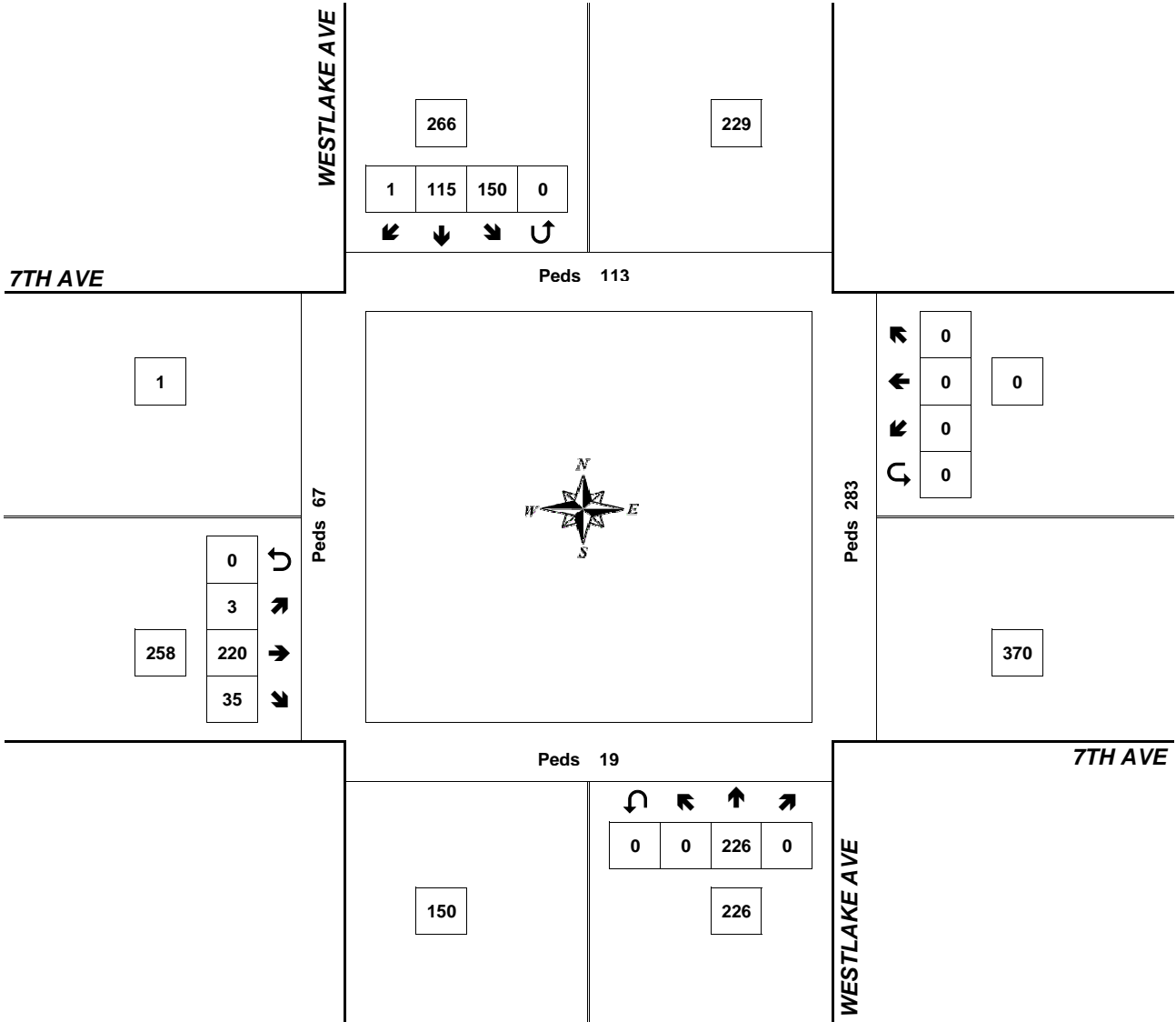
Site ID: 475



Eric Boivin
(303) 668-0220

WESTLAKE AVE & 7TH AVE

8:00 AM to 9:00 AM
Thursday, February 12, 2015



Approach	PHF	HV%	Volume
EB	0.95	3.1%	258
WB	0.00	0.0%	0
NB	0.84	6.2%	226
SB	0.75	5.3%	226
Intersection	0.86	4.8%	750

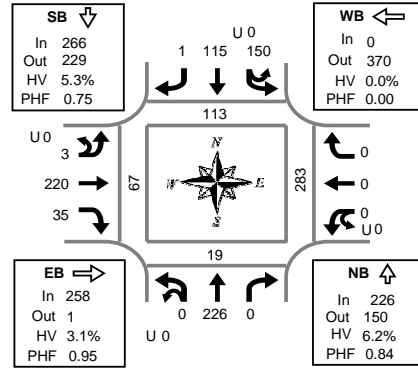
Count Period: 7:00 AM to 9:00 AM

Total Vehicle Summary



Eric Boivin
(303) 668-0220

Site ID: 475
WESTLAKE AVE & 7TH AVE
 Thursday, February 12, 2015
 7:00 AM to 9:00 AM



Peak Hour Summary
8:00 AM to 9:00 AM

15-Minute Interval Summary

7:00 AM to 9:00 AM

Interval Start Time	Northbound WESTLAKE AVE				Southbound WESTLAKE AVE				Eastbound 7TH AVE				Westbound 7TH AVE				Interval Total	Pedestrians & Bicycles In Crosswalk (By Location)					
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R		North	South	East	West		
7:00 AM	0	0	47	1	0	18	14	1	0	0	29	6	0	0	0	0	0	0	116	15	0	32	9
7:15 AM	0	0	37	0	0	15	25	0	0	0	41	5	0	0	0	0	0	0	123	12	1	56	14
7:30 AM	0	0	44	0	0	22	16	0	0	1	47	9	0	0	0	0	0	0	139	28	1	58	11
7:45 AM	0	0	56	0	0	32	30	0	0	0	49	3	0	0	0	0	0	0	170	29	4	62	13
8:00 AM	0	0	49	0	0	25	25	0	0	0	57	10	0	0	0	0	0	0	166	21	4	69	21
8:15 AM	0	0	67	0	0	49	40	0	0	1	52	8	0	0	0	0	0	0	217	33	4	73	14
8:30 AM	0	0	48	0	0	36	21	1	0	1	58	9	0	0	0	0	0	0	174	27	6	72	10
8:45 AM	0	0	62	0	0	40	29	0	0	1	53	8	0	0	0	0	0	0	193	32	5	69	22
Total Survey	0	0	410	1	0	237	200	2	0	4	386	58	0	0	0	0	0	0	1,298	197	25	491	114

Peak Hour Summary

8:00 AM to 9:00 AM

By Approach	Northbound WESTLAKE AVE				Southbound WESTLAKE AVE				Eastbound 7TH AVE				Westbound 7TH AVE				Total	Pedestrians & Bicycles In Crosswalk (By Location)			
	In	Out	Total	HV	In	Out	Total	HV	In	Out	Total	HV	In	Out	Total	HV		North	South	East	West
Volume	226	150	376	14	266	229	495	14	258	1	259	8	0	370	370	0	750	113	19	283	67
%HV	6.2%				5.3%				3.1%				0.0%				4.8%				
PHF	0.84				0.75				0.95				0.00				0.86				

By Movement	Northbound WESTLAKE AVE				Southbound WESTLAKE AVE				Eastbound 7TH AVE				Westbound 7TH AVE				Total
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R	
Volume	0	0	226	0	0	150	115	1	0	3	220	35	0	0	0	0	750
%HV	0.0%	0.0%	6.2%	0.0%	0.0%	2.7%	8.7%	0.0%	0.0%	0.0%	0.9%	17.1%	0.0%	0.0%	0.0%	0.0%	4.8%
PHF	0.00	0.00	0.84	0.00	0.00	0.77	0.72	0.25	0.00	0.75	0.95	0.88	0.00	0.00	0.00	0.00	0.86

Rolling Hour Summary

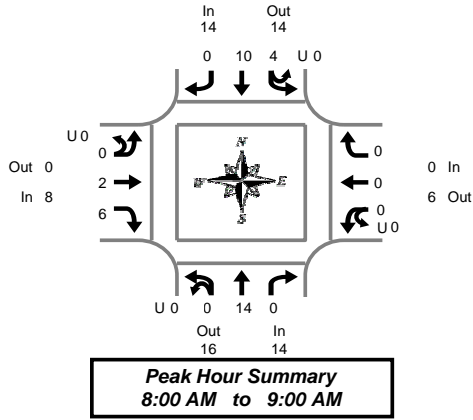
7:00 AM to 9:00 AM

Interval Start Time	Northbound WESTLAKE AVE				Southbound WESTLAKE AVE				Eastbound 7TH AVE				Westbound 7TH AVE				Interval Total	Pedestrians & Bicycles In Crosswalk (By Location)			
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R		North	South	East	West
7:00 AM	0	0	184	1	0	87	85	1	0	1	166	23	0	0	0	0	548	84	6	208	47
7:15 AM	0	0	186	0	0	94	96	0	0	1	194	27	0	0	0	0	598	90	10	245	59
7:30 AM	0	0	216	0	0	128	111	0	0	2	205	30	0	0	0	0	692	111	13	262	59
7:45 AM	0	0	220	0	0	142	116	1	0	2	216	30	0	0	0	0	727	110	18	276	58
8:00 AM	0	0	226	0	0	150	115	1	0	3	220	35	0	0	0	0	750	113	19	283	67

Heavy Vehicle Summary



Eric Boivin
(303) 668-0220



WESTLAKE AVE & 7TH AVE

Thursday, February 12, 2015
7:00 AM to 9:00 AM

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

Interval Start Time	Northbound WESTLAKE AVE					Southbound WESTLAKE AVE					Eastbound 7TH AVE					Westbound 7TH AVE					Interval Total	
	U	L	T	R	Total	U	L	T	R	Total	U	L	T	R	Total	U	L	T	R	Total		
7:00 AM	0	0	2	0	2	0	1	2	0	3	0	0	0	0	0	0	0	0	0	0	0	5
7:15 AM	0	0	4	0	4	0	1	2	0	3	0	0	1	1	2	0	0	0	0	0	0	9
7:30 AM	0	0	3	0	3	0	0	2	0	2	0	0	0	3	3	0	0	0	0	0	0	8
7:45 AM	0	0	5	0	5	0	0	1	0	1	0	0	1	1	2	0	0	0	0	0	0	8
8:00 AM	0	0	2	0	2	0	1	2	0	3	0	0	0	1	1	0	0	0	0	0	0	6
8:15 AM	0	0	3	0	3	0	1	4	0	5	0	0	0	1	1	0	0	0	0	0	0	9
8:30 AM	0	0	5	0	5	0	1	1	0	2	0	0	1	2	3	0	0	0	0	0	0	10
8:45 AM	0	0	4	0	4	0	1	3	0	4	0	0	1	2	3	0	0	0	0	0	0	11
Total Survey	0	0	28	0	28	0	6	17	0	23	0	0	4	11	15	0	0	0	0	0	0	11

Peak Hour Summary 8:00 AM to 9:00 AM

By Approach	Northbound WESTLAKE AVE			Southbound WESTLAKE AVE			Eastbound 7TH AVE			Westbound 7TH AVE			Total
	In	Out	Total	In	Out	Total	In	Out	Total	In	Out	Total	
Volume	14	16	30	14	14	28	8	0	8	0	6	6	36

By Movement	Northbound WESTLAKE AVE					Southbound WESTLAKE AVE					Eastbound 7TH AVE					Westbound 7TH AVE					Total
	U	L	T	R	Total	U	L	T	R	Total	U	L	T	R	Total	U	L	T	R	Total	
Volume	0	0	14	0	14	0	4	10	0	14	0	0	2	6	8	0	0	0	0	0	36

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

Interval Start Time	Northbound WESTLAKE AVE					Southbound WESTLAKE AVE					Eastbound 7TH AVE					Westbound 7TH AVE					Interval Total
	U	L	T	R	Total	U	L	T	R	Total	U	L	T	R	Total	U	L	T	R	Total	
7:00 AM	0	0	14	0	14	0	2	7	0	9	0	0	2	5	7	0	0	0	0	0	30
7:15 AM	0	0	14	0	14	0	2	7	0	9	0	0	2	6	8	0	0	0	0	0	31
7:30 AM	0	0	13	0	13	0	2	9	0	11	0	0	1	6	7	0	0	0	0	0	31
7:45 AM	0	0	15	0	15	0	3	8	0	11	0	0	2	5	7	0	0	0	0	0	33
8:00 AM	0	0	14	0	14	0	4	10	0	14	0	0	2	6	8	0	0	0	0	0	36

Peak Hour Summary

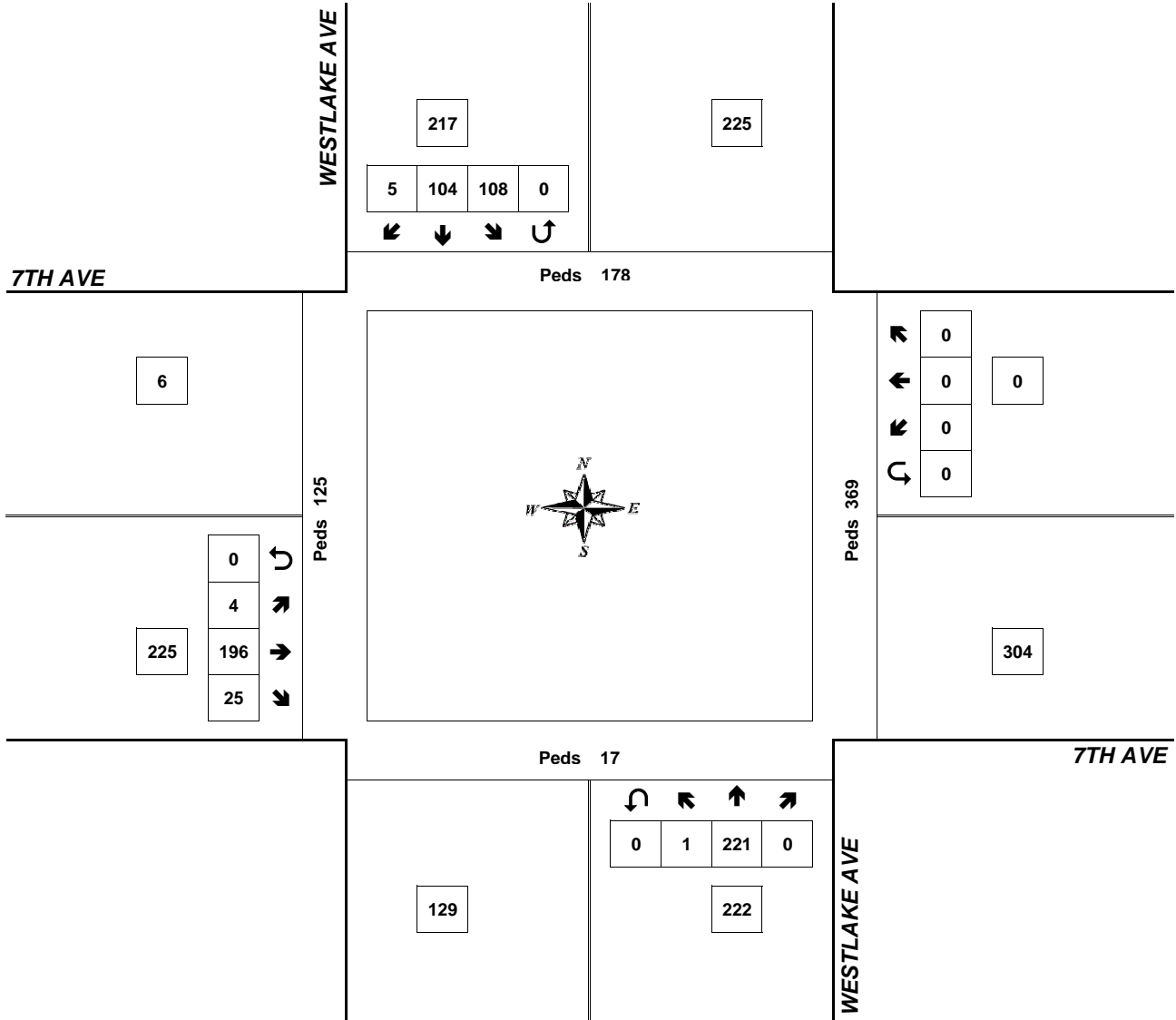
Site ID: 475



Eric Boivin
(303) 668-0220

WESTLAKE AVE & 7TH AVE

4:15 PM to 5:15 PM
Thursday, February 12, 2015



Approach	PHF	HV%	Volume
EB	0.89	2.2%	225
WB	0.00	0.0%	0
NB	0.93	5.9%	222
SB	0.81	3.2%	217
Intersection	0.95	3.8%	664

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

Total Vehicle Summary



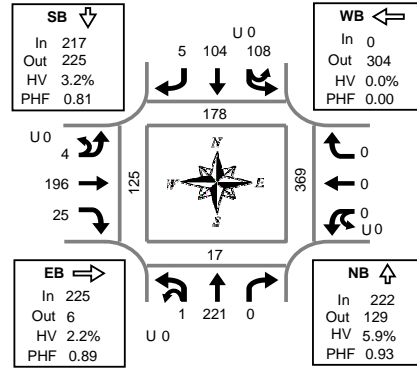
Eric Boivin
(303) 668-0220

Site ID: 475

WESTLAKE AVE & 7TH AVE

Thursday, February 12, 2015

4:00 PM to 6:00 PM



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

15-Minute Interval Summary

4:00 PM to 6:00 PM

Interval Start Time	Northbound WESTLAKE AVE				Southbound WESTLAKE AVE				Eastbound 7TH AVE				Westbound 7TH AVE				Interval Total	Pedestrians & Bicycles In Crosswalk (By Location)						
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R		North	South	East	West			
4:00 PM	0	0	46	0	0	21	31	2	0	0	49	12	0	0	0	0	0	0	0	161	22	0	76	20
4:15 PM	0	1	48	0	0	25	21	0	0	2	51	6	0	0	0	0	0	0	0	154	24	3	90	40
4:30 PM	0	0	57	0	0	19	24	4	0	2	53	8	0	0	0	0	0	0	0	167	46	1	83	27
4:45 PM	0	0	56	0	0	36	31	0	0	0	42	3	0	0	0	0	0	0	0	168	44	7	75	29
5:00 PM	0	0	60	0	0	28	28	1	0	0	50	8	0	0	0	0	0	0	0	175	64	6	121	29
5:15 PM	0	0	32	0	0	30	36	2	0	0	44	4	0	0	0	0	0	0	0	148	49	3	130	42
5:30 PM	0	0	47	0	0	20	28	3	0	0	57	6	0	0	0	0	0	0	0	161	45	3	114	35
5:45 PM	0	0	36	0	0	36	21	0	0	0	61	5	0	0	0	0	0	0	0	159	41	8	141	40
Total Survey	0	1	382	0	0	215	220	12	0	4	407	52	0	0	0	0	0	0	0	1,293	335	31	830	262

Peak Hour Summary

4:15 PM to 5:15 PM

By Approach	Northbound WESTLAKE AVE				Southbound WESTLAKE AVE				Eastbound 7TH AVE				Westbound 7TH AVE				Total	Pedestrians & Bicycles In Crosswalk (By Location)			
	In	Out	Total	HV	In	Out	Total	HV	In	Out	Total	HV	In	Out	Total	HV		North	South	East	West
Volume	222	129	351	13	217	225	442	7	225	6	231	5	0	304	304	0	664	178	17	369	125
%HV	5.9%				3.2%				2.2%				0.0%				3.8%				
PHF	0.93				0.81				0.89				0.00				0.95				

By Movement	Northbound WESTLAKE AVE				Southbound WESTLAKE AVE				Eastbound 7TH AVE				Westbound 7TH AVE				Total
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R	
Volume	0	1	221	0	0	108	104	5	0	4	196	25	0	0	0	0	664
%HV	0.0%	0.0%	5.9%	0.0%	0.0%	0.9%	5.8%	0.0%	0.0%	0.0%	1.0%	12.0%	0.0%	0.0%	0.0%	0.0%	3.8%
PHF	0.00	0.25	0.92	0.00	0.00	0.75	0.84	0.31	0.00	0.50	0.92	0.78	0.00	0.00	0.00	0.00	0.95

Rolling Hour Summary

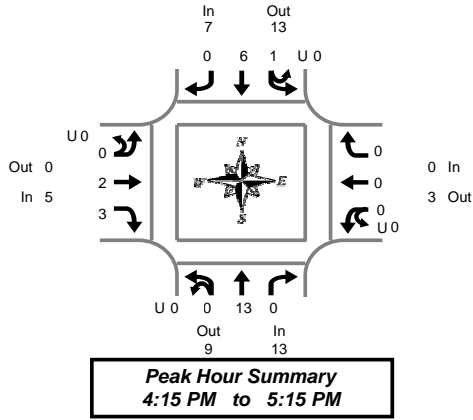
4:00 PM to 6:00 PM

Interval Start Time	Northbound WESTLAKE AVE				Southbound WESTLAKE AVE				Eastbound 7TH AVE				Westbound 7TH AVE				Interval Total	Pedestrians & Bicycles In Crosswalk (By Location)			
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R		North	South	East	West
4:00 PM	0	1	207	0	0	101	107	6	0	4	195	29	0	0	0	0	650	136	11	324	116
4:15 PM	0	1	221	0	0	108	104	5	0	4	196	25	0	0	0	0	664	178	17	369	125
4:30 PM	0	0	205	0	0	113	119	7	0	2	189	23	0	0	0	0	658	203	17	409	127
4:45 PM	0	0	195	0	0	114	123	6	0	0	193	21	0	0	0	0	652	202	19	440	135
5:00 PM	0	0	175	0	0	114	113	6	0	0	212	23	0	0	0	0	643	199	20	506	146

Heavy Vehicle Summary



Eric Boivin
(303) 668-0220



WESTLAKE AVE & 7TH AVE

Thursday, February 12, 2015
4:00 PM to 6:00 PM

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

Interval Start Time	Northbound WESTLAKE AVE					Southbound WESTLAKE AVE					Eastbound 7TH AVE					Westbound 7TH AVE					Interval Total	
	U	L	T	R	Total	U	L	T	R	Total	U	L	T	R	Total	U	L	T	R	Total		
4:00 PM	0	0	2	0	2	0	0	2	0	2	0	0	0	0	0	0	0	0	0	0	0	4
4:15 PM	0	0	3	0	3	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	4
4:30 PM	0	0	3	0	3	0	0	2	0	2	0	0	0	0	0	0	0	0	0	0	0	5
4:45 PM	0	0	3	0	3	0	1	2	0	3	0	0	1	0	1	0	0	0	0	0	0	7
5:00 PM	0	0	4	0	4	0	0	1	0	1	0	0	1	3	4	0	0	0	0	0	0	9
5:15 PM	0	0	1	0	1	0	1	1	0	2	0	0	0	1	1	0	0	0	0	0	0	4
5:30 PM	0	0	1	0	1	0	0	2	0	2	0	0	0	0	0	0	0	0	0	0	0	3
5:45 PM	0	0	2	0	2	0	1	1	0	2	0	0	0	0	0	0	0	0	0	0	0	4
Total Survey	0	0	19	0	19	0	3	12	0	15	0	0	2	4	6	0	0	0	0	0	0	4

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

By Approach	Northbound WESTLAKE AVE			Southbound WESTLAKE AVE			Eastbound 7TH AVE			Westbound 7TH AVE			Total
	In	Out	Total	In	Out	Total	In	Out	Total	In	Out	Total	
Volume	13	9	22	7	13	20	5	0	5	0	3	3	25

By Movement	Northbound WESTLAKE AVE					Southbound WESTLAKE AVE					Eastbound 7TH AVE					Westbound 7TH AVE					Total
	U	L	T	R	Total	U	L	T	R	Total	U	L	T	R	Total	U	L	T	R	Total	
Volume	0	0	13	0	13	0	1	6	0	7	0	0	2	3	5	0	0	0	0	0	25

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

Interval Start Time	Northbound WESTLAKE AVE					Southbound WESTLAKE AVE					Eastbound 7TH AVE					Westbound 7TH AVE					Interval Total
	U	L	T	R	Total	U	L	T	R	Total	U	L	T	R	Total	U	L	T	R	Total	
4:00 PM	0	0	11	0	11	0	1	7	0	8	0	0	1	0	1	0	0	0	0	0	20
4:15 PM	0	0	13	0	13	0	1	6	0	7	0	0	2	3	5	0	0	0	0	0	25
4:30 PM	0	0	11	0	11	0	2	6	0	8	0	0	2	4	6	0	0	0	0	0	25
4:45 PM	0	0	9	0	9	0	2	6	0	8	0	0	2	4	6	0	0	0	0	0	23
5:00 PM	0	0	8	0	8	0	2	5	0	7	0	0	1	4	5	0	0	0	0	0	20

LOCATION: Westlake Avenue @ Lenora Street
Seattle, WA

DATE OF COUNT: Tue. 2/3/2015
TIME OF COUNT: 8:00 - 9:00 AM

COUNTED BY: CN/RN
WEATHER: Overcast

TIME INTERVAL ENDING AT	FROM (1) Westlake Avenue (From North)							FROM (2) 8th Avenue (From East)							FROM (3) Westlake Avenue (From South)							FROM (4) Lenora Street (From West)							FROM (5) 8th Avenue (From Northwest)							INTERVAL TOTALS
	Peds	HV	Bikes	(2)	(3)	(4)	(5)	Peds	HV	Bikes	(1)	(3)	(4)	(5)	Peds	HV	Bikes	(1)	(2)	(4)	(5)	Peds	HV	Bikes	(1)	(2)	(3)	(5)	Peds	HV	Bikes	(1)	(2)	(3)	(4)	
07:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
07:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
07:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
08:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
08:15 AM	12	4	3	0	29	27	11	118	10	4	41	15	16	32	39	5	2	37	0	1	1	31	0	0	0	0	0	22	1	1	2	0	5	2	219	
08:30 AM	18	3	0	0	46	9	8	126	9	3	43	10	18	23	53	3	0	50	0	0	0	40	0	0	0	0	0	17	5	1	1	0	6	6	220	
08:45 AM	11	4	3	0	57	16	9	129	8	6	44	9	19	23	25	5	2	45	0	1	4	18	0	0	0	0	0	21	1	1	0	0	4	2	233	
09:00 AM	21	5	5	0	56	21	4	205	13	2	41	8	25	28	88	3	0	51	0	2	3	44	0	0	0	0	0	32	2	1	2	0	3	1	245	
PEAK HOUR TOTALS	62	16	11	0	188	73	32	578	40	15	169	42	78	106	205	16	4	183	0	4	8	133	0	0	0	0	0	92	9	4	5	0	18	11	INTERSECTION	
ALL MOVEMENTS	293							395							195							0							34							917
% HV	5%							10%							8%							N/A							26%							9%
PHF	0.89							0.95							0.87							N/A							0.65							0.94

Peds = Pedestrians Bikes = Bicycles
HV = Heavy Vehicles PHF = Peak Hour Factor

TURNING MOVEMENTS REDUCTION SHEET
AM PEAK HOUR: FROM 8:00 TO 9:00 AM

REDUCED BY: CN

DATE OF REDUCTION: 2/7/2015



LOCATION: Westlake Avenue @ Lenora Street
Seattle, WA

DATE OF COUNT: Tue. 2/3/2015
TIME OF COUNT: 5:00 - 6:00 PM

COUNTED BY: CN/RN
WEATHER: Overcast

TIME INTERVAL ENDING AT	FROM (1) Westlake Avenue (From North)							FROM (2) 8th Avenue (From East)							FROM (3) Westlake Avenue (From South)							FROM (4) Lenora Street (From West)							FROM (5) 8th Avenue (From Northwest)							INTERVAL TOTALS
	Peds	HV	Bikes	(2)	(3)	(4)	(5)	Peds	HV	Bikes	(1)	(3)	(4)	(5)	Peds	HV	Bikes	(1)	(2)	(4)	(5)	Peds	HV	Bikes	(1)	(2)	(3)	(5)	Peds	HV	Bikes	(1)	(2)	(3)	(4)	
04:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:15 PM	27	3	4	0	28	12	6	223	11	20	47	4	21	66	55	1	2	46	0	1	2	46	0	0	0	0	0	0	36	1	0	2	0	9	2	246
05:30 PM	31	0	1	0	42	12	3	218	14	14	39	8	28	46	67	0	5	40	0	1	2	43	0	0	0	0	0	63	2	0	1	0	10	5	237	
05:45 PM	25	1	3	0	34	15	1	249	6	11	43	8	31	43	57	0	5	46	0	2	6	45	0	0	0	0	0	35	1	1	2	0	8	6	245	
06:00 PM	40	4	3	0	32	19	8	155	8	17	35	4	32	36	51	1	2	50	0	1	2	33	0	0	0	0	0	40	0	0	2	0	4	4	229	
PEAK HOUR TOTALS	123	8	11	0	136	58	18	845	39	62	164	24	112	191	230	2	14	182	0	5	12	167	0	0	0	0	0	174	4	1	7	0	31	17	INTERSECTION	
ALL MOVEMENTS	212							491							199							0							55							957
% HV	4%							8%							1%							N/A							7%							6%
PHF	0.90							0.89							0.92							N/A							0.86							0.97

Peds = Pedestrians
HV = Heavy Vehicles

Bikes = Bicycles
PHF = Peak Hour Factor

TURNING MOVEMENTS REDUCTION SHEET
PM PEAK HOUR: FROM 5:00 TO 6:00 PM

REDUCED BY: CN

DATE OF REDUCTION: 2/10/2015



Peak Hour Summary

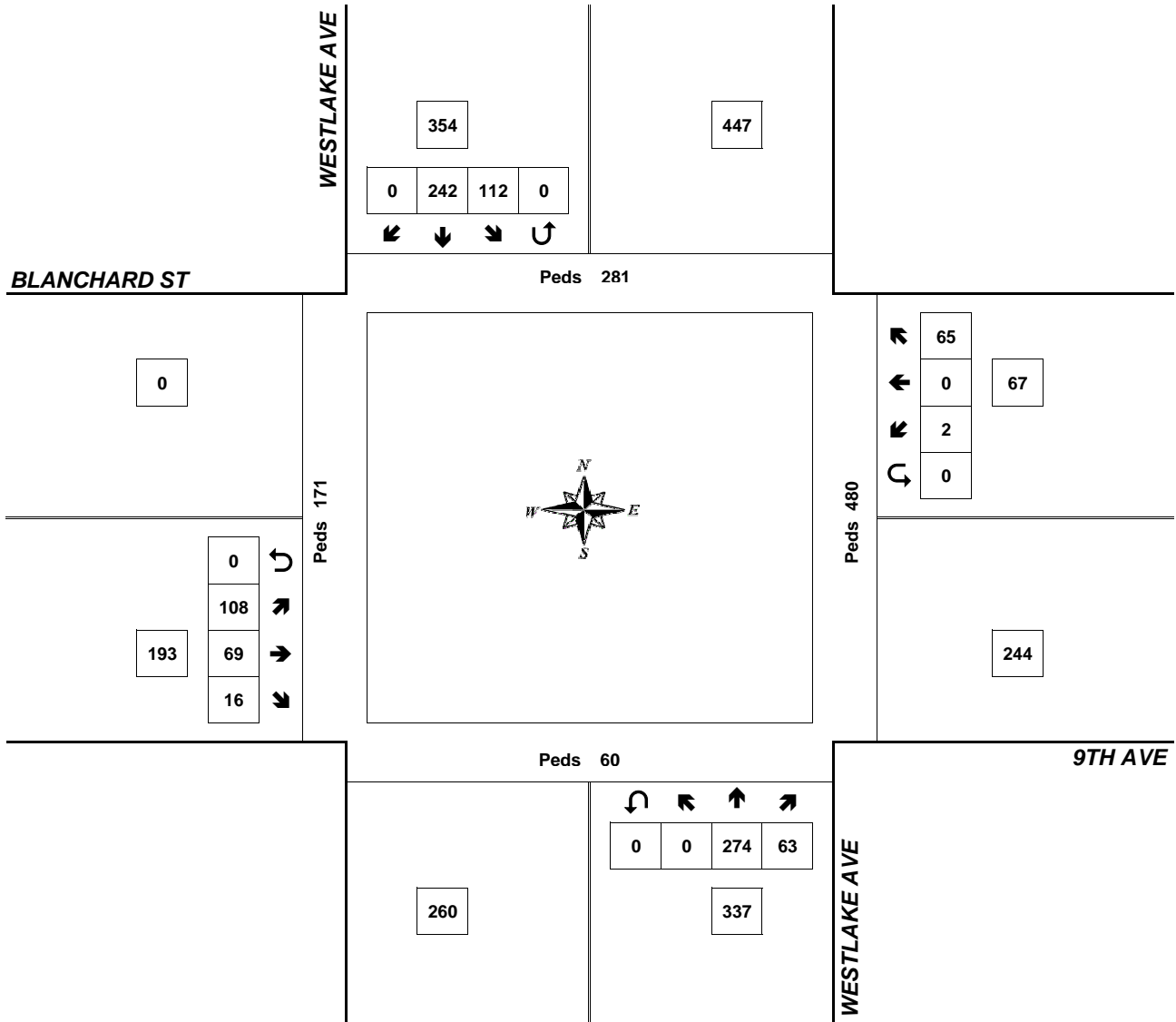
Site ID: 552



Eric Boivin
(303) 668-0220

WESTLAKE AVE & 9TH AVE

8:00 AM to 9:00 AM
Thursday, February 12, 2015



Approach	PHF	HV%	Volume
EB	0.89	13.0%	193
WB	0.84	7.5%	67
NB	0.95	8.6%	337
SB	0.85	4.5%	354
Intersection	0.94	7.9%	951

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

Total Vehicle Summary



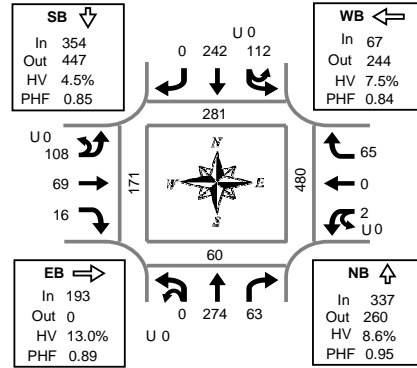
Eric Boivin
(303) 668-0220

Site ID: 552

WESTLAKE AVE & 9TH AVE

Thursday, February 12, 2015

7:00 AM to 9:00 AM



**Peak Hour Summary
8:00 AM to 9:00 AM**

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

Interval Start Time	Northbound WESTLAKE AVE				Southbound WESTLAKE AVE				Eastbound BLANCHARD ST				Westbound 9TH AVE				Interval Total	Pedestrians & Bicycles In Crosswalk (By Location)				
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R		North	South	East	West	
7:00 AM	0	0	46	15	0	19	43	0	0	13	5	3	0	0	0	0	7	151	30	8	41	18
7:15 AM	0	0	48	15	0	19	41	0	0	24	5	5	0	0	0	0	6	163	31	10	75	18
7:30 AM	0	0	54	10	0	19	49	0	0	22	9	1	0	1	0	19	184	46	9	86	20	
7:45 AM	0	0	72	9	0	27	61	0	0	27	13	3	0	0	0	6	218	59	13	93	44	
8:00 AM	0	0	61	17	0	28	49	0	0	31	13	6	0	1	0	11	217	55	12	110	43	
8:15 AM	0	0	70	13	0	30	74	0	0	27	17	3	0	0	0	19	253	69	16	124	39	
8:30 AM	0	0	73	14	0	26	51	0	0	26	23	5	0	1	0	19	238	80	14	118	37	
8:45 AM	0	0	70	19	0	28	68	0	0	24	16	2	0	0	0	16	243	77	18	128	52	
Total Survey	0	0	494	112	0	196	436	0	0	194	101	28	0	3	0	103	1,667	447	100	775	271	

Peak Hour Summary 8:00 AM to 9:00 AM

By Approach	Northbound WESTLAKE AVE				Southbound WESTLAKE AVE				Eastbound BLANCHARD ST				Westbound 9TH AVE				Total	Pedestrians & Bicycles In Crosswalk (By Location)			
	In	Out	Total	HV	In	Out	Total	HV	In	Out	Total	HV	In	Out	Total	HV		North	South	East	West
Volume	337	260	597	29	354	447	801	16	193	0	193	25	67	244	311	5	951	281	60	480	171
%HV	8.6%				4.5%				13.0%				7.5%				7.9%				
PHF	0.95				0.85				0.89				0.84				0.94				

By Movement	Northbound WESTLAKE AVE				Southbound WESTLAKE AVE				Eastbound BLANCHARD ST				Westbound 9TH AVE				Total				
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R					
Volume	0	0	274	63	0	112	242	0	0	108	69	16	0	2	0	65	951				
%HV	0.0%	0.0%	9.1%	6.3%	0.0%	4.5%	4.5%	0.0%	0.0%	13.9%	10.1%	18.8%	0.0%	50.0%	0.0%	6.2%	7.9%				
PHF	0.00	0.00	0.94	0.83	0.00	0.93	0.82	0.00	0.00	0.87	0.75	0.67	0.00	0.50	0.00	0.86	0.94				

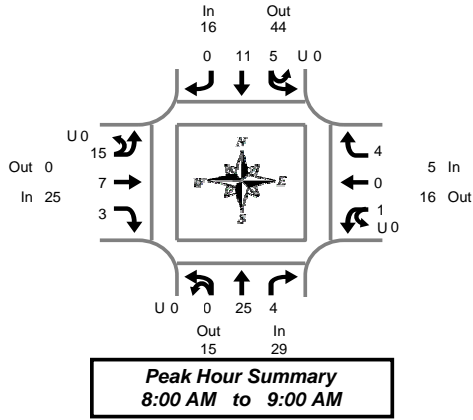
Rolling Hour Summary 7:00 AM to 9:00 AM

Interval Start Time	Northbound WESTLAKE AVE				Southbound WESTLAKE AVE				Eastbound BLANCHARD ST				Westbound 9TH AVE				Interval Total	Pedestrians & Bicycles In Crosswalk (By Location)			
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R		North	South	East	West
7:00 AM	0	0	220	49	0	84	194	0	0	86	32	12	0	1	0	38	716	166	40	295	100
7:15 AM	0	0	235	51	0	93	200	0	0	104	40	15	0	2	0	42	782	191	44	364	125
7:30 AM	0	0	257	49	0	104	233	0	0	107	52	13	0	2	0	55	872	229	50	413	146
7:45 AM	0	0	276	53	0	111	235	0	0	111	66	17	0	2	0	55	926	263	55	445	163
8:00 AM	0	0	274	63	0	112	242	0	0	108	69	16	0	2	0	65	951	281	60	480	171

Heavy Vehicle Summary



Eric Boivin
(303) 668-0220



WESTLAKE AVE & 9TH AVE

Thursday, February 12, 2015
7:00 AM to 9:00 AM

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

Interval Start Time	Northbound WESTLAKE AVE					Southbound WESTLAKE AVE					Eastbound BLANCHARD ST					Westbound 9TH AVE					Interval Total
	U	L	T	R	Total	U	L	T	R	Total	U	L	T	R	Total	U	L	T	R	Total	
7:00 AM	0	0	6	1	7	0	0	6	0	6	0	3	0	1	4	0	0	0	1	1	18
7:15 AM	0	0	7	2	9	0	3	4	0	7	0	2	0	1	3	0	0	0	1	1	20
7:30 AM	0	0	5	1	6	0	1	3	0	4	0	3	2	0	5	0	0	0	0	0	15
7:45 AM	0	0	6	0	6	0	2	1	0	3	0	5	1	0	6	0	0	0	0	0	15
8:00 AM	0	0	4	0	4	0	2	2	0	4	0	2	2	2	6	0	0	0	0	0	14
8:15 AM	0	0	5	2	7	0	0	4	0	4	0	5	4	0	9	0	0	0	2	2	22
8:30 AM	0	0	9	1	10	0	1	1	0	2	0	4	1	1	6	0	1	0	2	3	21
8:45 AM	0	0	7	1	8	0	2	4	0	6	0	4	0	0	4	0	0	0	0	0	18
Total Survey	0	0	49	8	57	0	11	25	0	36	0	28	10	5	43	0	1	0	6	7	19

Peak Hour Summary
8:00 AM to 9:00 AM

By Approach	Northbound WESTLAKE AVE			Southbound WESTLAKE AVE			Eastbound BLANCHARD ST			Westbound 9TH AVE			Total
	In	Out	Total	In	Out	Total	In	Out	Total	In	Out	Total	
Volume	29	15	44	16	44	60	25	0	25	5	16	21	75

By Movement	Northbound WESTLAKE AVE					Southbound WESTLAKE AVE					Eastbound BLANCHARD ST					Westbound 9TH AVE					Total
	U	L	T	R	Total	U	L	T	R	Total	U	L	T	R	Total	U	L	T	R	Total	
Volume	0	0	25	4	29	0	5	11	0	16	0	15	7	3	25	0	1	0	4	5	75

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

Interval Start Time	Northbound WESTLAKE AVE					Southbound WESTLAKE AVE					Eastbound BLANCHARD ST					Westbound 9TH AVE					Interval Total
	U	L	T	R	Total	U	L	T	R	Total	U	L	T	R	Total	U	L	T	R	Total	
7:00 AM	0	0	24	4	28	0	6	14	0	20	0	13	3	2	18	0	0	0	2	2	68
7:15 AM	0	0	22	3	25	0	8	10	0	18	0	12	5	3	20	0	0	0	1	1	64
7:30 AM	0	0	20	3	23	0	5	10	0	15	0	15	9	2	26	0	0	0	2	2	66
7:45 AM	0	0	24	3	27	0	5	8	0	13	0	16	8	3	27	0	1	0	4	5	72
8:00 AM	0	0	25	4	29	0	5	11	0	16	0	15	7	3	25	0	1	0	4	5	75

Peak Hour Summary

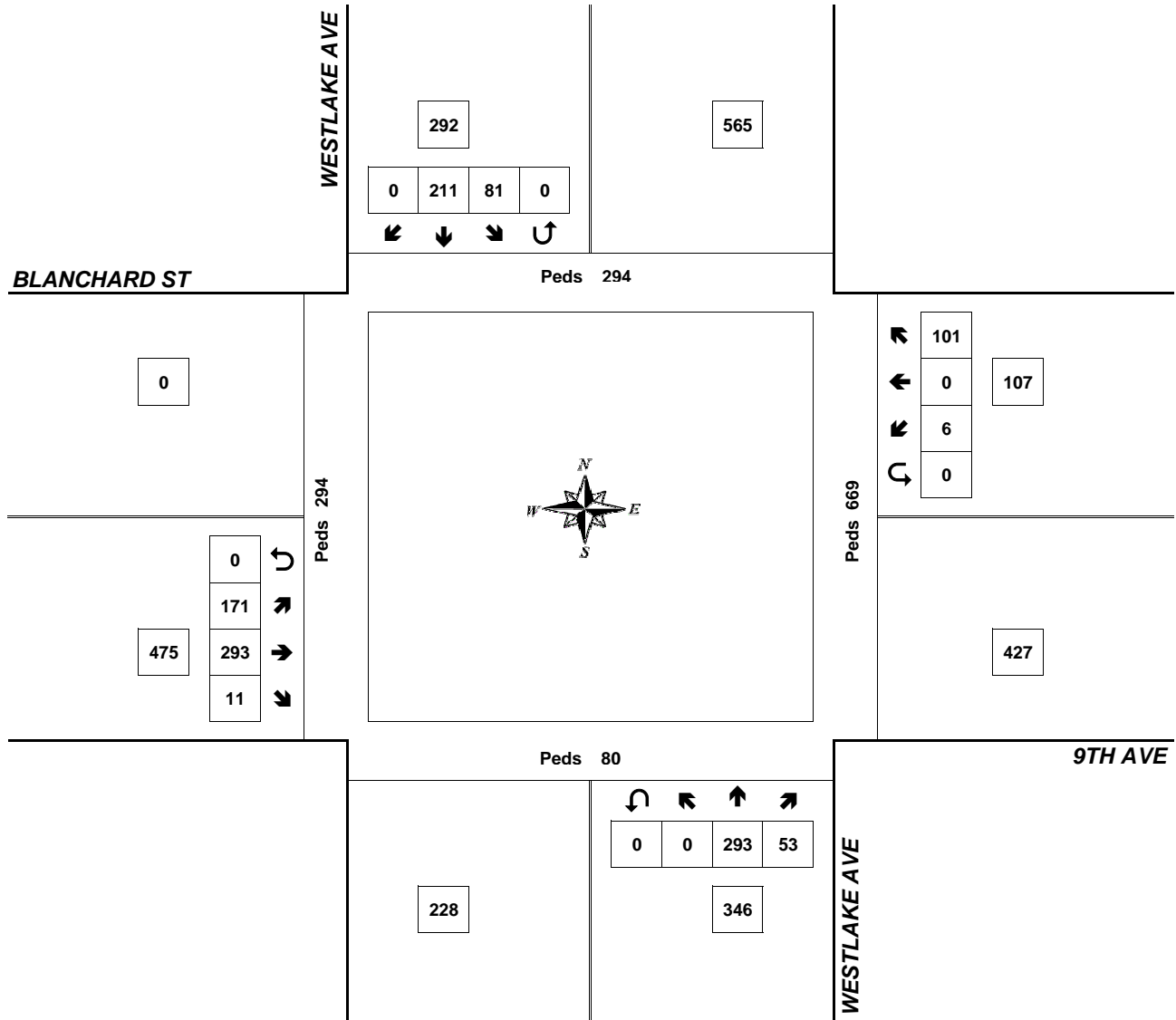
Site ID: 552



Eric Boivin
(303) 668-0220

WESTLAKE AVE & 9TH AVE

5:00 PM to 6:00 PM
Thursday, February 12, 2015



Approach	PHF	HV%	Volume
EB	0.91	3.4%	475
WB	0.79	0.9%	107
NB	0.87	4.9%	346
SB	0.85	3.4%	292
Intersection	0.95	3.6%	1,220

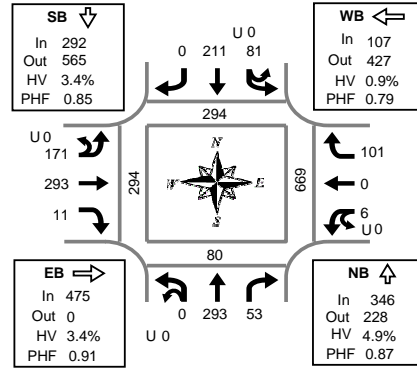
Count Period: 4:00 PM to 6:00 PM

Total Vehicle Summary



Eric Boivin
(303) 668-0220

Site ID: 552
WESTLAKE AVE & 9TH AVE
 Thursday, February 12, 2015
 4:00 PM to 6:00 PM



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

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

Interval Start Time	Northbound WESTLAKE AVE				Southbound WESTLAKE AVE				Eastbound BLANCHARD ST				Westbound 9TH AVE				Interval Total	Pedestrians & Bicycles In Crosswalk (By Location)			
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R		North	South	East	West
4:00 PM	0	0	71	9	0	17	41	0	0	45	29	6	0	1	0	17	236	60	9	109	40
4:15 PM	0	0	67	9	0	19	34	0	0	53	29	2	0	1	0	25	239	62	19	130	39
4:30 PM	0	0	67	12	0	21	41	0	0	36	35	1	0	1	0	25	239	68	8	127	59
4:45 PM	0	0	82	11	0	17	46	0	0	43	39	10	0	1	0	26	275	54	14	121	34
5:00 PM	0	0	74	16	0	19	67	0	0	44	55	1	0	2	0	22	300	80	22	165	80
5:15 PM	0	0	81	18	0	14	48	0	0	41	85	2	0	2	0	29	320	65	20	173	87
5:30 PM	0	0	62	11	0	22	53	0	0	41	87	3	0	1	0	33	313	75	18	160	55
5:45 PM	0	0	76	8	0	26	43	0	0	45	66	5	0	1	0	17	287	74	20	171	72
Total Survey	0	0	580	94	0	155	373	0	0	348	425	30	0	10	0	194	2,209	538	130	1,156	466

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

By Approach	Northbound WESTLAKE AVE				Southbound WESTLAKE AVE				Eastbound BLANCHARD ST				Westbound 9TH AVE				Total	Pedestrians & Bicycles In Crosswalk (By Location)			
	In	Out	Total	HV	In	Out	Total	HV	In	Out	Total	HV	In	Out	Total	HV		North	South	East	West
Volume	346	228	574	17	292	565	857	10	475	0	475	16	107	427	534	1	1,220	294	80	669	294
%HV	4.9%				3.4%				3.4%				0.9%				3.6%				
PHF	0.87				0.85				0.91				0.79				0.95				

By Movement	Northbound WESTLAKE AVE				Southbound WESTLAKE AVE				Eastbound BLANCHARD ST				Westbound 9TH AVE				Total				
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R					
Volume	0	0	293	53	0	81	211	0	0	171	293	11	0	6	0	101	1,220				
%HV	0.0%	0.0%	5.5%	1.9%	0.0%	6.2%	2.4%	0.0%	0.0%	4.1%	2.4%	18.2%	0.0%	0.0%	0.0%	1.0%	3.6%				
PHF	0.00	0.00	0.90	0.74	0.00	0.78	0.79	0.00	0.00	0.95	0.84	0.55	0.00	0.75	0.00	0.77	0.95				

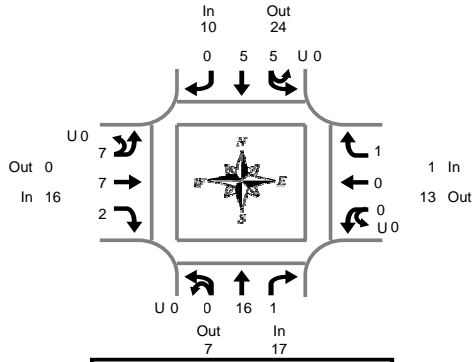
Rolling Hour Summary 4:00 PM to 6:00 PM

Interval Start Time	Northbound WESTLAKE AVE				Southbound WESTLAKE AVE				Eastbound BLANCHARD ST				Westbound 9TH AVE				Interval Total	Pedestrians & Bicycles In Crosswalk (By Location)			
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R		North	South	East	West
4:00 PM	0	0	287	41	0	74	162	0	0	177	132	19	0	4	0	93	989	244	50	487	172
4:15 PM	0	0	290	48	0	76	188	0	0	176	158	14	0	5	0	98	1,053	264	63	543	212
4:30 PM	0	0	304	57	0	71	202	0	0	164	214	14	0	6	0	102	1,134	267	64	586	260
4:45 PM	0	0	299	56	0	72	214	0	0	169	266	16	0	6	0	110	1,208	274	74	619	256
5:00 PM	0	0	293	53	0	81	211	0	0	171	293	11	0	6	0	101	1,220	294	80	669	294

Heavy Vehicle Summary



Eric Boivin
(303) 668-0220



WESTLAKE AVE & 9TH AVE

Thursday, February 12, 2015

4:00 PM to 6:00 PM

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

15-Minute Interval Summary

4:00 PM to 6:00 PM

Interval Start Time	Northbound WESTLAKE AVE					Southbound WESTLAKE AVE					Eastbound BLANCHARD ST					Westbound 9TH AVE					Interval Total
	U	L	T	R	Total	U	L	T	R	Total	U	L	T	R	Total	U	L	T	R	Total	
4:00 PM	0	0	4	0	4	0	2	2	0	4	0	1	2	1	4	0	0	0	1	1	13
4:15 PM	0	0	6	0	6	0	2	2	0	4	0	1	0	0	1	0	0	0	0	0	11
4:30 PM	0	0	2	0	2	0	3	2	0	5	0	1	2	1	4	0	1	0	0	1	12
4:45 PM	0	0	4	0	4	0	0	2	0	2	0	2	0	0	2	0	1	0	1	2	10
5:00 PM	0	0	7	0	7	0	1	2	0	3	0	1	0	1	2	0	0	0	0	0	12
5:15 PM	0	0	5	0	5	0	1	0	0	1	0	2	4	0	6	0	0	0	1	1	13
5:30 PM	0	0	2	1	3	0	2	2	0	4	0	2	2	0	4	0	0	0	0	0	11
5:45 PM	0	0	2	0	2	0	1	1	0	2	0	2	1	1	4	0	0	0	0	0	8
Total Survey	0	0	32	1	33	0	12	13	0	25	0	12	11	4	27	0	2	0	3	5	8

Peak Hour Summary

5:00 PM to 6:00 PM

By Approach	Northbound WESTLAKE AVE			Southbound WESTLAKE AVE			Eastbound BLANCHARD ST			Westbound 9TH AVE			Total
	In	Out	Total	In	Out	Total	In	Out	Total	In	Out	Total	
Volume	17	7	24	10	24	34	16	0	16	1	13	14	44

By Movement	Northbound WESTLAKE AVE					Southbound WESTLAKE AVE					Eastbound BLANCHARD ST					Westbound 9TH AVE					Total
	U	L	T	R	Total	U	L	T	R	Total	U	L	T	R	Total	U	L	T	R	Total	
Volume	0	0	16	1	17	0	5	5	0	10	0	7	7	2	16	0	0	0	1	1	44

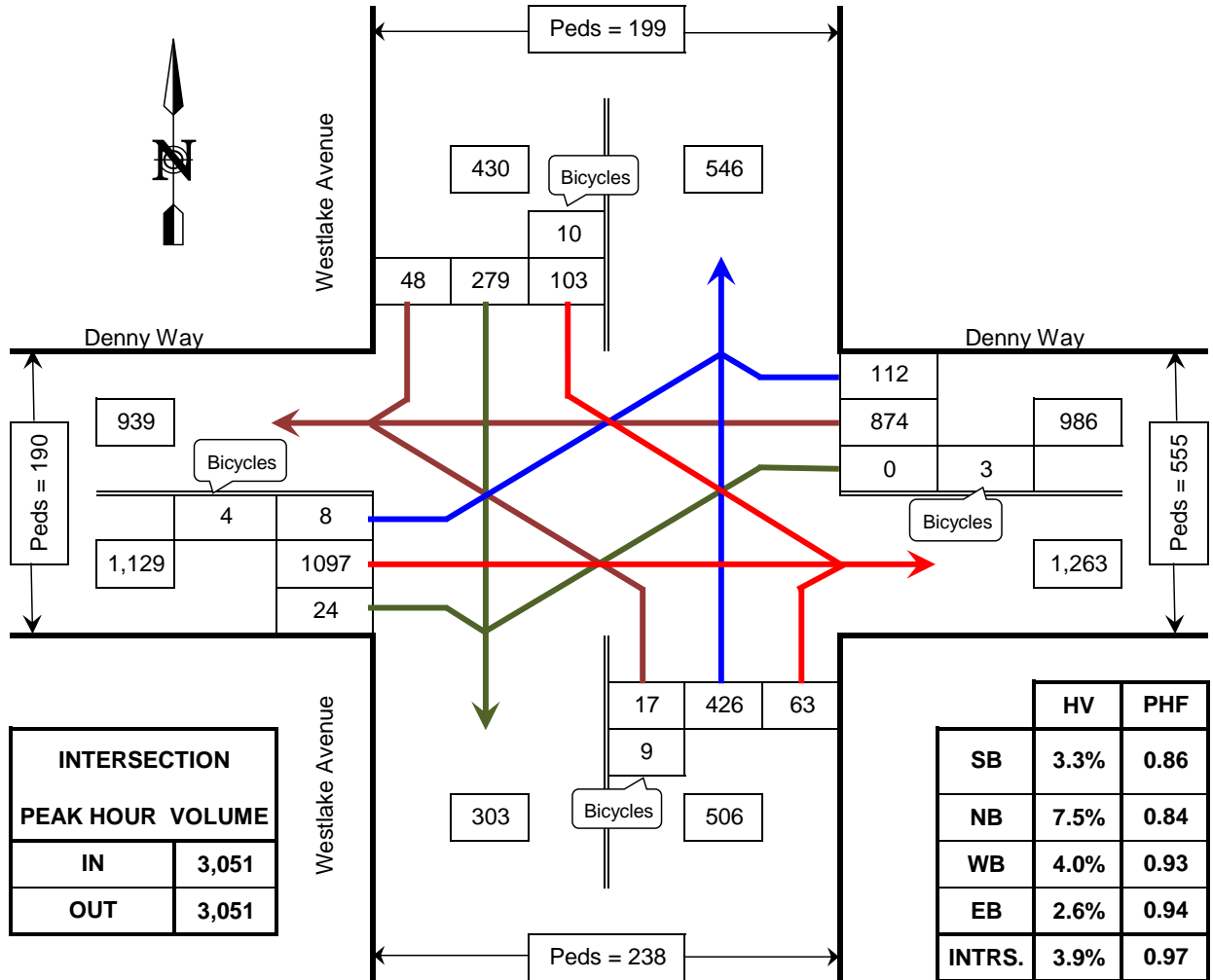
Rolling Hour Summary

4:00 PM to 6:00 PM

Interval Start Time	Northbound WESTLAKE AVE					Southbound WESTLAKE AVE					Eastbound BLANCHARD ST					Westbound 9TH AVE					Interval Total
	U	L	T	R	Total	U	L	T	R	Total	U	L	T	R	Total	U	L	T	R	Total	
4:00 PM	0	0	16	0	16	0	7	8	0	15	0	5	4	2	11	0	2	0	2	4	46
4:15 PM	0	0	19	0	19	0	6	8	0	14	0	5	2	2	9	0	2	0	1	3	45
4:30 PM	0	0	18	0	18	0	5	6	0	11	0	6	6	2	14	0	2	0	2	4	47
4:45 PM	0	0	18	1	19	0	4	6	0	10	0	7	6	1	14	0	1	0	2	3	46
5:00 PM	0	0	16	1	17	0	5	5	0	10	0	7	7	2	16	0	0	0	1	1	44

TURNING MOVEMENTS DIAGRAM

8:00 AM - 9:00 AM PEAK HOUR: 8:00 AM TO 9:00 AM



PHF = Peak Hour Factor
HV = Heavy Vehicles

**Westlake Avenue @ Denny way
Seattle, WA**

COUNTED BY: JH/RH

DATE OF COUNT: Tue. 1/20/15

REDUCED BY: CN

TIME OF COUNT: 8:00 AM - 9:00 AM

REDUCTION DATE: Wed. 1/21/15

WEATHER: Sunny

DTG TRAFFIC DATA GATHERING

INTERSECTION TURNING MOVEMENTS REDUCTION SHEET

LOCATION: Westlake Avenue @ Denny way
Seattle, WA

DATE OF COUNT: Tue. 1/20/15
TIME OF COUNT: 8:00 AM - 9:00 AM

COUNTED BY: JH/RH
WEATHER: Sunny

TIME INTERVAL ENDING AT	FROM NORTH ON Westlake Avenue						FROM SOUTH ON Westlake Avenue						FROM EAST ON Denny Way						FROM WEST ON Denny Way						INTERVAL TOTALS	
	Peds	HV	Bicycle	Left	Thru	Right	Peds	HV	Bicycle	Left	Thru	Right	Peds	HV	Bicycle	Left	Thru	Right	Peds	HV	Bicycle	Left	Thru	Right		
05:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
05:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
06:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
06:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
06:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
06:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:15 AM	29	5	0	27	82	16	52	7	2	3	99	16	87	7	1	0	203	29	23	6	0	3	290	8	776	
08:30 AM	52	7	3	25	70	13	63	14	1	5	103	18	162	9	0	0	213	20	65	5	0	5	267	7	746	
08:45 AM	63	1	1	24	63	13	58	9	1	2	95	15	156	13	0	0	226	29	52	10	1	0	273	2	742	
09:00 AM	55	1	6	27	64	6	65	8	5	7	129	14	150	10	2	0	232	34	50	8	3	0	267	7	787	
PEAK HOUR TOTALS	199	14	10	103	279	48	238	38	9	17	426	63	555	39	3	0	874	112	190	29	4	8	1097	24	INTERSECTION	
ALL MOVEMENTS	430						506						986						1129						3051	
% HV	3.3%						7.5%						4.0%						2.6%						3.9%	
PEAK HOUR FACTOR	0.86						0.84						0.93						0.94						0.97	

PHF = Peak Hour Factor

8:00 AM - 9:00 AM PEAK HOUR: 8:00 AM TO 9:00 AM

REDUCED BY: CN

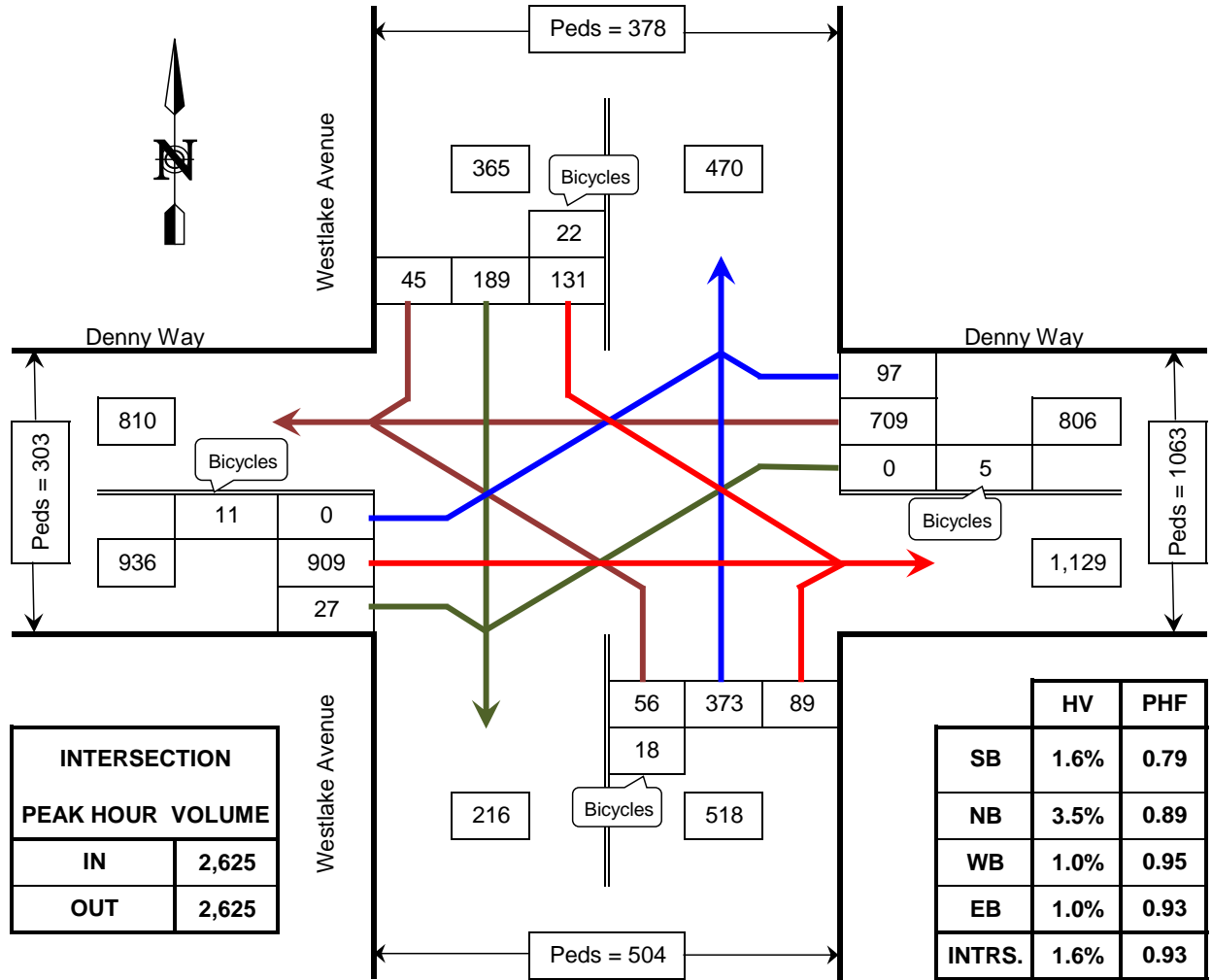
DATE OF REDUCTION: 1/21/2015

ROLLING HOUR COUNT

TIME INTERVAL	FROM NORTH ON Westlake Avenue						FROM SOUTH ON Westlake Avenue						FROM EAST ON Denny Way						FROM WEST ON Denny Way						INTERVAL TOTALS	
	Peds	HV	Bicycle	Left	Thru	Right	Peds	HV	Bicycle	Left	Thru	Right	Peds	HV	Bicycle	Left	Thru	Right	Peds	HV	Bicycle	Left	Thru	Right		
5:00 AM - 6:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 AM - 6:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 AM - 6:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 AM - 6:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:00 AM - 7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:15 AM - 7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:30 AM - 7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:45 AM - 7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:00 AM - 8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM - 8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM - 8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM - 8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM - 9:00 AM	199	14	10	103	279	48	238	38	9	17	426	63	555	39	3	0	874	112	190	29	4	8	1097	24	3051	

TURNING MOVEMENTS DIAGRAM

4:00 PM - 5:00 PM PEAK HOUR: 4:00 PM TO 5:00 PM



PHF = Peak Hour Factor
HV = Heavy Vehicles

**Westlake Avenue @ Denny Way
Seattle, WA**

COUNTED BY: CN/RH

DATE OF COUNT: Tue. 1/20/15

REDUCED BY: CN

TIME OF COUNT: 4:00 PM - 5:00 PM

REDUCTION DATE: Wed. 1/21/15

WEATHER: Sunny

DTG TRAFFIC DATA GATHERING

INTERSECTION TURNING MOVEMENTS REDUCTION SHEET

LOCATION: Westlake Avenue @ Denny Way
Seattle, WA

DATE OF COUNT: Tue. 1/20/15
TIME OF COUNT: 4:00 PM - 5:00 PM

COUNTED BY: CN/RH
WEATHER: Sunny

TIME INTERVAL ENDING AT	FROM NORTH ON Westlake Avenue						FROM SOUTH ON Westlake Avenue						FROM EAST ON Denny Way						FROM WEST ON Denny Way						INTERVAL TOTALS	
	Peds	HV	Bicycle	Left	Thru	Right	Peds	HV	Bicycle	Left	Thru	Right	Peds	HV	Bicycle	Left	Thru	Right	Peds	HV	Bicycle	Left	Thru	Right		
01:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
01:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:15 PM	96	1	4	23	51	10	149	3	5	13	82	15	197	2	1	0	174	18	75	4	3	0	211	6	603	
04:30 PM	110	1	11	44	44	9	156	5	5	5	108	11	324	1	2	0	179	27	74	4	3	0	222	8	657	
04:45 PM	90	2	1	36	59	20	100	5	5	21	88	36	285	2	0	0	173	23	78	0	2	0	240	12	708	
05:00 PM	82	2	6	28	35	6	99	5	3	17	95	27	257	3	2	0	183	29	76	1	3	0	236	1	657	
PEAK HOUR TOTALS	378	6	22	131	189	45	504	18	18	56	373	89	1063	8	5	0	709	97	303	9	11	0	909	27	INTERSECTION	
ALL MOVEMENTS	365						518						806						936						2625	
% HV	1.6%						3.5%						1.0%						1.0%						1.6%	
PEAK HOUR FACTOR	0.79						0.89						0.95						0.93						0.93	

PHF = Peak Hour Factor

4:00 PM - 5:00 PM PEAK HOUR: 4:00 PM TO 5:00 PM

REDUCED BY: CN

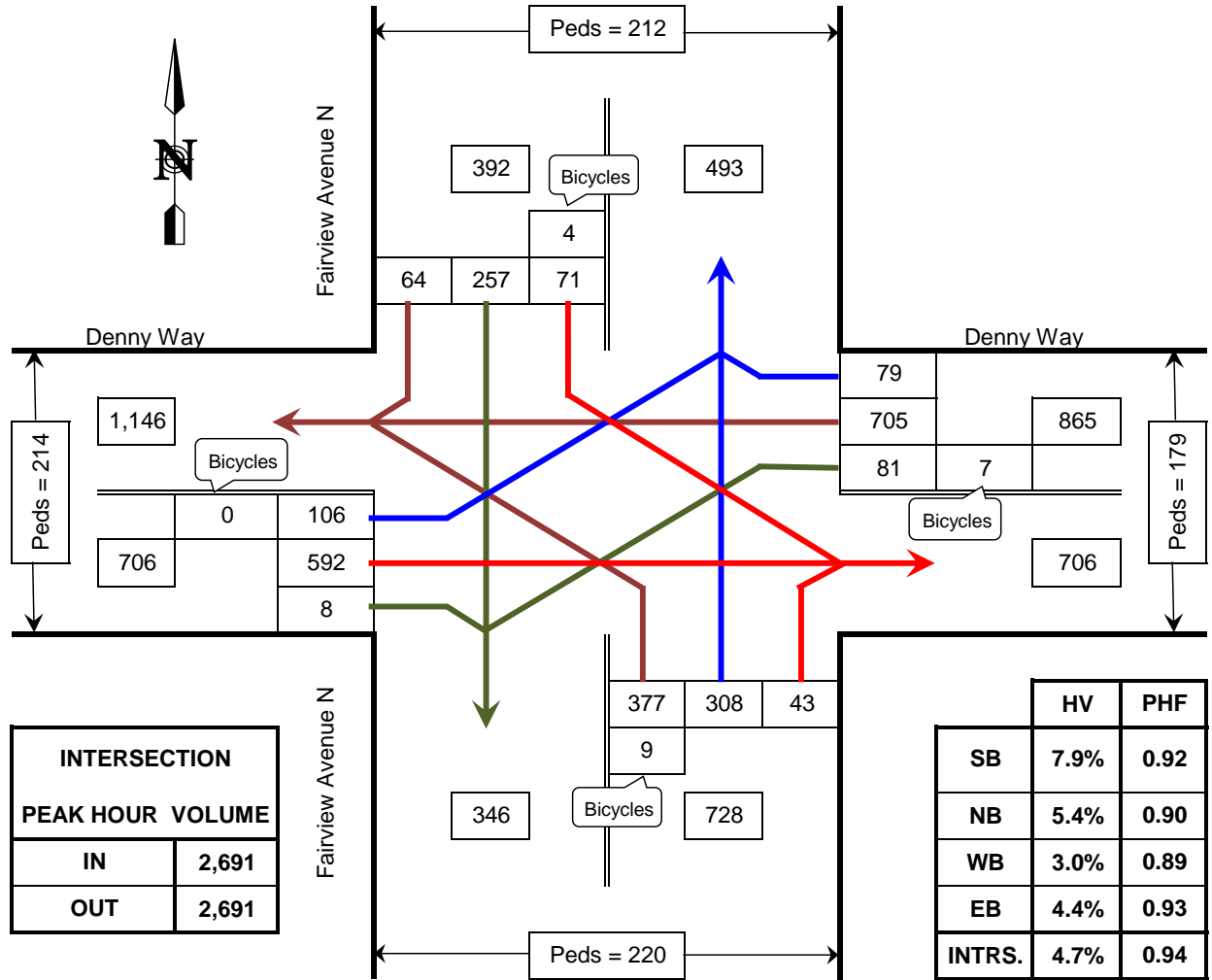
DATE OF REDUCTION: 1/21/2015

ROLLING HOUR COUNT

TIME INTERVAL	FROM NORTH ON Westlake Avenue						FROM SOUTH ON Westlake Avenue						FROM EAST ON Denny Way						FROM WEST ON Denny Way						INTERVAL TOTALS	
	Peds	HV	Bicycle	Left	Thru	Right	Peds	HV	Bicycle	Left	Thru	Right	Peds	HV	Bicycle	Left	Thru	Right	Peds	HV	Bicycle	Left	Thru	Right		
1:00 PM - 2:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
1:15 PM - 2:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:30 PM - 2:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:45 PM - 2:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:00 PM - 3:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:15 PM - 3:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:30 PM - 3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:45 PM - 3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:00 PM - 4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:15 PM - 4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:30 PM - 4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:45 PM - 4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:00 PM - 5:00 PM	378	6	22	131	189	45	504	18	18	56	373	89	1063	8	5	0	709	97	303	9	11	0	909	27	2625	

TURNING MOVEMENTS DIAGRAM

8:00 AM - 9:00 AM PEAK HOUR: 8:00 AM TO 9:00 AM



PHF = Peak Hour Factor
HV = Heavy Vehicles

Fairview Avenue N @ Denny Way Seattle, WA

COUNTED BY: RN/YH

DATE OF COUNT: Thu. 1/22/15

REDUCED BY: CN

TIME OF COUNT: 8:00 AM - 9:00 AM

REDUCTION DATE: Fri. 1/23/15

WEATHER: Sunny



TRAFFIC DATA GATHERING

INTERSECTION TURNING MOVEMENTS REDUCTION SHEET

LOCATION: Fairview Avenue N @ Denny Way
Seattle, WA

DATE OF COUNT: Thu. 1/22/15
TIME OF COUNT: 8:00 AM - 9:00 AM

COUNTED BY: RN/YH
WEATHER: Sunny

TIME INTERVAL ENDING AT	FROM NORTH ON Fairview Avenue N						FROM SOUTH ON Fairview Avenue N						FROM EAST ON Denny Way						FROM WEST ON Denny Way						INTERVAL TOTALS	
	Peds	HV	Bicycle	Left	Thru	Right	Peds	HV	Bicycle	Left	Thru	Right	Peds	HV	Bicycle	Left	Thru	Right	Peds	HV	Bicycle	Left	Thru	Right		
05:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
05:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
06:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
06:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
06:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
06:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:15 AM	43	6	2	8	64	17	47	11	0	97	72	12	34	7	2	17	156	11	65	5	0	27	146	4	631	
08:30 AM	49	6	1	20	57	17	50	8	1	82	70	7	53	7	1	16	182	19	51	8	0	26	139	2	637	
08:45 AM	54	7	0	18	69	19	52	10	2	103	89	11	36	4	3	22	175	24	36	11	0	28	161	0	719	
09:00 AM	66	12	1	25	67	11	71	10	6	95	77	13	56	8	1	26	192	25	62	7	0	25	146	2	704	
PEAK HOUR TOTALS	212	31	4	71	257	64	220	39	9	377	308	43	179	26	7	81	705	79	214	31	0	106	592	8	INTERSECTION	
ALL MOVEMENTS	392						728						865						706						2691	
% HV	7.9%						5.4%						3.0%						4.4%						4.7%	
PEAK HOUR FACTOR	0.92						0.90						0.89						0.93						0.94	

PHF = Peak Hour Factor

8:00 AM - 9:00 AM PEAK HOUR: 8:00 AM TO 9:00 AM

REDUCED BY: CN

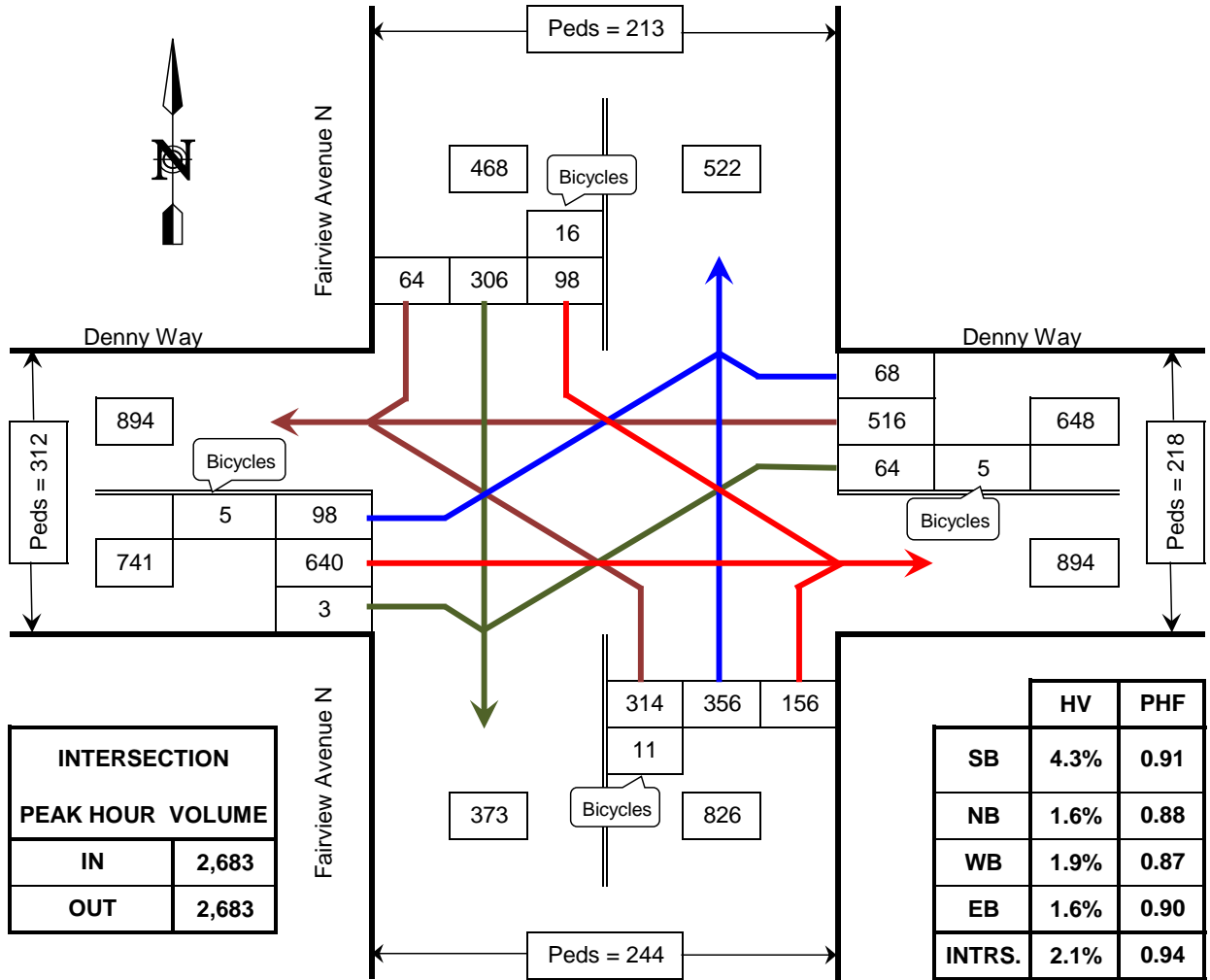
DATE OF REDUCTION: 1/23/2015

ROLLING HOUR COUNT

TIME INTERVAL	FROM NORTH ON Fairview Avenue N						FROM SOUTH ON Fairview Avenue N						FROM EAST ON Denny Way						FROM WEST ON Denny Way						INTERVAL TOTALS	
	Peds	HV	Bicycle	Left	Thru	Right	Peds	HV	Bicycle	Left	Thru	Right	Peds	HV	Bicycle	Left	Thru	Right	Peds	HV	Bicycle	Left	Thru	Right		
5:00 AM - 6:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 AM - 6:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 AM - 6:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 AM - 6:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:00 AM - 7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:15 AM - 7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:30 AM - 7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:45 AM - 7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:00 AM - 8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM - 8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM - 8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM - 8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM - 9:00 AM	212	31	4	71	257	64	220	39	9	377	308	43	179	26	7	81	705	79	214	31	0	106	592	8	2691	

TURNING MOVEMENTS DIAGRAM

5:00 PM - 6:00 PM PEAK HOUR: 5:00 PM TO 6:00 PM



**Fairview Avenue N @ Denny Way
Seattle, WA**

PHF = Peak Hour Factor
HV = Heavy Vehicles

COUNTED BY: RN/YH

DATE OF COUNT: Thu. 1/22/15

REDUCED BY: CN

TIME OF COUNT: 5:00 PM - 6:00 PM

REDUCTION DATE: Fri. 1/23/15

WEATHER: Sunny

TRAFFIC DATA GATHERING

INTERSECTION TURNING MOVEMENTS REDUCTION SHEET

LOCATION: Fairview Avenue N @ Denny Way
Seattle, WA

DATE OF COUNT: Thu. 1/22/15
 TIME OF COUNT: 5:00 PM - 6:00 PM

COUNTED BY: RN/YH
 WEATHER: Sunny

TIME INTERVAL ENDING AT	FROM NORTH ON Fairview Avenue N						FROM SOUTH ON Fairview Avenue N						FROM EAST ON Denny Way						FROM WEST ON Denny Way						INTERVAL TOTALS	
	Peds	HV	Bicycle	Left	Thru	Right	Peds	HV	Bicycle	Left	Thru	Right	Peds	HV	Bicycle	Left	Thru	Right	Peds	HV	Bicycle	Left	Thru	Right		
02:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
02:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:15 PM	49	4	4	24	75	21	39	2	3	77	88	42	49	4	2	14	110	19	73	2	1	24	182	0	676	
05:30 PM	64	3	7	19	62	19	67	5	3	75	89	40	71	0	1	21	144	21	70	1	3	24	142	1	657	
05:45 PM	55	8	3	29	77	14	68	2	1	78	79	23	49	4	1	15	133	16	83	6	0	23	151	1	639	
06:00 PM	45	5	2	26	92	10	70	4	4	84	100	51	49	4	1	14	129	12	86	3	1	27	165	1	711	
PEAK HOUR TOTALS	213	20	16	98	306	64	244	13	11	314	356	156	218	12	5	64	516	68	312	12	5	98	640	3	INTERSECTION	
ALL MOVEMENTS	468						826						648						741						2683	
% HV	4.3%						1.6%						1.9%						1.6%						2.1%	
PEAK HOUR FACTOR	0.91						0.88						0.87						0.90						0.94	

PHF = Peak Hour Factor

5:00 PM - 6:00 PM PEAK HOUR: 5:00 PM TO 6:00 PM

REDUCED BY: CN

DATE OF REDUCTION: 1/23/2015

ROLLING HOUR COUNT

TIME INTERVAL	FROM NORTH ON Fairview Avenue N						FROM SOUTH ON Fairview Avenue N						FROM EAST ON Denny Way						FROM WEST ON Denny Way						INTERVAL TOTALS	
	Peds	HV	Bicycle	Left	Thru	Right	Peds	HV	Bicycle	Left	Thru	Right	Peds	HV	Bicycle	Left	Thru	Right	Peds	HV	Bicycle	Left	Thru	Right		
2:00 PM - 3:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
2:15 PM - 3:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:30 PM - 3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:45 PM - 3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:00 PM - 4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:15 PM - 4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:30 PM - 4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:45 PM - 4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:00 PM - 5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM - 5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM - 5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM - 5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM - 6:00 PM	213	20	16	98	306	64	244	13	11	314	356	156	218	12	5	64	516	68	312	12	5	98	640	3	2683	

APPENDIX E ADD 2

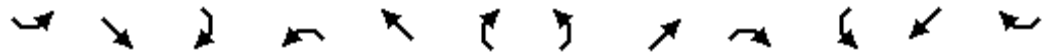
SYNCHRO OUTPUT SHEETS

EXISTING AM

HCM Signalized Intersection Capacity Analysis

1: Stewart St & 3rd Ave

7/31/2015



Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations		↑↑			↑↑			↑			↑↑	
Traffic Volume (vph)	0	117	61	13	96	12	0	6	1	26	480	95
Future Volume (vph)	0	117	61	13	96	12	0	6	1	26	480	95
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	12	9	12	10	9	10	12	12	12	9	10	10
Total Lost time (s)		4.0			4.0			4.5			4.0	
Lane Util. Factor		0.95			0.95			1.00			0.95	
Frbp, ped/bikes		0.91			0.95			0.97			0.95	
Flpb, ped/bikes		1.00			1.00			1.00			1.00	
Frt		0.95			0.98			0.98			0.98	
Flt Protected		1.00			0.99			1.00			1.00	
Satd. Flow (prot)		2167			2343			1242			2116	
Flt Permitted		1.00			0.92			1.00			0.95	
Satd. Flow (perm)		2167			2165			1242			2005	
Peak-hour factor, PHF	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Adj. Flow (vph)	0	134	70	15	110	14	0	7	1	30	552	109
RTOR Reduction (vph)	0	51	0	0	10	0	0	0	0	0	19	0
Lane Group Flow (vph)	0	153	0	0	129	0	0	8	0	0	672	0
Confl. Peds. (#/hr)			171			192			155			335
Confl. Bikes (#/hr)			14			9			3			25
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	51	0
Parking (#/hr)	8	8	8	8	8	8	0	16	0	16	16	16
Turn Type		NA		Perm	NA			NA		Perm	NA	
Protected Phases					1			2			2	
Permitted Phases		1		1						2		
Actuated Green, G (s)		21.5			21.5			49.5			49.5	
Effective Green, g (s)		22.0			22.0			49.5			50.0	
Actuated g/C Ratio		0.28			0.28			0.62			0.62	
Clearance Time (s)		4.5			4.5			4.5			4.5	
Lane Grp Cap (vph)		595			595			768			1253	
v/s Ratio Prot								0.01				
v/s Ratio Perm		c0.07			0.06						c0.34	
v/c Ratio		0.26			0.22			0.01			0.54	
Uniform Delay, d1		22.6			22.4			5.8			8.5	
Progression Factor		0.51			1.00			1.00			1.58	
Incremental Delay, d2		1.0			0.8			0.0			1.3	
Delay (s)		12.6			23.2			5.9			14.7	
Level of Service		B			C			A			B	
Approach Delay (s)		12.6			23.2			5.9			14.7	
Approach LOS		B			C			A			B	

Intersection Summary

HCM 2000 Control Delay	15.3	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.45		
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	8.5
Intersection Capacity Utilization	45.9%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

HCM Signalized Intersection Capacity Analysis

2: Stewart St & 4th Ave & Olive Way

7/31/2015



Movement	NWL	NWT	NWR2	NER	SWT	SWR
Lane Configurations		↑↑↑↑	↑	↑	↑↑	↑
Traffic Volume (vph)	101	997	228	48	512	140
Future Volume (vph)	101	997	228	48	512	140
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width	10	10	10	12	9	9
Total Lost time (s)		4.0	4.0	4.0	4.0	4.5
Lane Util. Factor		0.81	0.81	1.00	0.95	1.00
Frbp, ped/bikes		1.00	0.64	1.00	1.00	0.67
Flpb, ped/bikes		1.00	1.00	1.00	1.00	1.00
Frt		1.00	0.85	0.86	1.00	0.85
Flt Protected		1.00	1.00	1.00	1.00	1.00
Satd. Flow (prot)		4552	535	1233	2213	667
Flt Permitted		1.00	1.00	1.00	1.00	1.00
Satd. Flow (perm)		4552	535	1233	2213	667
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	107	1061	243	51	545	149
RTOR Reduction (vph)	0	0	109	0	0	55
Lane Group Flow (vph)	0	1168	134	51	545	94
Confl. Peds. (#/hr)			298	332		262
Confl. Bikes (#/hr)			21	9		27
Bus Blockages (#/hr)	0	0	0	0	51	0
Parking (#/hr)	16	16	16	0	16	16
Turn Type	Perm	NA	Perm	Prot	NA	Perm
Protected Phases		1		2	2	
Permitted Phases	1		1			2
Actuated Green, G (s)		43.5	43.5	27.5	27.5	27.5
Effective Green, g (s)		44.0	44.0	28.0	28.0	27.5
Actuated g/C Ratio		0.55	0.55	0.35	0.35	0.34
Clearance Time (s)		4.5	4.5	4.5	4.5	4.5
Lane Grp Cap (vph)		2503	294	431	774	229
v/s Ratio Prot				0.04	c0.25	
v/s Ratio Perm		0.26	0.25			0.14
v/c Ratio		0.47	0.45	0.12	0.70	0.41
Uniform Delay, d1		10.9	10.8	17.6	22.4	20.1
Progression Factor		1.00	1.00	1.28	0.48	0.36
Incremental Delay, d2		0.6	5.0	0.6	4.3	4.3
Delay (s)		11.5	15.8	23.2	15.1	11.6
Level of Service		B	B	C	B	B
Approach Delay (s)		12.3			14.3	
Approach LOS		B			B	

Intersection Summary

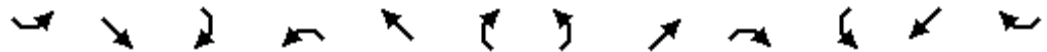
HCM 2000 Control Delay	13.2	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.56		
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	44.8%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

HCM Signalized Intersection Capacity Analysis

3: Stewart St & 5th Ave

7/31/2015



Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations		↑↑↑	↑							↓	↑↑	
Traffic Volume (vph)	0	1140	94	0	0	0	0	0	0	251	603	0
Future Volume (vph)	0	1140	94	0	0	0	0	0	0	251	603	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	10	11	10	12	12	12	12	12	12	9	9	9
Grade (%)		0%			0%			-10%				5%
Total Lost time (s)		5.0	5.0							5.5	5.5	
Lane Util. Factor		0.91	1.00							1.00	0.95	
Frbp, ped/bikes		1.00	0.66							1.00	1.00	
Flpb, ped/bikes		1.00	1.00							0.89	1.00	
Frt		1.00	0.85							1.00	1.00	
Flt Protected		1.00	1.00							0.95	1.00	
Satd. Flow (prot)		3928	683							958	2402	
Flt Permitted		1.00	1.00							0.95	1.00	
Satd. Flow (perm)		3928	683							958	2402	
Peak-hour factor, PHF	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Adj. Flow (vph)	0	1253	103	0	0	0	0	0	0	276	663	0
RTOR Reduction (vph)	0	0	11	0	0	0	0	0	0	11	0	0
Lane Group Flow (vph)	0	1253	92	0	0	0	0	0	0	265	663	0
Confl. Peds. (#/hr)	326		253	253		326	316		86	86		316
Confl. Bikes (#/hr)			20			20			20			20
Parking (#/hr)	16	16	16	0	0	0	0	0	0	16	16	16
Turn Type		NA	Perm							Perm	NA	
Protected Phases		1									2	
Permitted Phases			1							2		
Actuated Green, G (s)		35.5	35.5							35.5	35.5	
Effective Green, g (s)		35.0	35.0							34.5	34.5	
Actuated g/C Ratio		0.44	0.44							0.43	0.43	
Clearance Time (s)		4.5	4.5							4.5	4.5	
Lane Grp Cap (vph)		1718	298							413	1035	
v/s Ratio Prot		c0.32									0.28	
v/s Ratio Perm			0.13							c0.28		
v/c Ratio		0.73	0.31							0.64	0.64	
Uniform Delay, d1		18.6	14.6							17.9	17.9	
Progression Factor		0.44	0.32							0.27	0.29	
Incremental Delay, d2		1.8	1.7							6.9	2.8	
Delay (s)		9.9	6.4							11.8	8.0	
Level of Service		A	A							B	A	
Approach Delay (s)		9.7			0.0			0.0			9.2	
Approach LOS		A			A			A			A	

Intersection Summary

HCM 2000 Control Delay	9.5	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.69		
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	10.5
Intersection Capacity Utilization	51.7%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

HCM Signalized Intersection Capacity Analysis

4: Stewart St & Westlake Ave

7/31/2015



Movement	SBL	SBR	NEL	NET	SWT	SWR
Lane Configurations		↑			↑↑↑	
Traffic Volume (vph)	0	166	0	0	688	0
Future Volume (vph)	0	166	0	0	688	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width	12	12	12	12	10	12
Grade (%)	0%			-5%	0%	
Total Lost time (s)		4.5			4.0	
Lane Util. Factor		1.00			0.91	
Frbp, ped/bikes		1.00			1.00	
Flpb, ped/bikes		1.00			1.00	
Frt		0.86			1.00	
Flt Protected		1.00			1.00	
Satd. Flow (prot)		1123			3792	
Flt Permitted		1.00			1.00	
Satd. Flow (perm)		1123			3792	
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	0	177	0	0	732	0
RTOR Reduction (vph)	0	12	0	0	0	0
Lane Group Flow (vph)	0	165	0	0	732	0
Confl. Peds. (#/hr)	196	11	196			258
Confl. Bikes (#/hr)		20				20
Parking (#/hr)	0	16	0	0	16	0
Turn Type		Prot			NA	
Protected Phases		2			4	
Permitted Phases						
Actuated Green, G (s)		36.5			34.5	
Effective Green, g (s)		36.5			35.0	
Actuated g/C Ratio		0.46			0.44	
Clearance Time (s)		4.5			4.5	
Lane Grp Cap (vph)		512			1659	
v/s Ratio Prot		c0.15			c0.19	
v/s Ratio Perm						
v/c Ratio		0.32			0.44	
Uniform Delay, d1		13.9			15.7	
Progression Factor		0.70			0.29	
Incremental Delay, d2		1.6			0.8	
Delay (s)		11.3			5.4	
Level of Service		B			A	
Approach Delay (s)	11.3			0.0	5.4	
Approach LOS	B			A	A	
















Intersection Summary			
HCM 2000 Control Delay	6.6	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.38		
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	8.5
Intersection Capacity Utilization	42.1%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

HCM 2010 Signalized Intersection Summary

5: Stewart St & 6th Ave

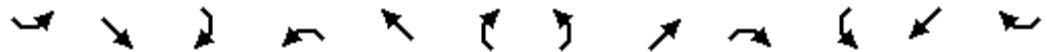
7/31/2015

												
Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	53	633	0	0	0	0	0	699	156
Future Volume (veh/h)	0	0	0	53	633	0	0	0	0	0	699	156
Number				5	2	12				7	4	14
Initial Q (Qb), veh				0	0	0				0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00				1.00		0.75
Parking Bus, Adj				1.00	1.00	1.00				1.00	1.00	0.82
Adj Sat Flow, veh/h/ln				1642	1520	0				0	1583	1583
Adj Flow Rate, veh/h				58	688	0				0	760	170
Adj No. of Lanes				0	3	0				0	3	1
Peak Hour Factor				0.92	0.92	0.92				0.92	0.92	0.92
Percent Heavy Veh, %				8	8	0				0	8	8
Cap, veh/h				153	1585	0				0	2053	389
Arrive On Green				0.43	0.43	0.00				0.00	0.47	0.47
Sat Flow, veh/h				233	3855	0				0	4465	829
Grp Volume(v), veh/h				277	469	0				0	760	170
Grp Sat Flow(s),veh/h/ln				1446	1259	0				0	1441	829
Q Serve(g_s), s				3.1	10.5	0.0				0.0	9.0	11.0
Cycle Q Clear(g_c), s				10.5	10.5	0.0				0.0	9.0	11.0
Prop In Lane				0.21		0.00				0.00		1.00
Lane Grp Cap(c), veh/h				669	1070	0				0	2053	389
V/C Ratio(X)				0.41	0.44	0.00				0.00	0.37	0.44
Avail Cap(c_a), veh/h				669	1070	0				0	2053	389
HCM Platoon Ratio				1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)				1.00	1.00	0.00				0.00	1.00	1.00
Uniform Delay (d), s/veh				16.2	16.3	0.0				0.0	13.4	14.2
Incr Delay (d2), s/veh				1.9	1.3	0.0				0.0	0.5	3.5
Initial Q Delay(d3),s/veh				0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				4.7	3.8	0.0				0.0	3.6	2.9
LnGrp Delay(d),s/veh				18.1	17.6	0.0				0.0	13.9	17.7
LnGrp LOS				B	B						B	B
Approach Vol, veh/h					746						930	
Approach Delay, s/veh					17.8						14.6	
Approach LOS					B						B	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs		2		4								
Phs Duration (G+Y+Rc), s		38.0		42.0								
Change Period (Y+Rc), s		4.5		4.5								
Max Green Setting (Gmax), s		33.5		37.5								
Max Q Clear Time (g_c+I1), s		12.5		13.0								
Green Ext Time (p_c), s		3.5		5.3								
Intersection Summary												
HCM 2010 Ctrl Delay				16.0								
HCM 2010 LOS				B								

HCM Signalized Intersection Capacity Analysis

6: Stewart St & 7th Ave

7/31/2015



Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations		↑↑↑									↑↑↑	
Traffic Volume (vph)	0	337	44	0	0	0	0	0	0	243	910	0
Future Volume (vph)	0	337	44	0	0	0	0	0	0	243	910	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	11	10	11	12	12	12	12	12	12	12	10	12
Total Lost time (s)		4.0									4.0	
Lane Util. Factor		0.91									0.91	
Frbp, ped/bikes		0.96									1.00	
Flpb, ped/bikes		1.00									0.94	
Frt		0.98									1.00	
Flt Protected		1.00									0.99	
Satd. Flow (prot)		3578									3514	
Flt Permitted		1.00									0.99	
Satd. Flow (perm)		3578									3514	
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	0	347	45	0	0	0	0	0	0	251	938	0
RTOR Reduction (vph)	0	20	0	0	0	0	0	0	0	0	60	0
Lane Group Flow (vph)	0	372	0	0	0	0	0	0	0	0	1129	0
Confl. Peds. (#/hr)			332			202				179		255
Confl. Bikes (#/hr)			11									31
Parking (#/hr)	0	16	16	0	0	0	0	0	0	16	16	16
Turn Type		NA								Perm	NA	
Protected Phases		1									2	
Permitted Phases										2		
Actuated Green, G (s)		23.5									47.5	
Effective Green, g (s)		24.0									48.0	
Actuated g/C Ratio		0.30									0.60	
Clearance Time (s)		4.5									4.5	
Lane Grp Cap (vph)		1073									2108	
v/s Ratio Prot		c0.10										
v/s Ratio Perm											0.32	
v/c Ratio		0.35									0.54	
Uniform Delay, d1		21.9									9.4	
Progression Factor		0.84									0.56	
Incremental Delay, d2		0.9									0.9	
Delay (s)		19.3									6.2	
Level of Service		B									A	
Approach Delay (s)		19.3			0.0			0.0			6.2	
Approach LOS		B			A			A			A	

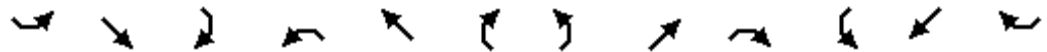
Intersection Summary

HCM 2000 Control Delay	9.4	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.47		
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	45.0%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

HCM Signalized Intersection Capacity Analysis

7: Stewart St & 8th Ave

7/31/2015



Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations					↑↑						↑↑↑	↑
Traffic Volume (vph)	0	0	0	176	265	0	0	0	0	0	1063	117
Future Volume (vph)	0	0	0	176	265	0	0	0	0	0	1063	117
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	12	12	12	12	10	12	12	12	12	11	11	11
Total Lost time (s)					4.0						4.0	4.5
Lane Util. Factor					0.95						0.91	1.00
Frbp, ped/bikes					1.00						1.00	0.61
Flpb, ped/bikes					0.86						1.00	1.00
Frt					1.00						1.00	0.85
Flt Protected					0.98						1.00	1.00
Satd. Flow (prot)					2144						3928	650
Flt Permitted					0.98						1.00	1.00
Satd. Flow (perm)					2144						3928	650
Peak-hour factor, PHF	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Adj. Flow (vph)	0	0	0	180	270	0	0	0	0	0	1085	119
RTOR Reduction (vph)	0	0	0	0	14	0	0	0	0	0	0	8
Lane Group Flow (vph)	0	0	0	0	436	0	0	0	0	0	1085	111
Confl. Peds. (#/hr)				377		501	420		245	245		420
Confl. Bikes (#/hr)												20
Parking (#/hr)	0	0	0	16	16	16	0	0	0	16	16	16
Turn Type				Perm	NA						NA	Perm
Protected Phases					1						2	
Permitted Phases				1								2
Actuated Green, G (s)					21.7						49.3	49.3
Effective Green, g (s)					22.2						49.8	49.3
Actuated g/C Ratio					0.28						0.62	0.62
Clearance Time (s)					4.5						4.5	4.5
Vehicle Extension (s)					3.0						3.0	3.0
Lane Grp Cap (vph)					594						2445	400
v/s Ratio Prot											c0.28	
v/s Ratio Perm					0.20							0.17
v/c Ratio					0.73						0.44	0.28
Uniform Delay, d1					26.2						7.9	7.1
Progression Factor					1.00						0.63	0.56
Incremental Delay, d2					4.7						0.5	1.3
Delay (s)					30.9						5.4	5.3
Level of Service					C						A	A
Approach Delay (s)		0.0			30.9			0.0			5.4	
Approach LOS		A			C			A			A	

Intersection Summary

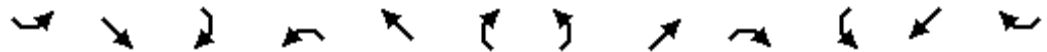
HCM 2000 Control Delay	12.3	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.53		
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	43.3%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

HCM Signalized Intersection Capacity Analysis

8: Stewart St & 9th Ave

7/31/2015

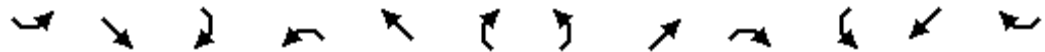


Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR	
Lane Configurations		↑↑								↖	↑↑		
Traffic Volume (vph)	0	203	148	0	0	0	0	0	0	126	1021	0	
Future Volume (vph)	0	203	148	0	0	0	0	0	0	126	1021	0	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	
Lane Width	12	11	12	10	12	12	12	12	12	12	10	12	
Total Lost time (s)		4.0								4.0	4.0		
Lane Util. Factor		0.95								1.00	0.95		
Frbp, ped/bikes		0.98								1.00	1.00		
Flpb, ped/bikes		1.00								0.98	1.00		
Frt		0.94								1.00	1.00		
Flt Protected		1.00								0.95	1.00		
Satd. Flow (prot)		2435								1204	2555		
Flt Permitted		1.00								0.95	1.00		
Satd. Flow (perm)		2435								1204	2555		
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	
Adj. Flow (vph)	0	211	154	0	0	0	0	0	0	131	1064	0	
RTOR Reduction (vph)	0	6	0	0	0	0	0	0	0	7	0	0	
Lane Group Flow (vph)	0	359	0	0	0	0	0	0	0	124	1064	0	
Confl. Peds. (#/hr)	450		8	8		450				13		610	
Confl. Bikes (#/hr)			20										
Bus Blockages (#/hr)	0	0	0	10	0	0	0	0	0	0	0	0	
Parking (#/hr)	0	16	16	0	0	0	0	0	0	16	16	0	
Turn Type		NA								Perm	NA		
Protected Phases		1									2		
Permitted Phases										2			
Actuated Green, G (s)		19.5								51.5	51.5		
Effective Green, g (s)		20.0								52.0	52.0		
Actuated g/C Ratio		0.25								0.65	0.65		
Clearance Time (s)		4.5								4.5	4.5		
Vehicle Extension (s)		3.0								3.0	3.0		
Lane Grp Cap (vph)		608								782	1660		
v/s Ratio Prot		c0.15									c0.42		
v/s Ratio Perm										0.10			
v/c Ratio		0.59								0.16	0.64		
Uniform Delay, d1		26.4								5.5	8.4		
Progression Factor		0.87								0.05	0.24		
Incremental Delay, d2		4.0								0.4	1.7		
Delay (s)		26.8								0.6	3.7		
Level of Service		C								A	A		
Approach Delay (s)		26.8			0.0			0.0			3.4		
Approach LOS		C			A			A			A		
Intersection Summary													
HCM 2000 Control Delay			8.9		HCM 2000 Level of Service					A			
HCM 2000 Volume to Capacity ratio			0.63										
Actuated Cycle Length (s)			80.0		Sum of lost time (s)					8.0			
Intersection Capacity Utilization			50.5%		ICU Level of Service					A			
Analysis Period (min)			15										
c Critical Lane Group													

HCM Signalized Intersection Capacity Analysis

9: Stewart St & Terry Ave

7/31/2015



Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations					↑↑						↑↑↑	↑
Traffic Volume (vph)	0	0	0	47	54	0	0	0	0	0	1094	55
Future Volume (vph)	0	0	0	47	54	0	0	0	0	0	1094	55
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	12	12	12	11	11	11	12	12	12	10	10	10
Total Lost time (s)					5.0						5.0	5.0
Lane Util. Factor					0.95						0.91	1.00
Frbp, ped/bikes					1.00						1.00	0.62
Flpb, ped/bikes					0.95						1.00	1.00
Frt					1.00						1.00	0.85
Flt Protected					0.98						1.00	1.00
Satd. Flow (prot)					2463						3742	641
Flt Permitted					0.98						1.00	1.00
Satd. Flow (perm)					2463						3742	641
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	0	0	49	57	0	0	0	0	0	1152	58
RTOR Reduction (vph)	0	0	0	0	37	0	0	0	0	0	0	18
Lane Group Flow (vph)	0	0	0	0	69	0	0	0	0	0	1152	40
Confl. Peds. (#/hr)	88		69	69		88				94		354
Confl. Bikes (#/hr)												20
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	10	0
Parking (#/hr)	0	0	0	16	16	0	0	0	0	16	16	16
Turn Type				Perm	NA						NA	Perm
Protected Phases					1						2	
Permitted Phases				1								2
Actuated Green, G (s)					19.5						51.5	51.5
Effective Green, g (s)					19.0						51.0	51.0
Actuated g/C Ratio					0.24						0.64	0.64
Clearance Time (s)					4.5						4.5	4.5
Lane Grp Cap (vph)					584						2385	408
v/s Ratio Prot											c0.31	
v/s Ratio Perm					0.03							0.06
v/c Ratio					0.12						0.48	0.10
Uniform Delay, d1					23.9						7.6	5.6
Progression Factor					1.00						1.00	1.00
Incremental Delay, d2					0.4						0.7	0.5
Delay (s)					24.3						8.3	6.1
Level of Service					C						A	A
Approach Delay (s)		0.0			24.3			0.0			8.2	
Approach LOS		A			C			A			A	

Intersection Summary

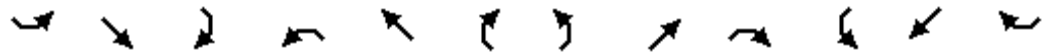
HCM 2000 Control Delay	9.5	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.38		
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	10.0
Intersection Capacity Utilization	46.7%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

HCM Signalized Intersection Capacity Analysis

10: Stewart St & Boren Ave

7/31/2015



Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations		↑↑		↖	↑↑						↑↑↑	↗
Traffic Volume (vph)	0	487	90	169	574	0	0	0	0	277	892	19
Future Volume (vph)	0	487	90	169	574	0	0	0	0	277	892	19
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	11	11	11	10	10	10	12	12	12	10	10	10
Total Lost time (s)		4.0		5.0	5.0						5.0	4.5
Lane Util. Factor		0.95		1.00	0.95						0.91	1.00
Frbp, ped/bikes		0.94		1.00	1.00						1.00	0.72
Flpb, ped/bikes		1.00		1.00	1.00						0.98	1.00
Frt		0.98		1.00	1.00						1.00	0.85
Flt Protected		1.00		0.95	1.00						0.99	1.00
Satd. Flow (prot)		2495		1207	2611						3626	746
Flt Permitted		1.00		0.95	1.00						0.99	1.00
Satd. Flow (perm)		2495		1207	2611						3626	746
Peak-hour factor, PHF	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Adj. Flow (vph)	0	535	99	186	631	0	0	0	0	304	980	21
RTOR Reduction (vph)	0	15	0	0	0	0	0	0	0	0	0	13
Lane Group Flow (vph)	0	619	0	186	631	0	0	0	0	0	1284	8
Confl. Peds. (#/hr)			324			39			41	41		128
Confl. Bikes (#/hr)			4			4						40
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	10	0
Parking (#/hr)	0	8	8	8	8	0	0	0	0	16	16	16
Turn Type		NA		Prot	NA					Perm	NA	Perm
Protected Phases		2		1	1 2						3	
Permitted Phases										3		3
Actuated Green, G (s)		28.5		19.5	52.5						38.5	38.5
Effective Green, g (s)		29.0		19.0	52.0						38.0	38.5
Actuated g/C Ratio		0.29		0.19	0.52						0.38	0.38
Clearance Time (s)		4.5		4.5							4.5	4.5
Lane Grp Cap (vph)		723		229	1357						1377	287
v/s Ratio Prot		c0.25		c0.15	0.24							
v/s Ratio Perm											0.35	0.01
v/c Ratio		0.86		0.81	0.46						0.93	0.03
Uniform Delay, d1		33.5		38.8	15.2						29.8	19.1
Progression Factor		1.00		1.00	1.00						1.00	1.00
Incremental Delay, d2		12.4		26.0	1.1						12.7	0.2
Delay (s)		46.0		64.8	16.3						42.5	19.3
Level of Service		D		E	B						D	B
Approach Delay (s)		46.0			27.4			0.0			42.1	
Approach LOS		D			C			A			D	

Intersection Summary

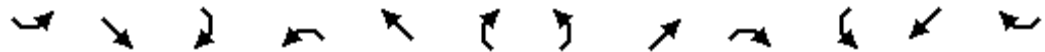
HCM 2000 Control Delay	38.6	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.89		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	15.0
Intersection Capacity Utilization	69.2%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

HCM Signalized Intersection Capacity Analysis

11: Virginia St & 3rd Ave

7/31/2015



Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations		↑↑			↑↑			↑↑↑				
Traffic Volume (vph)	30	161	0	0	116	28	32	359	63	0	0	0
Future Volume (vph)	30	161	0	0	116	28	32	359	63	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	9	9	9	9	9	9	10	10	10	10	10	10
Grade (%)		0%			0%			-5%			5%	
Total Lost time (s)		4.0			4.0			4.0				
Lane Util. Factor		0.95			0.95			0.91				
Frbp, ped/bikes		1.00			0.94			0.98				
Flpb, ped/bikes		0.96			1.00			0.99				
Frt		1.00			0.97			0.98				
Flt Protected		0.99			1.00			1.00				
Satd. Flow (prot)		2398			2290			3680				
Flt Permitted		0.89			1.00			1.00				
Satd. Flow (perm)		2162			2290			3680				
Peak-hour factor, PHF	0.80	0.80	0.80	0.87	0.87	0.87	0.91	0.91	0.91	0.92	0.92	0.92
Adj. Flow (vph)	38	201	0	0	133	32	35	395	69	0	0	0
RTOR Reduction (vph)	0	0	0	0	18	0	0	28	0	0	0	0
Lane Group Flow (vph)	0	239	0	0	147	0	0	472	0	0	0	0
Confl. Peds. (#/hr)	220						220	61		111		
Confl. Bikes (#/hr)							20			20		
Parking (#/hr)	8	8	0	0	8	8	16	16	16	0	0	0
Turn Type	Perm	NA			NA		Perm	NA				
Protected Phases		1			1			2				
Permitted Phases	1						2					
Actuated Green, G (s)		35.5			35.5			35.5				
Effective Green, g (s)		36.0			36.0			36.0				
Actuated g/C Ratio		0.45			0.45			0.45				
Clearance Time (s)		4.5			4.5			4.5				
Lane Grp Cap (vph)		972			1030			1656				
v/s Ratio Prot					0.06							
v/s Ratio Perm		c0.11						0.13				
v/c Ratio		0.25			0.14			0.28				
Uniform Delay, d1		13.6			12.9			13.9				
Progression Factor		1.00			0.62			1.00				
Incremental Delay, d2		0.6			0.3			0.4				
Delay (s)		14.2			8.3			14.3				
Level of Service		B			A			B				
Approach Delay (s)		14.2			8.3			14.3			0.0	
Approach LOS		B			A			B			A	

Intersection Summary

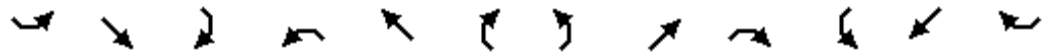
HCM 2000 Control Delay	13.2	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.27		
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	47.5%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

HCM Signalized Intersection Capacity Analysis

12: Virginia St & 4th Ave

7/31/2015



Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations					↑↑↑	↑		↑↑↑				
Traffic Volume (vph)	0	0	0	0	977	187	44	385	0	0	0	0
Future Volume (vph)	0	0	0	0	977	187	44	385	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	9	9	9	9	9	9	10	10	10	10	10	10
Grade (%)		0%			0%			-5%				5%
Total Lost time (s)					5.0	5.0		5.0				
Lane Util. Factor					0.81	0.81		0.91				
Frbp, ped/bikes					0.99	0.68		1.00				
Flpb, ped/bikes					1.00	1.00		0.99				
Frt					1.00	0.85		1.00				
Flt Protected					1.00	1.00		0.99				
Satd. Flow (prot)					4371	602		3816				
Flt Permitted					1.00	1.00		0.99				
Satd. Flow (perm)					4371	602		3816				
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	0	0	0	0	1007	193	45	397	0	0	0	0
RTOR Reduction (vph)	0	0	0	0	3	9	0	17	0	0	0	0
Lane Group Flow (vph)	0	0	0	0	1023	165	0	425	0	0	0	0
Confl. Peds. (#/hr)	201		330	330		201	93		200	200		93
Confl. Bikes (#/hr)						20			20			
Parking (#/hr)	0	0	0	16	16	0	16	16	16	0	0	0
Turn Type					NA	Perm	Perm	NA				
Protected Phases					1			2				
Permitted Phases						1	2					
Actuated Green, G (s)					48.5	48.5		22.5				
Effective Green, g (s)					48.0	48.0		22.0				
Actuated g/C Ratio					0.60	0.60		0.28				
Clearance Time (s)					4.5	4.5		4.5				
Lane Grp Cap (vph)					2622	361		1049				
v/s Ratio Prot					0.23							
v/s Ratio Perm						c0.27		0.11				
v/c Ratio					0.39	0.46		0.40				
Uniform Delay, d1					8.4	8.8		23.7				
Progression Factor					0.68	0.75		0.63				
Incremental Delay, d2					0.4	3.7		1.1				
Delay (s)					6.1	10.3		16.0				
Level of Service					A	B		B				
Approach Delay (s)		0.0			6.7			16.0			0.0	
Approach LOS		A			A			B			A	

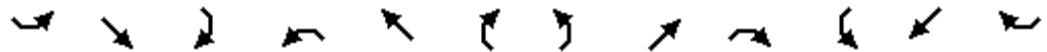
Intersection Summary			
HCM 2000 Control Delay	9.2	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.44		
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	10.0
Intersection Capacity Utilization	39.9%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

HCM Signalized Intersection Capacity Analysis

13: Virginia St & 5th Ave

7/31/2015



Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations		↑↑↑						↑↑↑				
Traffic Volume (vph)	96	1049	0	0	0	0	0	501	104	0	0	0
Future Volume (vph)	96	1049	0	0	0	0	0	501	104	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	10	10	10	10	10	10	10	10	10	10	10	10
Grade (%)		0%			0%			-5%			5%	
Total Lost time (s)		4.0						4.0				
Lane Util. Factor		0.91						0.91				
Frbp, ped/bikes		1.00						0.94				
Flpb, ped/bikes		0.98						1.00				
Frt		1.00						0.97				
Flt Protected		1.00						1.00				
Satd. Flow (prot)		3705						3574				
Flt Permitted		1.00						1.00				
Satd. Flow (perm)		3705						3574				
Peak-hour factor, PHF	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72
Adj. Flow (vph)	133	1457	0	0	0	0	0	696	144	0	0	0
RTOR Reduction (vph)	0	13	0	0	0	0	0	5	0	0	0	0
Lane Group Flow (vph)	0	1577	0	0	0	0	0	835	0	0	0	0
Confl. Peds. (#/hr)	132		272				132		287			219
Confl. Bikes (#/hr)			20						20			
Parking (#/hr)	16	16	0	0	0	0	16	16	16	0	0	0
Turn Type	Perm	NA						NA				
Protected Phases		1						2				
Permitted Phases	1											
Actuated Green, G (s)		44.5						26.5				
Effective Green, g (s)		45.0						27.0				
Actuated g/C Ratio		0.56						0.34				
Clearance Time (s)		4.5						4.5				
Lane Grp Cap (vph)		2084						1206				
v/s Ratio Prot								c0.23				
v/s Ratio Perm		0.43										
v/c Ratio		0.76						0.69				
Uniform Delay, d1		13.3						22.9				
Progression Factor		1.00						0.58				
Incremental Delay, d2		2.6						3.2				
Delay (s)		16.0						16.4				
Level of Service		B						B				
Approach Delay (s)		16.0			0.0			16.4			0.0	
Approach LOS		B			A			B			A	

Intersection Summary

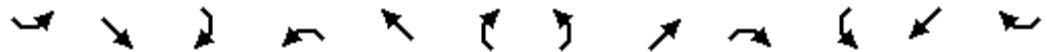
HCM 2000 Control Delay	16.1	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.73		
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	48.6%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

HCM Signalized Intersection Capacity Analysis

14: Virginia St & 6th Ave

7/31/2015



Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations					↑↑↑			←↑↑				
Traffic Volume (vph)	0	0	0	0	469	19	49	568	0	0	0	0
Future Volume (vph)	0	0	0	0	469	19	49	568	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	11	11	11	11	11	11	10	9	10	10	10	10
Grade (%)		0%			0%			-5%				5%
Total Lost time (s)					5.0			4.0				
Lane Util. Factor					0.91			0.91				
Frbp, ped/bikes					0.99			1.00				
Flpb, ped/bikes					1.00			0.97				
Frt					0.99			1.00				
Flt Protected					1.00			1.00				
Satd. Flow (prot)					3879			3637				
Flt Permitted					1.00			1.00				
Satd. Flow (perm)					3879			3637				
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	0	0	0	0	489	20	51	592	0	0	0	0
RTOR Reduction (vph)	0	0	0	0	5	0	0	13	0	0	0	0
Lane Group Flow (vph)	0	0	0	0	504	0	0	630	0	0	0	0
Confl. Peds. (#/hr)	74		258	258		74	249		73	73		249
Confl. Bikes (#/hr)						20						
Parking (#/hr)				16	16	16		16				
Turn Type					NA		Perm	NA				
Protected Phases					1			2				
Permitted Phases							2					
Actuated Green, G (s)					33.5			37.5				
Effective Green, g (s)					33.0			38.0				
Actuated g/C Ratio					0.41			0.48				
Clearance Time (s)					4.5			4.5				
Lane Grp Cap (vph)					1600			1727				
v/s Ratio Prot					c0.13							
v/s Ratio Perm								0.17				
v/c Ratio					0.31			0.37				
Uniform Delay, d1					15.9			13.3				
Progression Factor					0.42			0.33				
Incremental Delay, d2					0.5			0.4				
Delay (s)					7.2			4.8				
Level of Service					A			A				
Approach Delay (s)		0.0			7.2			4.8			0.0	
Approach LOS		A			A			A			A	

Intersection Summary

















HCM 2000 Control Delay	5.8	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.34		
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	9.0
Intersection Capacity Utilization	33.7%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

HCM Signalized Intersection Capacity Analysis

15: Virginia St & Westlake Ave

7/31/2015

												
Movement	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	0	137	153	1	152	0	89	462	36	0	0	0
Future Volume (vph)	0	137	153	1	152	0	89	462	36	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	11	9	11	11	10	11	12	9	9	12	12	12
Total Lost time (s)		4.0			4.0		4.0	4.0				
Lane Util. Factor		0.95			0.95		0.91	0.91				
Frbp, ped/bikes		0.81			1.00		1.00	0.98				
Flpb, ped/bikes		1.00			1.00		1.00	1.00				
Frt		0.92			1.00		1.00	0.99				
Flt Protected		1.00			1.00		0.95	1.00				
Satd. Flow (prot)		1885			2607		1119	2279				
Flt Permitted		1.00			0.95		0.95	1.00				
Satd. Flow (perm)		1885			2488		1119	2279				
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	0	152	170	1	169	0	99	513	40	0	0	0
RTOR Reduction (vph)	0	38	0	0	0	0	0	7	0	0	0	0
Lane Group Flow (vph)	0	284	0	0	170	0	88	558	0	0	0	0
Confl. Peds. (#/hr)	70		293	293		70	2		274	274		2
Confl. Bikes (#/hr)			4			10			6			
Parking (#/hr)	0	8	8	8	8	0	16	16	0	0	0	0
Turn Type		NA		Perm	NA		Perm	NA				
Protected Phases		1			1			2				
Permitted Phases				1			2					
Actuated Green, G (s)		31.5			31.5		39.5	39.5				
Effective Green, g (s)		32.0			32.0		40.0	40.0				
Actuated g/C Ratio		0.40			0.40		0.50	0.50				
Clearance Time (s)		4.5			4.5		4.5	4.5				
Lane Grp Cap (vph)		754			995		559	1139				
v/s Ratio Prot		c0.15										
v/s Ratio Perm					0.07		0.08	0.24				
v/c Ratio		0.38			0.17		0.16	0.49				
Uniform Delay, d1		17.0			15.5		10.9	13.2				
Progression Factor		0.22			0.73		0.27	0.20				
Incremental Delay, d2		1.3			0.4		0.6	1.4				
Delay (s)		5.0			11.6		3.5	4.1				
Level of Service		A			B		A	A				
Approach Delay (s)		5.0			11.6		4.0				0.0	
Approach LOS		A			B		A				A	
Intersection Summary												
HCM 2000 Control Delay			5.4				HCM 2000 Level of Service		A			
HCM 2000 Volume to Capacity ratio			0.44									
Actuated Cycle Length (s)			80.0				Sum of lost time (s)		8.0			
Intersection Capacity Utilization			38.0%				ICU Level of Service		A			
Analysis Period (min)			15									
c Critical Lane Group												

HCM Signalized Intersection Capacity Analysis

16: Virginia St & 7th Ave

7/31/2015



Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations		↑↑↑						↑↑↑				
Traffic Volume (vph)	116	254	0	0	0	0	0	459	157	0	0	0
Future Volume (vph)	116	254	0	0	0	0	0	459	157	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	9	9	9	12	12	12	9	9	9	12	12	12
Grade (%)		0%			-5%			0%			0%	
Total Lost time (s)		4.0						4.0				
Lane Util. Factor		0.91						0.91				
Frbp, ped/bikes		1.00						0.91				
Flpb, ped/bikes		0.90						1.00				
Frt		1.00						0.96				
Flt Protected		0.98						1.00				
Satd. Flow (prot)		3233						3188				
Flt Permitted		0.98						1.00				
Satd. Flow (perm)		3233						3188				
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	122	267	0	0	0	0	0	483	165	0	0	0
RTOR Reduction (vph)	0	75	0	0	0	0	0	26	0	0	0	0
Lane Group Flow (vph)	0	314	0	0	0	0	0	622	0	0	0	0
Confl. Peds. (#/hr)	249		290					17		359		
Confl. Bikes (#/hr)			16									
Parking (#/hr)	16	16	0	0	0	0	0	16	16	0	0	0
Turn Type	Perm	NA						NA				
Protected Phases		1						2				
Permitted Phases	1											
Actuated Green, G (s)		29.5						39.5				
Effective Green, g (s)		31.0						41.0				
Actuated g/C Ratio		0.39						0.51				
Clearance Time (s)		5.5						5.5				
Lane Grp Cap (vph)		1252						1633				
v/s Ratio Prot								c0.20				
v/s Ratio Perm		0.10										
v/c Ratio		0.25						0.38				
Uniform Delay, d1		16.6						11.8				
Progression Factor		0.73						1.23				
Incremental Delay, d2		0.4						0.6				
Delay (s)		12.6						15.2				
Level of Service		B						B				
Approach Delay (s)		12.6			0.0			15.2			0.0	
Approach LOS		B			A			B			A	
Intersection Summary												
HCM 2000 Control Delay			14.2					HCM 2000 Level of Service			B	
HCM 2000 Volume to Capacity ratio			0.32									
Actuated Cycle Length (s)			80.0					Sum of lost time (s)		8.0		
Intersection Capacity Utilization			55.9%					ICU Level of Service		B		
Analysis Period (min)			15									

c Critical Lane Group

HCM Signalized Intersection Capacity Analysis

17: Virginia St & 8th Ave

7/31/2015



Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations					↑↑		↑	↑↑				↑
Traffic Volume (vph)	0	0	0	0	228	153	45	484	0	0	0	138
Future Volume (vph)	0	0	0	0	228	153	45	484	0	0	0	138
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	12	12	12	10	9	10	10	10	12	12	12	12
Total Lost time (s)					4.0		4.0	4.0				4.0
Lane Util. Factor					0.95		1.00	0.95				1.00
Frbp, ped/bikes					0.86		1.00	1.00				0.63
Flpb, ped/bikes					1.00		0.64	1.00				1.00
Frt					0.94		1.00	1.00				0.86
Flt Protected					1.00		0.95	1.00				1.00
Satd. Flow (prot)					2022		786	2625				756
Flt Permitted					1.00		0.95	1.00				1.00
Satd. Flow (perm)					2022		786	2625				756
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	0	0	0	0	253	170	50	538	0	0	0	153
RTOR Reduction (vph)	0	0	0	0	6	0	15	0	0	0	0	68
Lane Group Flow (vph)	0	0	0	0	417	0	35	538	0	0	0	86
Confl. Peds. (#/hr)				498		257	343		463	463		343
Confl. Bikes (#/hr)						20						20
Bus Blockages (#/hr)	0	0	0	0	16	16	8	8	0	0	0	8
Parking (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Turn Type					NA		Perm	NA				Perm
Protected Phases					1			2				
Permitted Phases							2					2
Actuated Green, G (s)					36.5		34.5	34.5				34.5
Effective Green, g (s)					37.0		35.0	35.0				35.0
Actuated g/C Ratio					0.46		0.44	0.44				0.44
Clearance Time (s)					4.5		4.5	4.5				4.5
Lane Grp Cap (vph)					935		343	1148				330
v/s Ratio Prot					c0.21			c0.20				
v/s Ratio Perm							0.04					0.11
v/c Ratio					0.45		0.10	0.47				0.26
Uniform Delay, d1					14.6		13.2	15.9				14.3
Progression Factor					1.33		0.62	0.66				0.73
Incremental Delay, d2					1.4		0.6	1.3				1.8
Delay (s)					20.8		8.7	11.8				12.1
Level of Service					C		A	B				B
Approach Delay (s)		0.0			20.8			11.5			12.1	
Approach LOS		A			C			B			B	

Intersection Summary			
HCM 2000 Control Delay	15.0	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.46		
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	55.9%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

HCM Signalized Intersection Capacity Analysis

18: Virginia St & 9th Ave

7/31/2015



Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations		↕↕						↕↕			↕	
Traffic Volume (vph)	26	128	18	0	0	0	0	417	138	83	140	0
Future Volume (vph)	26	128	18	0	0	0	0	417	138	83	140	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	12	12	12	12	12	12	11	11	11	11	11	11
Total Lost time (s)		4.0						4.0			4.0	
Lane Util. Factor		0.95						0.95			1.00	
Frbp, ped/bikes		0.96						0.93			1.00	
Flpb, ped/bikes		0.95						1.00			0.96	
Frt		0.98						0.96			1.00	
Flt Protected		0.99						1.00			0.98	
Satd. Flow (prot)		2445						2427			1240	
Flt Permitted		0.99						1.00			0.70	
Satd. Flow (perm)		2445						2427			882	
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	28	138	19	0	0	0	0	448	148	89	151	0
RTOR Reduction (vph)	0	11	0	0	0	0	0	40	0	0	0	0
Lane Group Flow (vph)	0	174	0	0	0	0	0	556	0	0	240	0
Confl. Peds. (#/hr)	200		118	118		200			164	164		126
Confl. Bikes (#/hr)			20						20			
Parking (#/hr)	16	16	16	0	0	0	8	8	8	8	8	0
Turn Type	Perm	NA						NA		Perm	NA	
Protected Phases		1						2			2	
Permitted Phases	1									2		
Actuated Green, G (s)		19.0						53.0			53.0	
Effective Green, g (s)		19.0						53.0			53.0	
Actuated g/C Ratio		0.24						0.66			0.66	
Clearance Time (s)		4.0						4.0			4.0	
Lane Grp Cap (vph)		580						1607			584	
v/s Ratio Prot								0.23				
v/s Ratio Perm		0.07									c0.27	
v/c Ratio		0.30						0.35			0.41	
Uniform Delay, d1		25.0						5.9			6.3	
Progression Factor		1.00						0.12			0.66	
Incremental Delay, d2		1.3						0.5			2.1	
Delay (s)		26.4						1.2			6.2	
Level of Service		C						A			A	
Approach Delay (s)		26.4			0.0			1.2			6.2	
Approach LOS		C			A			A			A	

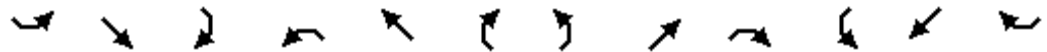
Intersection Summary

HCM 2000 Control Delay	7.0	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.38		
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	56.1%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

HCM Signalized Intersection Capacity Analysis

19: Virginia St & Terry Ave













7/31/2015



Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR	
Lane Configurations					↕	↕		↕↕			↕		
Traffic Volume (vph)	0	0	0	38	40	37	28	367	0	0	199	17	
Future Volume (vph)	0	0	0	38	40	37	28	367	0	0	199	17	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	
Lane Width	12	12	12	11	11	11	10	10	10	12	12	12	
Total Lost time (s)					4.0	4.0		4.0			4.0		
Lane Util. Factor					1.00	1.00		0.95			1.00		
Frbp, ped/bikes					1.00	0.76		1.00			0.97		
Flpb, ped/bikes					1.00	1.00		0.98			1.00		
Frt					1.00	0.85		1.00			0.99		
Flt Protected					0.98	1.00		1.00			1.00		
Satd. Flow (prot)					1225	810		2557			1302		
Flt Permitted					0.98	1.00		0.92			1.00		
Satd. Flow (perm)					1225	810		2374			1302		
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	
Adj. Flow (vph)	0	0	0	41	43	40	30	395	0	0	214	18	
RTOR Reduction (vph)	0	0	0	0	0	27	0	0	0	0	4	0	
Lane Group Flow (vph)	0	0	0	0	84	14	0	425	0	0	228	0	
Confl. Peds. (#/hr)						131	131					157	
Confl. Bikes (#/hr)						20						20	
Parking (#/hr)	0	0	0	0	16	16	8	8	0	0	8	8	
Turn Type				Perm	NA	Perm	Perm	NA			NA		
Protected Phases					1			2				2	
Permitted Phases				1		1	2						
Actuated Green, G (s)					26.5	26.5		44.5			44.5		
Effective Green, g (s)					27.0	27.0		45.0			45.0		
Actuated g/C Ratio					0.34	0.34		0.56			0.56		
Clearance Time (s)					4.5	4.5		4.5			4.5		
Lane Grp Cap (vph)					413	273		1335			732		
v/s Ratio Prot											0.18		
v/s Ratio Perm					0.07	0.02		c0.18					
v/c Ratio					0.20	0.05		0.32			0.31		
Uniform Delay, d1					18.9	17.9		9.3			9.3		
Progression Factor					1.04	1.17		0.55			1.00		
Incremental Delay, d2					1.1	0.3		0.6			1.1		
Delay (s)					20.8	21.3		5.7			10.4		
Level of Service					C	C		A			B		
Approach Delay (s)		0.0			20.9			5.7			10.4		
Approach LOS		A			C			A			B		
Intersection Summary													
HCM 2000 Control Delay			9.5		HCM 2000 Level of Service						A		
HCM 2000 Volume to Capacity ratio			0.28										
Actuated Cycle Length (s)			80.0		Sum of lost time (s)						8.0		
Intersection Capacity Utilization			47.5%		ICU Level of Service						A		
Analysis Period (min)			15										
c Critical Lane Group													

HCM Signalized Intersection Capacity Analysis
 20: Virginia St/Fairview Ave & Boren Ave

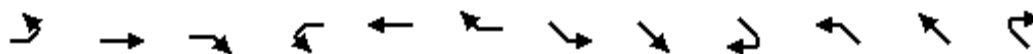
7/31/2015

												
Movement	NBL	NBT	NBR	SBL	SBT	SBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations		↑↑		↙	↔			↑↑				↗↗
Traffic Volume (vph)	0	238	0	130	186	6	0	314	49	0	0	411
Future Volume (vph)	0	238	0	130	186	6	0	314	49	0	0	411
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	12	11	12	11	11	12	12	11	12	12	12	11
Total Lost time (s)		4.0		4.0	4.0			4.0				4.0
Lane Util. Factor		0.95		0.95	0.95			0.95				0.88
Frbp, ped/bikes		1.00		1.00	0.99			0.98				1.00
Flpb, ped/bikes		1.00		1.00	1.00			1.00				1.00
Frt		1.00		1.00	1.00			0.98				0.85
Flt Protected		1.00		0.95	1.00			1.00				1.00
Satd. Flow (prot)		2763		1243	1290			2640				2165
Flt Permitted		1.00		0.95	1.00			1.00				1.00
Satd. Flow (perm)		2763		1243	1290			2640				2165
Peak-hour factor, PHF	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83
Adj. Flow (vph)	0	287	0	157	224	7	0	378	59	0	0	495
RTOR Reduction (vph)	0	0	0	0	1	0	0	10	0	0	0	0
Lane Group Flow (vph)	0	287	0	141	246	0	0	427	0	0	0	495
Confl. Peds. (#/hr)			60			81			66			
Confl. Bikes (#/hr)						3						9
Parking (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Turn Type		NA		Split	NA			NA				pt+ov
Protected Phases		3		1	1			2				1 2
Permitted Phases												2 3
Actuated Green, G (s)		20.5		48.5	48.5			36.0				110.0
Effective Green, g (s)		21.5		49.5	49.5			37.0				112.0
Actuated g/C Ratio		0.18		0.41	0.41			0.31				0.93
Clearance Time (s)		5.0		5.0	5.0			5.0				
Vehicle Extension (s)		3.0		3.0	3.0			3.0				
Lane Grp Cap (vph)		495		512	532			814				2165
v/s Ratio Prot		c0.10		0.11	c0.19			c0.16				0.17
v/s Ratio Perm												0.06
v/c Ratio		0.58		0.28	0.46			0.52				0.23
Uniform Delay, d1		45.1		23.4	25.6			34.2				0.3
Progression Factor		1.00		1.00	1.00			1.00				1.00
Incremental Delay, d2		1.7		1.3	2.9			2.4				0.1
Delay (s)		46.8		24.7	28.5			36.6				0.4
Level of Service		D		C	C			D				A
Approach Delay (s)		46.8			27.1			36.6			0.4	
Approach LOS		D			C			D			A	
Intersection Summary												
HCM 2000 Control Delay			25.0									C
HCM 2000 Volume to Capacity ratio			0.51									
Actuated Cycle Length (s)			120.0						12.0			
Intersection Capacity Utilization			65.8%									C
Analysis Period (min)			15									
c Critical Lane Group												

HCM Signalized Intersection Capacity Analysis

21: 5th Ave & Olive Way

7/31/2015



Movement	EBL	EBT	EBR	WBL	WBT	WBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations		↑↑	↗					↙↙↙				
Traffic Volume (vph)	0	245	27	0	0	0	400	991	0	0	0	0
Future Volume (vph)	0	245	27	0	0	0	400	991	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	16	9	12	12	12	12	11	11	11	12	12	12
Total Lost time (s)		4.0	4.0					4.0				
Lane Util. Factor		0.95	1.00					0.91				
Frbp, ped/bikes		1.00	0.65					1.00				
Flpb, ped/bikes		1.00	1.00					0.89				
Frt		1.00	0.85					1.00				
Flt Protected		1.00	1.00					0.99				
Satd. Flow (prot)		2858	881					3918				
Flt Permitted		1.00	1.00					0.99				
Satd. Flow (perm)		2858	881					3918				
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	0	261	29	0	0	0	426	1054	0	0	0	0
RTOR Reduction (vph)	0	0	14	0	0	0	0	91	0	0	0	0
Lane Group Flow (vph)	0	261	15	0	0	0	0	1389	0	0	0	0
Confl. Peds. (#/hr)			396				492		375			
Confl. Bikes (#/hr)									67			
Parking (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Turn Type		NA	Perm				Perm	NA				
Protected Phases		2						1				
Permitted Phases			2				1					
Actuated Green, G (s)		23.5	23.5					47.5				
Effective Green, g (s)		24.0	24.0					48.0				
Actuated g/C Ratio		0.30	0.30					0.60				
Clearance Time (s)		4.5	4.5					4.5				
Lane Grp Cap (vph)		857	264					2350				
v/s Ratio Prot		c0.09										
v/s Ratio Perm			0.02					0.35				
v/c Ratio		0.30	0.06					0.59				
Uniform Delay, d1		21.6	19.9					9.9				
Progression Factor		0.90	0.83					0.21				
Incremental Delay, d2		0.8	0.4					0.8				
Delay (s)		20.1	17.0					2.8				
Level of Service		C	B					A				
Approach Delay (s)		19.8			0.0			2.8			0.0	
Approach LOS		B			A			A			A	













Intersection Summary

HCM 2000 Control Delay	5.6	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.50		
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	49.8%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

HCM Signalized Intersection Capacity Analysis

22: Westlake Ave & 6th Ave

















7/31/2015

												
Movement	NBL	NBT	NBR	SBL	SBT	SBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations		↑			↑						↑↑↑	
Traffic Volume (vph)	0	5	0	0	130	24	0	0	0	23	464	306
Future Volume (vph)	0	5	0	0	130	24	0	0	0	23	464	306
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	12	12	12	12	9	12	12	12	12	12	10	12
Total Lost time (s)		4.5			4.0						4.0	
Lane Util. Factor		1.00			1.00						0.91	
Frbp, ped/bikes		1.00			0.98						0.96	
Flpb, ped/bikes		1.00			1.00						0.99	
Frt		1.00			0.98						0.94	
Flt Protected		1.00			1.00						1.00	
Satd. Flow (prot)		1425			1126						3396	
Flt Permitted		1.00			1.00						1.00	
Satd. Flow (perm)		1425			1126						3396	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	0	6	0	0	144	27	0	0	0	26	516	340
RTOR Reduction (vph)	0	0	0	0	8	0	0	0	0	0	142	0
Lane Group Flow (vph)	0	6	0	0	163	0	0	0	0	0	740	0
Confl. Peds. (#/hr)	80		206	206		80				217		84
Confl. Bikes (#/hr)						20						20
Parking (#/hr)	0	0	0	0	16	16	0	0	0	0	16	0
Turn Type		NA			NA					Perm	NA	
Protected Phases		2			2						4	
Permitted Phases										4		
Actuated Green, G (s)		34.5			34.5						36.5	
Effective Green, g (s)		34.5			35.0						37.0	
Actuated g/C Ratio		0.43			0.44						0.46	
Clearance Time (s)		4.5			4.5						4.5	
Lane Grp Cap (vph)		614			492						1570	
v/s Ratio Prot		0.00			0.14							
v/s Ratio Perm											0.22	
v/c Ratio		0.01			0.33						0.47	
Uniform Delay, d1		13.0			14.8						14.8	
Progression Factor		1.00			1.02						0.43	
Incremental Delay, d2		0.0			1.8						0.9	
Delay (s)		13.0			16.9						7.2	
Level of Service		B			B						A	
Approach Delay (s)		13.0			16.9			0.0			7.2	
Approach LOS		B			B			A			A	
Intersection Summary												
HCM 2000 Control Delay			8.8		HCM 2000 Level of Service			A				
HCM 2000 Volume to Capacity ratio			0.41									
Actuated Cycle Length (s)			80.0		Sum of lost time (s)			8.5				
Intersection Capacity Utilization			47.9%		ICU Level of Service			A				
Analysis Period (min)			15									
c Critical Lane Group												

HCM Signalized Intersection Capacity Analysis

23: Westlake Ave & 7th Ave


















7/31/2015

												
Movement	NBL	NBT	NBR	SBL	SBT	SBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Traffic Volume (vph)	0	226	0	150	118	1	3	220	35	0	0	0
Future Volume (vph)	0	226	0	150	118	1	3	220	35	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	12	10	12	12	9	16	12	10	12	12	12	12
Grade (%)		0%			0%			0%				-5%
Total Lost time (s)		4.0		4.0	4.0			4.0				
Lane Util. Factor		0.95		1.00	1.00			1.00				
Frbp, ped/bikes		1.00		1.00	1.00			0.99				
Flpb, ped/bikes		1.00		0.79	1.00			1.00				
Frt		1.00		1.00	1.00			0.98				
Flt Protected		1.00		0.95	1.00			1.00				
Satd. Flow (prot)		2555		1070	1166			1178				
Flt Permitted		1.00		0.59	1.00			1.00				
Satd. Flow (perm)		2555		664	1166			1178				
Peak-hour factor, PHF	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86
Adj. Flow (vph)	0	263	0	174	137	1	3	256	41	0	0	0
RTOR Reduction (vph)	0	0	0	0	1	0	0	7	0	0	0	0
Lane Group Flow (vph)	0	263	0	174	138	0	0	293	0	0	0	0
Confl. Peds. (#/hr)	67		283	283		67	113		19			
Confl. Bikes (#/hr)			5			3			41			
Parking (#/hr)	0	16	0	0	16	0	0	16	0	0	0	0
Turn Type		NA		Perm	NA		Perm	NA				
Protected Phases		1			1			2				
Permitted Phases	1			1			2					
Actuated Green, G (s)		38.5		38.5	38.5			30.5				
Effective Green, g (s)		40.0		40.0	40.0			32.0				
Actuated g/C Ratio		0.50		0.50	0.50			0.40				
Clearance Time (s)		5.5		5.5	5.5			5.5				
Lane Grp Cap (vph)		1277		332	583			471				
v/s Ratio Prot		0.10			0.12							
v/s Ratio Perm				c0.26				0.25				
v/c Ratio		0.21		0.52	0.24			0.62				
Uniform Delay, d1		11.1		13.6	11.3			19.2				
Progression Factor		0.80		0.41	0.37			1.00				
Incremental Delay, d2		0.4		5.3	0.9			6.1				
Delay (s)		9.2		10.9	5.1			25.2				
Level of Service		A		B	A			C				
Approach Delay (s)		9.2			8.3			25.2			0.0	
Approach LOS		A			A			C			A	
Intersection Summary												
HCM 2000 Control Delay			14.4									B
HCM 2000 Volume to Capacity ratio			0.57									
Actuated Cycle Length (s)			80.0									8.0
Intersection Capacity Utilization			65.0%									C
Analysis Period (min)			15									
c Critical Lane Group												

HCM Signalized Intersection Capacity Analysis

24: Lenora St & Westlake Ave & 8th Ave

7/31/2015

												
Movement	NBL2	NBL	NBT	SBT	SBR	SBR2	SEL2	SER	SER2	NWL2	NWL	NWT
Lane Configurations												
Traffic Volume (vph)	4	8	183	188	73	32	5	18	11	42	78	106
Future Volume (vph)	4	8	183	188	73	32	5	18	11	42	78	106
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	12	12	9	10	12	12	12	11	12	12	12	9
Total Lost time (s)			4.0	4.0			8.5	4.0				4.0
Lane Util. Factor			0.95	0.95			1.00	1.00				0.95
Frbp, ped/bikes			1.00	0.88			1.00	0.52				0.97
Flpb, ped/bikes			0.99	1.00			0.97	1.00				0.86
Frt			1.00	0.95			1.00	0.85				0.94
Flt Protected			1.00	1.00			0.95	1.00				0.99
Satd. Flow (prot)			2480	2180			1311	610				1890
Flt Permitted			0.92	1.00			0.44	1.00				0.99
Satd. Flow (perm)			2291	2180			608	610				1890
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	4	9	195	200	78	34	5	19	12	45	83	113
RTOR Reduction (vph)	0	0	0	12	0	0	0	20	0	0	0	0
Lane Group Flow (vph)	0	0	208	300	0	0	5	11	0	0	0	421
Confl. Peds. (#/hr)	133	92			92	133	62	205	133	205	133	
Confl. Bikes (#/hr)					11			4				
Parking (#/hr)	0	8	8	8	8	0	0	0	0	0	16	16
Turn Type	Perm	Perm	NA	NA			D.Pm	Perm		Perm	Perm	NA
Protected Phases			1	1						2	2	2
Permitted Phases	1	1					2	2		2	2	
Actuated Green, G (s)			16.5	16.5			24.5	24.5				24.5
Effective Green, g (s)			20.0	20.0			24.5	29.0				29.0
Actuated g/C Ratio			0.25	0.25			0.31	0.36				0.36
Clearance Time (s)			7.5	7.5			8.5	8.5				8.5
Lane Grp Cap (vph)			572	545			186	221				685
v/s Ratio Prot				c0.14								
v/s Ratio Perm			0.09				0.01	0.02				0.22
v/c Ratio			0.36	0.55			0.03	0.05				0.61
Uniform Delay, d1			24.8	26.1			19.4	16.6				20.9
Progression Factor			0.84	1.00			1.00	1.00				0.70
Incremental Delay, d2			1.8	4.0			0.3	0.4				3.8
Delay (s)			22.5	30.1			19.7	17.0				18.5
Level of Service			C	C			B	B				B
Approach Delay (s)			22.5	30.1								18.5
Approach LOS			C	C								B
Intersection Summary												
HCM 2000 Control Delay			23.0				HCM 2000 Level of Service		C			
HCM 2000 Volume to Capacity ratio			0.42									
Actuated Cycle Length (s)			80.0				Sum of lost time (s)		12.0			
Intersection Capacity Utilization			56.7%				ICU Level of Service		B			
Analysis Period (min)			15									
c Critical Lane Group												

HCM Signalized Intersection Capacity Analysis

24: Lenora St & Westlake Ave & 8th Ave

7/31/2015


















Movement	NWR	SWT
Lane Configurations		
Traffic Volume (vph)	169	0
Future Volume (vph)	169	0
Ideal Flow (vphpl)	1900	1900
Lane Width	12	12
Total Lost time (s)		
Lane Util. Factor		
Frbp, ped/bikes		
Flpb, ped/bikes		
Frt		
Flt Protected		
Satd. Flow (prot)		
Flt Permitted		
Satd. Flow (perm)		
Peak-hour factor, PHF	0.94	0.94
Adj. Flow (vph)	180	0
RTOR Reduction (vph)	0	0
Lane Group Flow (vph)	0	0
Confl. Peds. (#/hr)	62	
Confl. Bikes (#/hr)	15	
Parking (#/hr)	16	0
Turn Type		
Protected Phases		3
Permitted Phases		
Actuated Green, G (s)		
Effective Green, g (s)		
Actuated g/C Ratio		
Clearance Time (s)		
Lane Grp Cap (vph)		
v/s Ratio Prot		
v/s Ratio Perm		
v/c Ratio		
Uniform Delay, d1		
Progression Factor		
Incremental Delay, d2		
Delay (s)		
Level of Service		
Approach Delay (s)		0.0
Approach LOS		A
Intersection Summary		

HCM 2010 Signalized Intersection Summary

















25: Blanchard St & Westlake Ave & 9th Ave

7/31/2015

											
Movement	NBL	NBT	NBR	SBL	SBT	SBR	NWL	NWR	NEL	NER	NER2
Lane Configurations											
Traffic Volume (veh/h)	0	331	63	112	242	0	0	67	108	69	16
Future Volume (veh/h)	0	331	63	112	242	0	0	67	108	69	16
Number	5	2	12	1	6	16	3	18	7	14	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	0.86	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	0	1520	1710	1710	1583	0	0	1583	1583	1710	1710
Adj Flow Rate, veh/h	0	360	68	122	263	0	0	73	117	17	17
Adj No. of Lanes	0	2	0	0	2	0	0	1	2	0	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	8	8	8	8	0	0	8	8	0	0
Cap, veh/h	0	1363	254	416	998	0	0	0	847	0	0
Arrive On Green	0.00	0.61	0.62	0.62	0.61	0.00	0.00	0.01	0.29	0.01	0.01
Sat Flow, veh/h	0	2328	420	581	1721	0	0		2925		
Grp Volume(v), veh/h	0	229	199	176	209	0	0.0		117		
Grp Sat Flow(s),veh/h/ln	0	1444	1228	861	1369	0			1463		
Q Serve(g_s), s	0.0	7.1	7.2	8.0	6.8	0.0			2.8		
Cycle Q Clear(g_c), s	0.0	7.1	7.2	15.2	6.8	0.0			2.8		
Prop In Lane	0.00		0.34	0.69		0.00			1.00		
Lane Grp Cap(c), veh/h	0	874	744	599	828	0			847		
V/C Ratio(X)	0.00	0.26	0.27	0.29	0.25	0.00			0.14		
Avail Cap(c_a), veh/h	0	874	744	599	828	0			847		
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00			1.00		
Upstream Filter(I)	0.00	1.00	1.00	1.00	1.00	0.00			1.00		
Uniform Delay (d), s/veh	0.0	8.8	8.7	11.2	8.7	0.0			25.0		
Incr Delay (d2), s/veh	0.0	0.7	0.9	1.2	0.7	0.0			0.3		
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0			0.0		
%ile BackOfQ(50%),veh/ln	0.0	3.0	2.6	2.6	2.7	0.0			1.2		
LnGrp Delay(d),s/veh	0.0	9.5	9.6	12.4	9.5	0.0			25.3		
LnGrp LOS		A	A	B	A				C		
Approach Vol, veh/h		428			385				117		
Approach Delay, s/veh		9.6			10.8				25.3		
Approach LOS		A			B				C		
Timer	1	2	3	4	5	6	7	8			
Assigned Phs		2				6	7				
Phs Duration (G+Y+Rc), s		63.0				63.0	32.0				
Change Period (Y+Rc), s		4.5				4.5	4.5				
Max Green Setting (Gmax), s		58.5				58.5	27.5				
Max Q Clear Time (g_c+I1), s		9.2				17.2	4.8				
Green Ext Time (p_c), s		4.1				4.1	0.5				
Intersection Summary											
HCM 2010 Ctrl Delay				12.1							
HCM 2010 LOS				B							





















HCM 2010 Signalized Intersection Summary
 26: Westlake Ave & Denny Way

7/9/2015

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	1103	24	0	974	112	17	426	63	103	279	48
Future Volume (veh/h)	0	1103	24	0	974	112	17	426	63	103	279	48
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.87	1.00		0.83	0.90		0.82	1.00		0.88
Parking Bus, Adj	1.00	1.00	0.90	1.00	1.00	0.90	1.00	1.00	0.90	1.00	1.00	0.90
Adj Sat Flow, veh/h/ln	0	1583	1710	0	1583	1710	1710	1583	1710	1583	1583	1710
Adj Flow Rate, veh/h	0	1137	25	0	1004	115	18	439	65	106	288	49
Adj No. of Lanes	0	2	0	0	2	0	0	2	0	1	2	0
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	0	8	8	0	8	8	8	8	8	8	8	8
Cap, veh/h	0	1252	28	0	1108	127	52	741	106	370	1150	191
Arrive On Green	0.00	0.44	0.44	0.00	0.88	0.87	0.32	0.32	0.31	0.12	0.48	0.47
Sat Flow, veh/h	0	2924	63	0	2598	288	44	2315	332	1508	2396	397
Grp Volume(v), veh/h	0	601	561	0	599	520	297	0	225	106	178	159
Grp Sat Flow(s),veh/h/ln	0	1504	1403	0	1504	1302	1539	0	1152	1508	1504	1288
Q Serve(g_s), s	0.0	37.3	37.3	0.0	23.5	23.9	0.0	0.0	16.5	4.1	7.0	7.3
Cycle Q Clear(g_c), s	0.0	37.3	37.3	0.0	23.5	23.9	15.7	0.0	16.5	4.1	7.0	7.3
Prop In Lane	0.00		0.04	0.00		0.22	0.06		0.29	1.00		0.31
Lane Grp Cap(c), veh/h	0	662	617	0	662	573	531	0	369	370	722	618
V/C Ratio(X)	0.00	0.91	0.91	0.00	0.91	0.91	0.56	0.00	0.61	0.29	0.25	0.26
Avail Cap(c_a), veh/h	0	662	617	0	662	573	531	0	369	370	722	618
HCM Platoon Ratio	1.00	1.00	1.00	1.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	0.00	0.31	0.31	0.09	0.00	0.09	1.00	1.00	1.00
Uniform Delay (d), s/veh	0.0	26.1	26.1	0.0	4.8	4.9	28.5	0.0	28.8	17.7	15.3	15.5
Incr Delay (d2), s/veh	0.0	18.5	19.6	0.0	7.0	8.1	0.1	0.0	0.3	1.9	0.8	1.0
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
%ile BackOfQ(50%),veh/ln	0.0	18.8	17.7	0.0	9.6	8.8	6.9	0.0	5.3	1.8	3.0	2.8
LnGrp Delay(d),s/veh	0.0	44.7	45.7	0.0	11.8	13.0	28.6	0.0	29.1	19.6	16.1	16.5
LnGrp LOS		D	D		B	B	C		C	B	B	B
Approach Vol, veh/h		1162			1119			522			443	
Approach Delay, s/veh		45.2			12.3			28.8			17.1	
Approach LOS		D			B			C			B	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2		4		6		8				
Phs Duration (G+Y+Rc), s	16.0	36.0		48.0		52.0		48.0				
Change Period (Y+Rc), s	4.5	4.5		4.5		4.5		4.5				
Max Green Setting (Gmax), s	11.5	31.5		43.5		47.5		43.5				
Max Q Clear Time (g_c+I1), s	6.1	18.5		39.3		9.3		25.9				
Green Ext Time (p_c), s	0.1	3.2		3.4		4.0		10.7				
Intersection Summary												
HCM 2010 Ctrl Delay			27.4									
HCM 2010 LOS			C									

HCM 2010 Signalized Intersection Summary
 34: Fairview Ave & Denny Way

7/9/2015

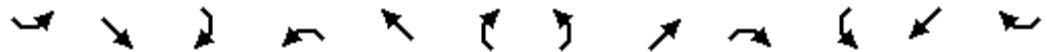
												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	106	992	8	81	705	79	377	308	43	71	257	64
Future Volume (veh/h)	106	992	8	81	705	79	377	308	43	71	257	64
Number	1	6	16	5	2	12	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.84	1.00		0.82	1.00		0.78	1.00		0.69
Parking Bus, Adj	1.00	1.00	0.90	1.00	1.00	0.90	1.00	1.00	0.90	1.00	1.00	0.85
Adj Sat Flow, veh/h/ln	1583	1583	1710	1583	1583	1710	1583	1583	1710	1583	1583	1710
Adj Flow Rate, veh/h	113	1055	9	86	750	84	401	328	46	76	273	68
Adj No. of Lanes	1	2	0	1	2	0	2	2	0	1	2	0
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	8	8	8	8	8	8	8	8	8	8	8	8
Cap, veh/h	151	1180	10	119	975	109	478	734	100	107	429	99
Arrive On Green	0.03	0.13	0.13	0.08	0.39	0.38	0.16	0.30	0.29	0.07	0.21	0.20
Sat Flow, veh/h	1508	2895	25	1508	2524	282	2925	2429	331	1508	2044	470
Grp Volume(v), veh/h	113	548	516	86	447	387	401	200	174	76	195	146
Grp Sat Flow(s),veh/h/ln	1508	1504	1415	1508	1504	1302	1463	1504	1256	1508	1504	1010
Q Serve(g_s), s	7.4	35.9	35.9	5.6	25.9	26.0	13.3	10.7	11.3	4.9	11.8	13.4
Cycle Q Clear(g_c), s	7.4	35.9	35.9	5.6	25.9	26.0	13.3	10.7	11.3	4.9	11.8	13.4
Prop In Lane	1.00		0.02	1.00		0.22	1.00		0.26	1.00		0.47
Lane Grp Cap(c), veh/h	151	613	577	119	581	503	478	454	379	107	316	212
V/C Ratio(X)	0.75	0.89	0.89	0.72	0.77	0.77	0.84	0.44	0.46	0.71	0.62	0.69
Avail Cap(c_a), veh/h	158	613	577	158	581	503	483	489	408	158	399	268
HCM Platoon Ratio	0.33	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.28	0.28	0.28	1.00	1.00	1.00	0.97	0.97	0.97	1.00	1.00	1.00
Uniform Delay (d), s/veh	47.1	41.2	41.2	45.0	26.8	26.9	40.6	28.1	28.4	45.4	35.9	36.7
Incr Delay (d2), s/veh	5.3	6.2	6.6	10.2	9.4	10.8	12.0	0.7	0.8	8.2	2.0	5.2
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
%ile BackOfQ(50%),veh/ln	3.3	16.0	15.2	2.7	12.2	10.9	6.1	4.5	4.0	2.3	5.0	4.1
LnGrp Delay(d),s/veh	52.4	47.4	47.7	55.2	36.2	37.7	52.6	28.7	29.2	53.6	37.8	42.0
LnGrp LOS	D	D	D	E	D	D	D	C	C	D	D	D
Approach Vol, veh/h		1177			920			775			417	
Approach Delay, s/veh		48.0			38.6			41.2			42.2	
Approach LOS		D			D			D			D	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	13.5	42.1	19.8	24.5	11.4	44.3	10.6	33.7				
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5				
Max Green Setting (Gmax), s	9.5	31.5	15.5	25.5	9.5	31.5	9.5	31.5				
Max Q Clear Time (g_c+I1), s	9.4	28.0	15.3	15.4	7.6	37.9	6.9	13.3				
Green Ext Time (p_c), s	0.0	2.6	0.0	2.3	0.0	0.0	0.0	3.0				
Intersection Summary												
HCM 2010 Ctrl Delay			43.0									
HCM 2010 LOS			D									

EXISTING PM

HCM Signalized Intersection Capacity Analysis

1: Stewart St & 3rd Ave

8/5/2015



Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations		↑↑			↑↑			↑			↑↑	
Traffic Volume (vph)	0	191	72	0	200	16	0	91	2	0	423	25
Future Volume (vph)	0	191	72	0	200	16	0	91	2	0	423	25
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	12	9	12	10	9	10	12	12	12	9	10	10
Total Lost time (s)		5.5			5.5			4.5			5.5	
Lane Util. Factor		0.95			0.95			1.00			0.95	
Frbp, ped/bikes		0.91			0.95			1.00			0.98	
Flpb, ped/bikes		1.00			1.00			1.00			1.00	
Frt		0.96			0.99			1.00			0.99	
Flt Protected		1.00			1.00			1.00			1.00	
Satd. Flow (prot)		2260			2440			1331			2549	
Flt Permitted		1.00			1.00			1.00			1.00	
Satd. Flow (perm)		2260			2440			1331			2549	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	0	212	80	0	222	18	0	101	2	0	470	28
RTOR Reduction (vph)	0	9	0	0	7	0	0	1	0	0	5	0
Lane Group Flow (vph)	0	283	0	0	233	0	0	102	0	0	493	0
Confl. Peds. (#/hr)	407		272	272		407				225		515
Confl. Bikes (#/hr)			6			52			10			25
Parking (#/hr)		8	8		8	8		16	16		16	16
Turn Type		NA			NA			NA			NA	
Protected Phases					1			2			2	
Permitted Phases		1								2		
Actuated Green, G (s)		32.5			32.5			38.5			38.5	
Effective Green, g (s)		31.5			31.5			38.5			37.5	
Actuated g/C Ratio		0.39			0.39			0.48			0.47	
Clearance Time (s)		4.5			4.5			4.5			4.5	
Lane Grp Cap (vph)		889			960			640			1194	
v/s Ratio Prot					0.10			0.08			c0.19	
v/s Ratio Perm		c0.13										
v/c Ratio		0.32			0.24			0.16			0.41	
Uniform Delay, d1		16.8			16.3			11.7			14.0	
Progression Factor		0.70			1.00			1.00			0.16	
Incremental Delay, d2		0.9			0.6			0.5			0.9	
Delay (s)		12.7			16.9			12.2			3.1	
Level of Service		B			B			B			A	
Approach Delay (s)		12.7			16.9			12.2			3.1	
Approach LOS		B			B			B			A	

Intersection Summary

HCM 2000 Control Delay	9.3	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.37		
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	11.0
Intersection Capacity Utilization	37.5%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

HCM Signalized Intersection Capacity Analysis

2: Stewart St & 4th Ave & Olive Way

8/5/2015



Movement	NWL	NWT	NWR2	NER	SWT	SWR
Lane Configurations		↑↑↑↑	↑	↑	↑↑	↑
Traffic Volume (vph)	29	1277	218	107	402	130
Future Volume (vph)	29	1277	218	107	402	130
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width	10	10	10	12	9	9
Total Lost time (s)		4.0	4.5	4.5	4.0	4.5
Lane Util. Factor		0.81	0.81	1.00	0.95	1.00
Frbp, ped/bikes		0.99	0.51	1.00	1.00	0.57
Flpb, ped/bikes		0.99	1.00	1.00	1.00	1.00
Frt		1.00	0.85	0.86	1.00	0.85
Flt Protected		1.00	1.00	1.00	1.00	1.00
Satd. Flow (prot)		4614	439	1155	2534	586
Flt Permitted		1.00	1.00	1.00	1.00	1.00
Satd. Flow (perm)		4614	439	1155	2534	586
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	31	1359	232	114	428	138
RTOR Reduction (vph)	0	8	8	0	0	14
Lane Group Flow (vph)	0	1405	201	114	428	124
Confl. Peds. (#/hr)	276		643			629
Confl. Bikes (#/hr)			104			25
Parking (#/hr)		16	16	16	16	16
Turn Type	Perm	NA	Perm	Prot	NA	Perm
Protected Phases		1		2	2	
Permitted Phases	1		1			2
Actuated Green, G (s)		46.5	46.5	24.5	24.5	24.5
Effective Green, g (s)		47.0	46.5	24.5	25.0	24.5
Actuated g/C Ratio		0.59	0.58	0.31	0.31	0.31
Clearance Time (s)		4.5	4.5	4.5	4.5	4.5
Lane Grp Cap (vph)		2710	255	353	791	179
v/s Ratio Prot				0.10	0.17	
v/s Ratio Perm		0.30	c0.46			c0.21
v/c Ratio		0.52	0.79	0.32	0.54	0.69
Uniform Delay, d1		9.8	12.9	21.4	22.8	24.4
Progression Factor		1.00	1.00	0.70	0.70	0.70
Incremental Delay, d2		0.7	21.3	2.4	2.5	19.1
Delay (s)		10.5	34.2	17.4	18.5	36.1
Level of Service		B	C	B	B	D
Approach Delay (s)		13.6			22.8	
Approach LOS		B			C	

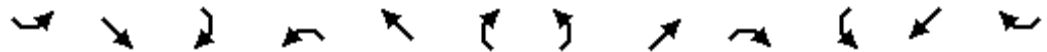
Intersection Summary

HCM 2000 Control Delay	16.0	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.75		
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	8.5
Intersection Capacity Utilization	49.6%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

HCM Signalized Intersection Capacity Analysis

3: Stewart St & 5th Ave

8/5/2015

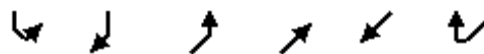


Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations		↑↑↑	↑							↓	↑↑	
Traffic Volume (vph)	0	766	86	0	0	0	0	0	0	251	434	0
Future Volume (vph)	0	766	86	0	0	0	0	0	0	251	434	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	10	11	10	12	12	12	12	12	12	9	9	9
Grade (%)		0%			0%			-10%				5%
Total Lost time (s)		4.5	4.5							4.5	4.5	
Lane Util. Factor		0.91	1.00							1.00	0.95	
Frbp, ped/bikes		1.00	0.90							1.00	1.00	
Flpb, ped/bikes		1.00	1.00							0.93	1.00	
Frt		1.00	0.85							1.00	1.00	
Flt Protected		1.00	1.00							0.95	1.00	
Satd. Flow (prot)		3940	964							1045	2478	
Flt Permitted		1.00	1.00							0.95	1.00	
Satd. Flow (perm)		3940	964							1045	2478	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	833	93	0	0	0	0	0	0	273	472	0
RTOR Reduction (vph)	0	0	58	0	0	0	0	0	0	20	0	0
Lane Group Flow (vph)	0	833	35	0	0	0	0	0	0	253	472	0
Confl. Peds. (#/hr)	50		50	50		50	50		50	50		50
Parking (#/hr)	15	30	15							15	15	
Turn Type		NA	Perm							Perm	NA	
Protected Phases		1									2	
Permitted Phases			1							2		
Actuated Green, G (s)		30.5	30.5							40.5	40.5	
Effective Green, g (s)		30.5	30.5							40.5	40.5	
Actuated g/C Ratio		0.38	0.38							0.51	0.51	
Clearance Time (s)		4.5	4.5							4.5	4.5	
Lane Grp Cap (vph)		1502	367							529	1254	
v/s Ratio Prot		c0.21									0.19	
v/s Ratio Perm			0.04							c0.24		
v/c Ratio		0.55	0.10							0.48	0.38	
Uniform Delay, d1		19.4	15.9							12.9	12.0	
Progression Factor		0.45	0.30							0.29	0.26	
Incremental Delay, d2		1.2	0.4							3.0	0.8	
Delay (s)		9.8	5.2							6.8	4.0	
Level of Service		A	A							A	A	
Approach Delay (s)		9.4			0.0			0.0			5.0	
Approach LOS		A			A			A			A	
Intersection Summary												
HCM 2000 Control Delay			7.4								HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio			0.51									
Actuated Cycle Length (s)			80.0							9.0	Sum of lost time (s)	
Intersection Capacity Utilization			39.4%								ICU Level of Service	A
Analysis Period (min)			15									
c Critical Lane Group												

HCM Signalized Intersection Capacity Analysis

4: Stewart St & Westlake Ave

8/5/2015



Movement	SBL	SBR	NEL	NET	SWT	SWR
Lane Configurations						
Traffic Volume (vph)	0	189	0	0	496	0
Future Volume (vph)	0	189	0	0	496	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width	12	12	12	12	10	12
Grade (%)	0%			-5%	0%	
Total Lost time (s)	4.5				4.0	
Lane Util. Factor	1.00				0.91	
Frbp, ped/bikes	0.93				1.00	
Flpb, ped/bikes	1.00				1.00	
Frt	0.86				1.00	
Flt Protected	1.00				1.00	
Satd. Flow (prot)	1305				4150	
Flt Permitted	1.00				1.00	
Satd. Flow (perm)	1305				4150	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	205	0	0	539	0
RTOR Reduction (vph)	93	0	0	0	0	0
Lane Group Flow (vph)	112	0	0	0	539	0
Confl. Peds. (#/hr)	50	50	50			50
Turn Type	Prot				NA	
Protected Phases	2				4	
Permitted Phases						
Actuated Green, G (s)	35.5				35.5	
Effective Green, g (s)	35.5				36.0	
Actuated g/C Ratio	0.44				0.45	
Clearance Time (s)	4.5				4.5	
Lane Grp Cap (vph)	579				1867	
v/s Ratio Prot	c0.09				c0.13	
v/s Ratio Perm						
v/c Ratio	0.19				0.29	
Uniform Delay, d1	13.5				13.9	
Progression Factor	0.52				0.54	
Incremental Delay, d2	0.6				0.4	
Delay (s)	7.7				8.0	
Level of Service	A				A	
Approach Delay (s)	7.7			0.0	8.0	
Approach LOS	A			A	A	

Intersection Summary
















HCM 2000 Control Delay	7.9	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.24		
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	8.5
Intersection Capacity Utilization	45.6%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

HCM 2010 Signalized Intersection Summary

5: Stewart St & 6th Ave

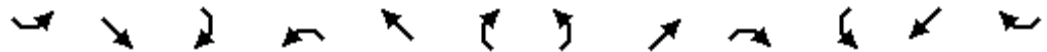
8/5/2015

												
Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	81	836	0	0	0	0	0	415	154
Future Volume (veh/h)	0	0	0	81	836	0	0	0	0	0	415	154
Number				5	2	12				7	4	14
Initial Q (Qb), veh				0	0	0				0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00				1.00		0.74
Parking Bus, Adj				1.00	1.00	1.00				1.00	1.00	1.00
Adj Sat Flow, veh/h/ln				1642	1563	0				0	1629	1629
Adj Flow Rate, veh/h				85	880	0				0	437	162
Adj No. of Lanes				0	3	0				0	3	1
Peak Hour Factor				0.95	0.95	0.95				0.95	0.95	0.95
Percent Heavy Veh, %				5	5	0				0	5	5
Cap, veh/h				193	1791	0				0	1890	427
Arrive On Green				0.47	0.47	0.00				0.00	0.43	0.42
Sat Flow, veh/h				290	3899	0				0	4593	1019
Grp Volume(v), veh/h				355	610	0				0	437	162
Grp Sat Flow(s),veh/h/ln				1471	1295	0				0	1482	1019
Q Serve(g_s), s				6.6	12.9	0.0				0.0	5.0	8.8
Cycle Q Clear(g_c), s				13.0	12.9	0.0				0.0	5.0	8.8
Prop In Lane				0.24		0.00				0.00		1.00
Lane Grp Cap(c), veh/h				754	1230	0				0	1890	427
V/C Ratio(X)				0.47	0.50	0.00				0.00	0.23	0.38
Avail Cap(c_a), veh/h				754	1230	0				0	1890	427
HCM Platoon Ratio				1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)				1.00	1.00	0.00				0.00	1.00	1.00
Uniform Delay (d), s/veh				14.3	14.4	0.0				0.0	14.7	16.1
Incr Delay (d2), s/veh				2.1	1.4	0.0				0.0	0.3	2.6
Initial Q Delay(d3),s/veh				0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				5.8	4.8	0.0				0.0	2.1	2.8
LnGrp Delay(d),s/veh				16.5	15.9	0.0				0.0	15.0	18.6
LnGrp LOS				B	B						B	B
Approach Vol, veh/h					965						599	
Approach Delay, s/veh					16.1						15.9	
Approach LOS					B						B	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs		2		4								
Phs Duration (G+Y+Rc), s		42.0		38.0								
Change Period (Y+Rc), s		4.5		4.5								
Max Green Setting (Gmax), s		37.5		33.5								
Max Q Clear Time (g_c+I1), s		15.0		10.8								
Green Ext Time (p_c), s		4.7		3.2								
Intersection Summary												
HCM 2010 Ctrl Delay				16.0								
HCM 2010 LOS				B								

HCM Signalized Intersection Capacity Analysis

6: Stewart St & 7th Ave

8/5/2015

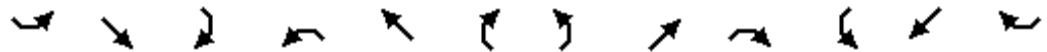


Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR		
Lane Configurations		↑↑↑									↑↑↑			
Traffic Volume (vph)	0	360	40	0	0	0	0	0	0	180	516	0		
Future Volume (vph)	0	360	40	0	0	0	0	0	0	180	516	0		
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900		
Lane Width	11	10	11	12	12	12	12	12	12	12	10	12		
Total Lost time (s)		4.5									4.5			
Lane Util. Factor		0.91									0.91			
Frbp, ped/bikes		0.96									1.00			
Flpb, ped/bikes		1.00									0.94			
Frt		0.98									1.00			
Flt Protected		1.00									0.99			
Satd. Flow (prot)		3699									3613			
Flt Permitted		1.00									0.99			
Satd. Flow (perm)		3699									3613			
Peak-hour factor, PHF	0.76	0.76	0.76	0.76	0.76	0.76	0.76	0.76	0.76	0.76	0.76	0.76		
Adj. Flow (vph)	0	474	53	0	0	0	0	0	0	237	679	0		
RTOR Reduction (vph)	0	17	0	0	0	0	0	0	0	0	15	0		
Lane Group Flow (vph)	0	510	0	0	0	0	0	0	0	0	901	0		
Confl. Peds. (#/hr)	248		385	385		248	363		139	139		363		
Confl. Bikes (#/hr)			37			1			1			34		
Parking (#/hr)	16	16	16							16	16	16		
Turn Type		NA								Perm	NA			
Protected Phases		1									2			
Permitted Phases										2				
Actuated Green, G (s)		29.5									41.5			
Effective Green, g (s)		29.5									41.5			
Actuated g/C Ratio		0.37									0.52			
Clearance Time (s)		4.5									4.5			
Lane Grp Cap (vph)		1364									1874			
v/s Ratio Prot		c0.14												
v/s Ratio Perm											0.25			
v/c Ratio		0.37									0.48			
Uniform Delay, d1		18.5									12.3			
Progression Factor		0.73									0.57			
Incremental Delay, d2		0.8									0.9			
Delay (s)		14.2									7.9			
Level of Service		B									A			
Approach Delay (s)		14.2			0.0			0.0			7.9			
Approach LOS		B			A			A			A			
Intersection Summary														
HCM 2000 Control Delay			10.2									HCM 2000 Level of Service	B	
HCM 2000 Volume to Capacity ratio			0.44											
Actuated Cycle Length (s)			80.0								9.0		Sum of lost time (s)	
Intersection Capacity Utilization			38.6%										ICU Level of Service	A
Analysis Period (min)			15											
c Critical Lane Group														

HCM Signalized Intersection Capacity Analysis

7: Stewart St & 8th Ave

8/5/2015

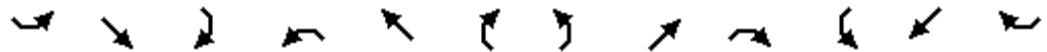


Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR	
Lane Configurations					↑↑						↑↑↑	↑	
Traffic Volume (vph)	0	0	0	141	311	0	0	0	0	0	523	100	
Future Volume (vph)	0	0	0	141	311	0	0	0	0	0	523	100	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	
Lane Width	12	12	12	12	10	12	12	12	12	11	11	11	
Total Lost time (s)					4.0						4.0	4.5	
Lane Util. Factor					0.95						0.91	1.00	
Frbp, ped/bikes					1.00						1.00	0.59	
Flpb, ped/bikes					0.89						1.00	1.00	
Frt					1.00						1.00	0.85	
Flt Protected					0.98						1.00	1.00	
Satd. Flow (prot)					2291						4040	789	
Flt Permitted					0.98						1.00	1.00	
Satd. Flow (perm)					2291						4040	789	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	
Adj. Flow (vph)	0	0	0	153	338	0	0	0	0	0	568	109	
RTOR Reduction (vph)	0	0	0	0	26	0	0	0	0	0	0	12	
Lane Group Flow (vph)	0	0	0	0	465	0	0	0	0	0	568	97	
Confl. Peds. (#/hr)				401		608				186		485	
Parking (#/hr)					16						16		
Turn Type				Perm	NA						NA	Perm	
Protected Phases					1						2		
Permitted Phases				1								2	
Actuated Green, G (s)					38.5						32.5	32.5	
Effective Green, g (s)					39.0						33.0	32.5	
Actuated g/C Ratio					0.49						0.41	0.41	
Clearance Time (s)					4.5						4.5	4.5	
Lane Grp Cap (vph)					1116						1666	320	
v/s Ratio Prot											c0.14		
v/s Ratio Perm					0.20							0.12	
v/c Ratio					0.42						0.34	0.30	
Uniform Delay, d1					13.2						16.1	16.1	
Progression Factor					1.00						0.52	0.45	
Incremental Delay, d2					1.1						0.5	2.3	
Delay (s)					14.3						8.9	9.6	
Level of Service					B						A	A	
Approach Delay (s)		0.0			14.3			0.0			9.0		
Approach LOS		A			B			A			A		
Intersection Summary													
HCM 2000 Control Delay			11.3		HCM 2000 Level of Service						B		
HCM 2000 Volume to Capacity ratio			0.38										
Actuated Cycle Length (s)			80.0		Sum of lost time (s)					8.0			
Intersection Capacity Utilization			37.9%		ICU Level of Service					A			
Analysis Period (min)			15										
c Critical Lane Group													

HCM Signalized Intersection Capacity Analysis

8: Stewart St & 9th Ave

8/5/2015



Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations		↑↑								↘	↑↑	
Traffic Volume (vph)	0	334	100	0	0	0	0	0	0	106	472	0
Future Volume (vph)	0	334	100	0	0	0	0	0	0	106	472	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	12	11	12	10	12	12	12	12	12	12	10	12
Total Lost time (s)		4.0								4.0	4.0	
Lane Util. Factor		0.95								1.00	0.95	
Frbp, ped/bikes		0.99								1.00	1.00	
Flpb, ped/bikes		1.00								0.97	1.00	
Frt		0.97								1.00	1.00	
Flt Protected		1.00								0.95	1.00	
Satd. Flow (prot)		2684								1504	2888	
Flt Permitted		1.00								0.95	1.00	
Satd. Flow (perm)		2684								1504	2888	
Peak-hour factor, PHF	0.76	0.76	0.76	0.92	0.92	0.92	0.92	0.92	0.92	0.97	0.97	0.97
Adj. Flow (vph)	0	439	132	0	0	0	0	0	0	109	487	0
RTOR Reduction (vph)	0	3	0	0	0	0	0	0	0	17	0	0
Lane Group Flow (vph)	0	568	0	0	0	0	0	0	0	92	487	0
Confl. Peds. (#/hr)	405		16							15		536
Bus Blockages (#/hr)	0	0	0	10	0	0	0	0	0	0	0	0
Parking (#/hr)		5										
Turn Type		NA								Perm	NA	
Protected Phases		1									2	
Permitted Phases										2		
Actuated Green, G (s)		37.5								33.5	33.5	
Effective Green, g (s)		38.0								34.0	34.0	
Actuated g/C Ratio		0.48								0.42	0.42	
Clearance Time (s)		4.5								4.5	4.5	
Vehicle Extension (s)		3.0								3.0	3.0	
Lane Grp Cap (vph)		1274								639	1227	
v/s Ratio Prot		c0.21									c0.17	
v/s Ratio Perm										0.06		
v/c Ratio		0.45								0.14	0.40	
Uniform Delay, d1		14.0								14.1	15.9	
Progression Factor		0.89								0.35	0.48	
Incremental Delay, d2		1.1								0.5	0.9	
Delay (s)		13.6								5.3	8.5	
Level of Service		B								A	A	
Approach Delay (s)		13.6			0.0			0.0			7.9	
Approach LOS		B			A			A			A	

Intersection Summary

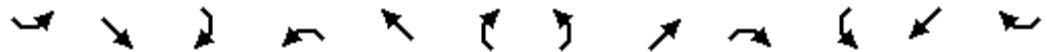
HCM 2000 Control Delay	10.7	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.42		
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	35.3%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

HCM Signalized Intersection Capacity Analysis

9: Stewart St & Terry Ave

8/5/2015



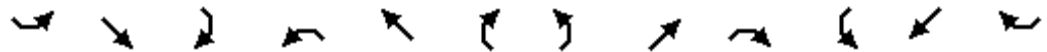
Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations					↑↑						↑↑↑	↑
Traffic Volume (vph)	0	0	0	68	64	0	0	0	0	0	506	19
Future Volume (vph)	0	0	0	68	64	0	0	0	0	0	506	19
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	12	12	12	11	11	11	12	12	12	10	10	10
Total Lost time (s)					4.5						4.0	4.5
Lane Util. Factor					0.95						0.91	1.00
Frbp, ped/bikes					1.00						1.00	0.62
Flpb, ped/bikes					0.89						1.00	1.00
Frt					1.00						1.00	0.85
Flt Protected					0.97						1.00	1.00
Satd. Flow (prot)					2437						4094	805
Flt Permitted					0.97						1.00	1.00
Satd. Flow (perm)					2437						4094	805
Peak-hour factor, PHF	0.92	0.92	0.92	0.70	0.70	0.70	0.92	0.92	0.92	0.85	0.85	0.85
Adj. Flow (vph)	0	0	0	97	91	0	0	0	0	0	595	22
RTOR Reduction (vph)	0	0	0	0	60	0	0	0	0	0	0	11
Lane Group Flow (vph)	0	0	0	0	128	0	0	0	0	0	595	11
Confl. Peds. (#/hr)				140		70				65		350
Confl. Bikes (#/hr)												20
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	10	0
Parking (#/hr)				5	5							
Turn Type				Perm	NA						NA	Perm
Protected Phases					1						2	
Permitted Phases				1								2
Actuated Green, G (s)					30.5						40.5	40.5
Effective Green, g (s)					30.5						41.0	40.5
Actuated g/C Ratio					0.38						0.51	0.51
Clearance Time (s)					4.5						4.5	4.5
Lane Grp Cap (vph)					929						2098	407
v/s Ratio Prot											c0.15	
v/s Ratio Perm					0.05							0.01
v/c Ratio					0.14						0.28	0.03
Uniform Delay, d1					16.2						11.1	9.9
Progression Factor					1.00						1.00	1.00
Incremental Delay, d2					0.3						0.3	0.1
Delay (s)					16.5						11.5	10.0
Level of Service					B						B	B
Approach Delay (s)		0.0			16.5		0.0				11.4	
Approach LOS		A			B		A				B	
Intersection Summary												
HCM 2000 Control Delay			12.6								HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio			0.22									
Actuated Cycle Length (s)			80.0								Sum of lost time (s)	8.5
Intersection Capacity Utilization			34.8%								ICU Level of Service	A
Analysis Period (min)			15									

c Critical Lane Group

HCM Signalized Intersection Capacity Analysis

10: Stewart St & Boren Ave

8/5/2015



Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations		↑↑		↖	↑↑					↘	↑↑	↗
Traffic Volume (vph)	0	877	46	57	428	0	0	0	0	158	471	35
Future Volume (vph)	0	877	46	57	428	0	0	0	0	158	471	35
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	11	11	11	10	10	10	12	12	12	10	10	10
Total Lost time (s)		4.0		4.0	4.0					4.0	4.0	4.5
Lane Util. Factor		0.95		1.00	0.95					1.00	0.95	1.00
Frbp, ped/bikes		0.98		1.00	1.00					1.00	1.00	0.74
Flpb, ped/bikes		1.00		1.00	1.00					0.82	1.00	1.00
Frt		0.99		1.00	1.00					1.00	1.00	0.85
Flt Protected		1.00		0.95	1.00					0.95	1.00	1.00
Satd. Flow (prot)		2713		1242	2686					971	2628	784
Flt Permitted		1.00		0.95	1.00					0.95	1.00	1.00
Satd. Flow (perm)		2713		1242	2686					971	2628	784
Peak-hour factor, PHF	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84
Adj. Flow (vph)	0	1044	55	68	510	0	0	0	0	188	561	42
RTOR Reduction (vph)	0	4	0	0	0	0	0	0	0	0	0	29
Lane Group Flow (vph)	0	1095	0	68	510	0	0	0	0	188	561	13
Confl. Peds. (#/hr)	107		301	301		107				90		120
Confl. Bikes (#/hr)			11			6			3			30
Parking (#/hr)	8	8	8	8	8	8				16	16	16
Turn Type		NA		Prot	NA					Perm	NA	Perm
Protected Phases		2		1	1 2						3	
Permitted Phases										3		3
Actuated Green, G (s)		47.5		8.5	60.5					30.5	30.5	30.5
Effective Green, g (s)		48.0		9.0	61.0					31.0	31.0	30.5
Actuated g/C Ratio		0.48		0.09	0.61					0.31	0.31	0.30
Clearance Time (s)		4.5		4.5						4.5	4.5	4.5
Lane Grp Cap (vph)		1302		111	1638					301	814	239
v/s Ratio Prot		c0.40		c0.05	0.19						c0.21	
v/s Ratio Perm										0.19		0.02
v/c Ratio		0.84		0.61	0.31					0.62	0.69	0.05
Uniform Delay, d1		22.7		43.8	9.4					29.5	30.3	24.6
Progression Factor		0.56		1.00	1.00					1.00	1.00	1.00
Incremental Delay, d2		6.3		22.7	0.5					9.4	4.7	0.4
Delay (s)		19.1		66.5	9.9					38.9	35.0	25.0
Level of Service		B		E	A					D	D	C
Approach Delay (s)		19.1			16.5			0.0			35.4	
Approach LOS		B			B			A			D	

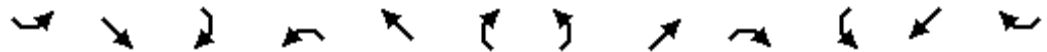
Intersection Summary

HCM 2000 Control Delay	23.7	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.76		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	69.0%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

HCM Signalized Intersection Capacity Analysis

11: Virginia St & 3rd Ave

8/5/2015



Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations		↑↑			↑↑			↑↑↑				
Traffic Volume (vph)	86	222	0	0	164	86	29	514	42	0	0	0
Future Volume (vph)	86	222	0	0	164	86	29	514	42	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	9	9	9	9	9	9	10	10	10	10	10	10
Grade (%)		0%			0%			-5%				5%
Total Lost time (s)		3.5			3.5			3.5				
Lane Util. Factor		0.95			0.95			0.91				
Frbp, ped/bikes		1.00			0.88			0.97				
Flpb, ped/bikes		0.93			1.00			0.98				
Frt		1.00			0.95			0.99				
Flt Protected		0.99			1.00			1.00				
Satd. Flow (prot)		2386			2159			3759				
Flt Permitted		0.80			1.00			1.00				
Satd. Flow (perm)		1935			2159			3759				
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	91	236	0	0	174	91	31	547	45	0	0	0
RTOR Reduction (vph)	0	0	0	0	4	0	0	11	0	0	0	0
Lane Group Flow (vph)	0	327	0	0	261	0	0	612	0	0	0	0
Confl. Peds. (#/hr)	298		525	525		298	576		477	477		576
Confl. Bikes (#/hr)			1			27			11			32
Parking (#/hr)		8	8		8	8	16	16	16			
Turn Type	Perm	NA			NA		Perm	NA				
Protected Phases		1			1			2				
Permitted Phases	1						2					
Actuated Green, G (s)		38.5			38.5			32.5				
Effective Green, g (s)		39.5			39.5			33.5				
Actuated g/C Ratio		0.49			0.49			0.42				
Clearance Time (s)		4.5			4.5			4.5				
Lane Grp Cap (vph)		955			1066			1574				
v/s Ratio Prot					0.12							
v/s Ratio Perm		c0.17						0.16				
v/c Ratio		0.34			0.25			0.39				
Uniform Delay, d1		12.3			11.7			16.1				
Progression Factor		1.00			0.29			1.00				
Incremental Delay, d2		1.0			0.5			0.7				
Delay (s)		13.3			3.9			16.9				
Level of Service		B			A			B				
Approach Delay (s)		13.3			3.9			16.9			0.0	
Approach LOS		B			A			B			A	

Intersection Summary

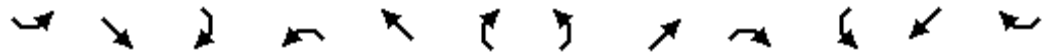
HCM 2000 Control Delay	13.1	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.36		
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	7.0
Intersection Capacity Utilization	49.0%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

HCM Signalized Intersection Capacity Analysis

12: Virginia St & 4th Ave

8/5/2015



Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations					↑↑↑	↑		↑↑↑				
Traffic Volume (vph)	0	0	0	0	1254	183	75	602	0	0	0	0
Future Volume (vph)	0	0	0	0	1254	183	75	602	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	9	9	9	9	9	9	10	10	10	10	10	10
Grade (%)		0%			0%			-5%				5%
Total Lost time (s)					3.5	3.5		3.5				
Lane Util. Factor					0.81	0.81		0.91				
Frbp, ped/bikes					0.99	0.61		1.00				
Flpb, ped/bikes					1.00	1.00		0.96				
Frt					1.00	0.85		1.00				
Flt Protected					1.00	1.00		0.99				
Satd. Flow (prot)					4505	615		3833				
Flt Permitted					1.00	1.00		0.99				
Satd. Flow (perm)					4505	615		3833				
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	0	0	0	0	1348	197	81	647	0	0	0	0
RTOR Reduction (vph)	0	0	0	0	2	8	0	14	0	0	0	0
Lane Group Flow (vph)	0	0	0	0	1366	169	0	714	0	0	0	0
Confl. Peds. (#/hr)				411		426	350		190			
Parking (#/hr)				15	15		15	15				
Turn Type					NA	Perm	Perm	NA				
Protected Phases					1			2				
Permitted Phases						1	2					
Actuated Green, G (s)					47.5	47.5		23.5				
Effective Green, g (s)					48.5	48.5		24.5				
Actuated g/C Ratio					0.61	0.61		0.31				
Clearance Time (s)					4.5	4.5		4.5				
Lane Grp Cap (vph)					2731	372		1173				
v/s Ratio Prot					0.30							
v/s Ratio Perm						0.27		0.19				
v/c Ratio					0.50	0.45		0.61				
Uniform Delay, d1					8.9	8.6		23.7				
Progression Factor					0.23	0.22		0.60				
Incremental Delay, d2					0.6	3.4		2.2				
Delay (s)					2.6	5.3		16.5				
Level of Service					A	A		B				
Approach Delay (s)		0.0			2.9			16.5			0.0	
Approach LOS		A			A			B			A	

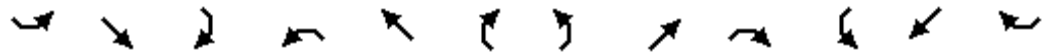
Intersection Summary

HCM 2000 Control Delay	7.3	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.54		
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	7.0
Intersection Capacity Utilization	43.0%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

HCM Signalized Intersection Capacity Analysis

13: Virginia St & 5th Ave

8/5/2015



Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations		↑↑↑						↑↑↑				
Traffic Volume (vph)	132	777	0	0	0	0	0	758	86	0	0	0
Future Volume (vph)	132	777	0	0	0	0	0	758	86	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	10	10	10	10	10	10	10	10	10	10	10	10
Grade (%)		0%			0%			-5%			5%	
Total Lost time (s)		4.5						4.5				
Lane Util. Factor		0.91						0.91				
Frbp, ped/bikes		1.00						0.97				
Flpb, ped/bikes		0.95						1.00				
Frt		1.00						0.98				
Flt Protected		0.99						1.00				
Satd. Flow (prot)		3695						3822				
Flt Permitted		0.99						1.00				
Satd. Flow (perm)		3695						3822				
Peak-hour factor, PHF	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85
Adj. Flow (vph)	155	914	0	0	0	0	0	892	101	0	0	0
RTOR Reduction (vph)	0	11	0	0	0	0	0	17	0	0	0	0
Lane Group Flow (vph)	0	1058	0	0	0	0	0	976	0	0	0	0
Confl. Peds. (#/hr)	221		86	86		221	161		208	208		161
Confl. Bikes (#/hr)			51			3			10			2
Parking (#/hr)	16	16	16				16	16	16			
Turn Type	Perm	NA						NA				
Protected Phases		1						2				
Permitted Phases	1											
Actuated Green, G (s)		37.5						33.5				
Effective Green, g (s)		37.5						33.5				
Actuated g/C Ratio		0.47						0.42				
Clearance Time (s)		4.5						4.5				
Lane Grp Cap (vph)		1732						1600				
v/s Ratio Prot								c0.26				
v/s Ratio Perm		0.29										
v/c Ratio		0.61						0.61				
Uniform Delay, d1		15.8						18.1				
Progression Factor		1.00						0.64				
Incremental Delay, d2		1.6						1.5				
Delay (s)		17.4						13.1				
Level of Service		B						B				
Approach Delay (s)		17.4			0.0			13.1			0.0	
Approach LOS		B			A			B			A	

Intersection Summary

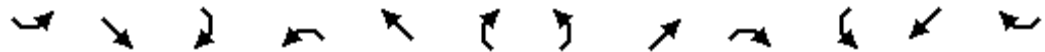
HCM 2000 Control Delay	15.4	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.61		
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	9.0
Intersection Capacity Utilization	48.5%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

HCM Signalized Intersection Capacity Analysis

14: Virginia St & 6th Ave

8/5/2015























Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR	
Lane Configurations					↑↑↑			↑↑↑					
Traffic Volume (vph)	0	0	0	0	706	32	83	841	0	0	0	0	
Future Volume (vph)	0	0	0	0	706	32	83	841	0	0	0	0	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	
Lane Width	11	11	11	11	11	11	10	9	10	10	10	10	
Grade (%)		0%			0%			-5%				5%	
Total Lost time (s)					3.0			4.0					
Lane Util. Factor					0.91			0.91					
Frbp, ped/bikes					0.98			1.00					
Flpb, ped/bikes					1.00			0.97					
Frt					0.99			1.00					
Flt Protected					1.00			1.00					
Satd. Flow (prot)					3954			3732					
Flt Permitted					1.00			1.00					
Satd. Flow (perm)					3954			3732					
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	
Adj. Flow (vph)	0	0	0	0	735	33	86	876	0	0	0	0	
RTOR Reduction (vph)	0	0	0	0	6	0	0	5	0	0	0	0	
Lane Group Flow (vph)	0	0	0	0	762	0	0	957	0	0	0	0	
Confl. Peds. (#/hr)				358		251	200		230				
Confl. Bikes (#/hr)						20			20				
Parking (#/hr)				16	16	16	16	16	16				
Turn Type					NA		Perm	NA					
Protected Phases					1			2					
Permitted Phases							2						
Actuated Green, G (s)					33.5			38.5					
Effective Green, g (s)					34.0			39.0					
Actuated g/C Ratio					0.42			0.49					
Clearance Time (s)					3.5			4.5					
Lane Grp Cap (vph)					1680			1819					
v/s Ratio Prot					0.19								
v/s Ratio Perm								0.26					
v/c Ratio					0.45			0.53					
Uniform Delay, d1					16.4			14.1					
Progression Factor					0.22			0.27					
Incremental Delay, d2					0.7			0.9					
Delay (s)					4.4			4.7					
Level of Service					A			A					
Approach Delay (s)		0.0			4.4			4.7			0.0		
Approach LOS		A			A			A			A		
Intersection Summary													
HCM 2000 Control Delay			4.6		HCM 2000 Level of Service				A				
HCM 2000 Volume to Capacity ratio			0.49										
Actuated Cycle Length (s)			80.0		Sum of lost time (s)				7.0				
Intersection Capacity Utilization			42.9%		ICU Level of Service				A				
Analysis Period (min)			15										
c Critical Lane Group													

HCM Signalized Intersection Capacity Analysis

15: Virginia St & Westlake Ave

8/5/2015

												
Movement	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations		 			 		 	 				
Traffic Volume (vph)	0	120	97	0	145	0	98	754	21	0	0	0
Future Volume (vph)	0	120	97	0	145	0	98	754	21	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	11	9	11	11	10	11	12	9	9	12	12	12
Total Lost time (s)		4.5			4.5		4.5	4.5				
Lane Util. Factor		0.95			0.95		0.91	0.91				
Frbp, ped/bikes		0.81			1.00		1.00	0.99				
Flpb, ped/bikes		1.00			1.00		1.00	1.00				
Frt		0.93			1.00		1.00	1.00				
Flt Protected		1.00			1.00		0.95	1.00				
Satd. Flow (prot)		1926			2635		1158	2401				
Flt Permitted		1.00			1.00		0.95	1.00				
Satd. Flow (perm)		1926			2635		1158	2401				
Peak-hour factor, PHF	0.87	0.87	0.87	0.89	0.89	0.89	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	138	111	0	163	0	107	820	23	0	0	0
RTOR Reduction (vph)	0	36	0	0	0	0	0	2	0	0	0	0
Lane Group Flow (vph)	0	213	0	0	163	0	96	852	0	0	0	0
Confl. Peds. (#/hr)	134		481	481		134	2		285	285		2
Parking (#/hr)		15			15		15	15				
Turn Type		NA			NA		Perm	NA				
Protected Phases		1			1			2				
Permitted Phases				1			2					
Actuated Green, G (s)		22.5			22.5		48.5	48.5				
Effective Green, g (s)		22.5			22.5		48.5	48.5				
Actuated g/C Ratio		0.28			0.28		0.61	0.61				
Clearance Time (s)		4.5			4.5		4.5	4.5				
Lane Grp Cap (vph)		541			741		702	1455				
v/s Ratio Prot		c0.11			0.06							
v/s Ratio Perm							0.08	0.35				
v/c Ratio		0.39			0.22		0.14	0.59				
Uniform Delay, d1		23.2			22.0		6.8	9.6				
Progression Factor		0.27			1.05		0.11	0.16				
Incremental Delay, d2		1.8			0.7		0.4	1.5				
Delay (s)		8.1			23.9		1.1	3.1				
Level of Service		A			C		A	A				
Approach Delay (s)		8.1			23.9			2.9			0.0	
Approach LOS		A			C			A			A	
Intersection Summary												
HCM 2000 Control Delay			6.4				HCM 2000 Level of Service			A		
HCM 2000 Volume to Capacity ratio			0.52									
Actuated Cycle Length (s)			80.0				Sum of lost time (s)			9.0		
Intersection Capacity Utilization			41.7%				ICU Level of Service			A		
Analysis Period (min)			15									
c Critical Lane Group												

HCM Signalized Intersection Capacity Analysis

16: Virginia St & 7th Ave

8/5/2015



Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations		↑↑↑						↑↑↑				
Traffic Volume (vph)	87	255	0	0	0	0	0	669	182	0	0	0
Future Volume (vph)	87	255	0	0	0	0	0	669	182	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	9	9	9	12	12	12	9	9	9	12	12	12
Grade (%)		0%			-5%			0%			0%	
Total Lost time (s)		3.5						3.5				
Lane Util. Factor		0.91						0.91				
Frbp, ped/bikes		1.00						0.92				
Flpb, ped/bikes		0.91						1.00				
Frt		1.00						0.97				
Flt Protected		0.99						1.00				
Satd. Flow (prot)		3576						3338				
Flt Permitted		0.99						1.00				
Satd. Flow (perm)		3576						3338				
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	95	277	0	0	0	0	0	727	198	0	0	0
RTOR Reduction (vph)	0	65	0	0	0	0	0	2	0	0	0	0
Lane Group Flow (vph)	0	307	0	0	0	0	0	923	0	0	0	0
Confl. Peds. (#/hr)	384		433					29		442		
Parking (#/hr)	15							15		15		
Turn Type	Perm	NA						NA				
Protected Phases		1						2				
Permitted Phases	1											
Actuated Green, G (s)		23.5						45.5				
Effective Green, g (s)		25.5						47.5				
Actuated g/C Ratio		0.32						0.59				
Clearance Time (s)		5.5						5.5				
Lane Grp Cap (vph)		1139						1981				
v/s Ratio Prot								c0.28				
v/s Ratio Perm		0.09										
v/c Ratio		0.27						0.47				
Uniform Delay, d1		20.3						9.1				
Progression Factor		0.52						0.20				
Incremental Delay, d2		0.5						0.7				
Delay (s)		11.0						2.5				
Level of Service		B						A				
Approach Delay (s)		11.0			0.0			2.5			0.0	
Approach LOS		B			A			A			A	
Intersection Summary												
HCM 2000 Control Delay			4.9					HCM 2000 Level of Service			A	
HCM 2000 Volume to Capacity ratio			0.40									
Actuated Cycle Length (s)			80.0					Sum of lost time (s)		7.0		
Intersection Capacity Utilization			53.5%					ICU Level of Service			A	
Analysis Period (min)			15									
c Critical Lane Group												

HCM Signalized Intersection Capacity Analysis

17: Virginia St & 8th Ave

8/5/2015



Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations					↑↑		↑	↑↑				↑
Traffic Volume (vph)	0	0	0	0	302	96	73	700	0	0	0	110
Future Volume (vph)	0	0	0	0	302	96	73	700	0	0	0	110
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	12	12	12	10	9	10	10	10	12	12	12	12
Total Lost time (s)					4.5		4.5	4.5				4.5
Lane Util. Factor					0.95		1.00	0.95				1.00
Frbp, ped/bikes					0.92		1.00	1.00				0.67
Flpb, ped/bikes					1.00		0.67	1.00				1.00
Frt					0.96		1.00	1.00				0.86
Flt Protected					1.00		0.95	1.00				1.00
Satd. Flow (prot)					2463		874	2744				846
Flt Permitted					1.00		0.95	1.00				1.00
Satd. Flow (perm)					2463		874	2744				846
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	0	0	0	0	321	102	78	745	0	0	0	117
RTOR Reduction (vph)	0	0	0	0	38	0	38	0	0	0	0	21
Lane Group Flow (vph)	0	0	0	0	385	0	40	745	0	0	0	96
Confl. Peds. (#/hr)						280	255					255
Parking (#/hr)						0	0	0				0
Turn Type					NA		Perm	NA				Perm
Protected Phases					1			2				
Permitted Phases							2					2
Actuated Green, G (s)					29.5		41.5	41.5				41.5
Effective Green, g (s)					29.5		41.5	41.5				41.5
Actuated g/C Ratio					0.37		0.52	0.52				0.52
Clearance Time (s)					4.5		4.5	4.5				4.5
Lane Grp Cap (vph)					908		453	1423				438
v/s Ratio Prot					c0.16			c0.27				
v/s Ratio Perm							0.05					0.11
v/c Ratio					0.42		0.09	0.52				0.22
Uniform Delay, d1					18.9		9.7	12.7				10.5
Progression Factor					0.74		0.30	0.45				0.62
Incremental Delay, d2					1.4		0.4	1.3				1.1
Delay (s)					15.3		3.2	7.0				7.7
Level of Service					B		A	A				A
Approach Delay (s)		0.0			15.3			6.6			7.7	
Approach LOS		A			B			A			A	

Intersection Summary

HCM 2000 Control Delay	9.4	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.48		
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	9.0
Intersection Capacity Utilization	53.5%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

HCM Signalized Intersection Capacity Analysis

18: Virginia St & 9th Ave

8/5/2015



Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations		↕↕						↕↕			↕	
Traffic Volume (vph)	79	182	30	0	0	0	0	585	238	23	62	0
Future Volume (vph)	79	182	30	0	0	0	0	585	238	23	62	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	12	12	12	12	12	12	11	11	11	11	11	11
Total Lost time (s)		4.0						4.0			4.0	
Lane Util. Factor		0.95						0.95			1.00	
Frbp, ped/bikes		0.96						0.91			1.00	
Flpb, ped/bikes		0.91						1.00			0.98	
Frt		0.98						0.96			1.00	
Flt Protected		0.99						1.00			0.99	
Satd. Flow (prot)		2622						2600			1524	
Flt Permitted		0.99						1.00			0.79	
Satd. Flow (perm)		2622						2600			1225	
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	84	194	32	0	0	0	0	622	253	24	66	0
RTOR Reduction (vph)	0	11	0	0	0	0	0	51	0	0	0	0
Lane Group Flow (vph)	0	299	0	0	0	0	0	824	0	0	90	0
Confl. Peds. (#/hr)	228		133					136		218	218	136
Turn Type	Perm	NA						NA		Perm	NA	
Protected Phases		1						2			2	
Permitted Phases	1									2		
Actuated Green, G (s)		23.0						49.0			49.0	
Effective Green, g (s)		23.0						49.0			49.0	
Actuated g/C Ratio		0.29						0.61			0.61	
Clearance Time (s)		4.0						4.0			4.0	
Lane Grp Cap (vph)		753						1592			750	
v/s Ratio Prot								c0.32				
v/s Ratio Perm		0.11									0.07	
v/c Ratio		0.40						0.52			0.12	
Uniform Delay, d1		22.9						8.8			6.5	
Progression Factor		1.00						0.28			0.78	
Incremental Delay, d2		1.6						1.1			0.3	
Delay (s)		24.5						3.5			5.4	
Level of Service		C						A			A	
Approach Delay (s)		24.5			0.0			3.5			5.4	
Approach LOS		C			A			A			A	

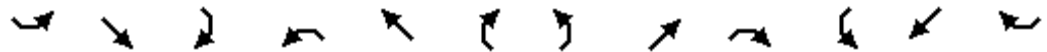
Intersection Summary

HCM 2000 Control Delay	8.8	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.48		
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	46.2%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

HCM Signalized Intersection Capacity Analysis

19: Virginia St & Terry Ave

8/5/2015















Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR	
Lane Configurations					↔	↔		↕↕			↕		
Traffic Volume (vph)	0	0	0	12	31	31	46	611	0	0	66	16	
Future Volume (vph)	0	0	0	12	31	31	46	611	0	0	66	16	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	
Lane Width	12	12	12	11	11	11	10	10	10	12	12	12	
Total Lost time (s)					4.5	4.5		4.5			4.5		
Lane Util. Factor					1.00	1.00		0.95			1.00		
Frbp, ped/bikes					1.00	0.77		1.00			0.94		
Flpb, ped/bikes					0.97	1.00		0.98			1.00		
Frt					1.00	0.85		1.00			0.97		
Flt Protected					0.99	1.00		1.00			1.00		
Satd. Flow (prot)					1359	929		2683			1490		
Flt Permitted					0.99	1.00		0.93			1.00		
Satd. Flow (perm)					1359	929		2502			1490		
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	
Adj. Flow (vph)	0	0	0	13	34	34	50	664	0	0	72	17	
RTOR Reduction (vph)	0	0	0	0	0	25	0	0	0	0	6	0	
Lane Group Flow (vph)	0	0	0	0	47	9	0	714	0	0	83	0	
Confl. Peds. (#/hr)				35		129	114		119	119		114	
Parking (#/hr)				0	0	0		0					
Turn Type				Perm	NA	Perm	Perm	NA			NA		
Protected Phases					1			2			2		
Permitted Phases				1		1	2						
Actuated Green, G (s)					21.5	21.5		49.5			49.5		
Effective Green, g (s)					21.5	21.5		49.5			49.5		
Actuated g/C Ratio					0.27	0.27		0.62			0.62		
Clearance Time (s)					4.5	4.5		4.5			4.5		
Lane Grp Cap (vph)					365	249		1548			921		
v/s Ratio Prot											0.06		
v/s Ratio Perm					0.03	0.01		c0.29					
v/c Ratio					0.13	0.04		0.46			0.09		
Uniform Delay, d1					22.2	21.6		8.1			6.2		
Progression Factor					0.80	0.70		0.33			1.00		
Incremental Delay, d2					0.7	0.3		0.9			0.2		
Delay (s)					18.5	15.4		3.6			6.3		
Level of Service					B	B		A			A		
Approach Delay (s)		0.0			17.2			3.6			6.3		
Approach LOS		A			B			A			A		
Intersection Summary													
HCM 2000 Control Delay			5.1		HCM 2000 Level of Service						A		
HCM 2000 Volume to Capacity ratio			0.36										
Actuated Cycle Length (s)			80.0		Sum of lost time (s)						9.0		
Intersection Capacity Utilization			42.7%		ICU Level of Service						A		
Analysis Period (min)			15										
c Critical Lane Group													

HCM Signalized Intersection Capacity Analysis

20: Virginia St/Fairview Ave & Boren Ave

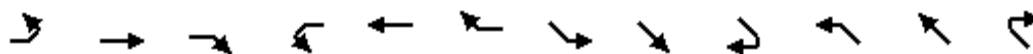
8/5/2015

												
Movement	NBL	NBT	NBR	SBL	SBT	SBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations		↑↑		↵	↔			↑↑				↵↵
Traffic Volume (vph)	0	435	0	320	94	0	0	425	4	0	0	490
Future Volume (vph)	0	435	0	320	94	0	0	425	4	0	0	490
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	12	11	12	11	11	12	12	11	12	12	12	11
Total Lost time (s)		4.0		4.0	4.0			4.0				4.0
Lane Util. Factor		0.95		0.95	0.95			0.95				0.88
Frbp, ped/bikes		1.00		1.00	1.00			1.00				0.95
Flpb, ped/bikes		1.00		1.00	1.00			1.00				1.00
Frt		1.00		1.00	1.00			1.00				0.85
Flt Protected		1.00		0.95	0.97			1.00				1.00
Satd. Flow (prot)		2991		1421	1456			2765				2230
Flt Permitted		1.00		0.95	0.97			1.00				1.00
Satd. Flow (perm)		2991		1421	1456			2765				2230
Peak-hour factor, PHF	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Adj. Flow (vph)	0	494	0	364	107	0	0	483	5	0	0	557
RTOR Reduction (vph)	0	0	0	0	0	0	0	1	0	0	0	0
Lane Group Flow (vph)	0	494	0	233	238	0	0	487	0	0	0	557
Confl. Peds. (#/hr)			92			207			201			92
Confl. Bikes (#/hr)			9			1			8			9
Parking (#/hr)								8	8			
Turn Type		NA		Split	NA			NA				pt+ov
Protected Phases		3		1	1			2				1 2
Permitted Phases												2 3
Actuated Green, G (s)		22.1		32.9	32.9			30.0				90.0
Effective Green, g (s)		23.1		33.9	33.9			31.0				92.0
Actuated g/C Ratio		0.23		0.34	0.34			0.31				0.92
Clearance Time (s)		5.0		5.0	5.0			5.0				
Vehicle Extension (s)		3.0		3.0	3.0			3.0				
Lane Grp Cap (vph)		690		481	493			857				2230
v/s Ratio Prot		c0.17		c0.16	0.16			c0.18				0.17
v/s Ratio Perm												0.08
v/c Ratio		0.72		0.48	0.48			0.57				0.25
Uniform Delay, d1		35.4		26.1	26.1			28.9				0.4
Progression Factor		1.00		0.43	0.43			1.00				1.49
Incremental Delay, d2		3.5		2.8	2.8			2.7				0.1
Delay (s)		39.0		14.0	14.0			31.6				0.7
Level of Service		D		B	B			C				A
Approach Delay (s)		39.0			14.0			31.6			0.7	
Approach LOS		D			B			C			A	
Intersection Summary												
HCM 2000 Control Delay			20.7									C
HCM 2000 Volume to Capacity ratio			0.57									
Actuated Cycle Length (s)			100.0						12.0			
Intersection Capacity Utilization			59.3%									B
Analysis Period (min)			15									
c Critical Lane Group												

HCM Signalized Intersection Capacity Analysis

21: 5th Ave & Olive Way

8/5/2015















Movement	EBL	EBT	EBR	WBL	WBT	WBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations		↑↑	↑					↑↑↑				
Traffic Volume (vph)	0	327	40	0	0	0	360	657	0	0	0	0
Future Volume (vph)	0	327	40	0	0	0	360	657	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	16	9	12	12	12	12	11	11	11	12	12	12
Total Lost time (s)		4.5	4.5					4.5				
Lane Util. Factor		0.95	1.00					0.91				
Frbp, ped/bikes		1.00	0.61					1.00				
Flpb, ped/bikes		1.00	1.00					1.00				
Frt		1.00	0.85					1.00				
Flt Protected		1.00	1.00					0.98				
Satd. Flow (prot)		2785	847					4223				
Flt Permitted		1.00	1.00					0.98				
Satd. Flow (perm)		2785	847					4223				
Peak-hour factor, PHF	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85
Adj. Flow (vph)	0	385	47	0	0	0	424	773	0	0	0	0
RTOR Reduction (vph)	0	0	30	0	0	0	0	124	0	0	0	0
Lane Group Flow (vph)	0	385	17	0	0	0	0	1073	0	0	0	0
Confl. Peds. (#/hr)			538					622				
Turn Type		NA	Perm				Split	NA				
Protected Phases		2					1	1				
Permitted Phases			2									
Actuated Green, G (s)		28.5	28.5					42.5				
Effective Green, g (s)		28.5	28.5					42.5				
Actuated g/C Ratio		0.36	0.36					0.53				
Clearance Time (s)		4.5	4.5					4.5				
Lane Grp Cap (vph)		992	301					2243				
v/s Ratio Prot		c0.14						c0.25				
v/s Ratio Perm			0.02									
v/c Ratio		0.39	0.06					0.48				
Uniform Delay, d1		19.2	16.9					11.8				
Progression Factor		0.94	1.02					0.17				
Incremental Delay, d2		1.0	0.3					0.6				
Delay (s)		19.1	17.6					2.6				
Level of Service		B	B					A				
Approach Delay (s)		18.9			0.0			2.6			0.0	
Approach LOS		B			A			A			A	
Intersection Summary												
HCM 2000 Control Delay			7.0					HCM 2000 Level of Service			A	
HCM 2000 Volume to Capacity ratio			0.44									
Actuated Cycle Length (s)			80.0					Sum of lost time (s)			9.0	
Intersection Capacity Utilization			45.6%					ICU Level of Service			A	
Analysis Period (min)			15									
c Critical Lane Group												

HCM Signalized Intersection Capacity Analysis

22: Westlake Ave & 6th Ave

















8/5/2015

												
Movement	NBL	NBT	NBR	SBL	SBT	SBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations		↑			↑						↑↑↑	
Traffic Volume (vph)	0	5	0	0	183	39	0	0	0	17	729	244
Future Volume (vph)	0	5	0	0	183	39	0	0	0	17	729	244
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	12	12	12	12	9	12	12	12	12	12	10	12
Total Lost time (s)		4.0			4.0						4.0	
Lane Util. Factor		1.00			1.00						0.91	
Frbp, ped/bikes		1.00			0.98						0.95	
Flpb, ped/bikes		1.00			1.00						1.00	
Frt		1.00			0.98						0.96	
Flt Protected		1.00			1.00						1.00	
Satd. Flow (prot)		1629			1154						3471	
Flt Permitted		1.00			1.00						1.00	
Satd. Flow (perm)		1629			1154						3471	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	5	0	0	193	41	0	0	0	18	767	257
RTOR Reduction (vph)	0	0	0	0	10	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	5	0	0	224	0	0	0	0	0	1042	0
Confl. Peds. (#/hr)						110				112		190
Confl. Bikes (#/hr)						20						20
Parking (#/hr)					15	15						30
Turn Type		NA			NA					Perm	NA	
Protected Phases		2			2						4	
Permitted Phases										4		
Actuated Green, G (s)		30.5			30.5						40.5	
Effective Green, g (s)		31.0			31.0						41.0	
Actuated g/C Ratio		0.39			0.39						0.51	
Clearance Time (s)		4.5			4.5						4.5	
Lane Grp Cap (vph)		631			447						1778	
v/s Ratio Prot		0.00			0.19							
v/s Ratio Perm											0.30	
v/c Ratio		0.01			0.50						0.59	
Uniform Delay, d1		15.1			18.6						13.6	
Progression Factor		1.00			0.90						0.62	
Incremental Delay, d2		0.0			3.9						1.2	
Delay (s)		15.1			20.6						9.7	
Level of Service		B			C						A	
Approach Delay (s)		15.1			20.6			0.0			9.7	
Approach LOS		B			C			A			A	
Intersection Summary												
HCM 2000 Control Delay			11.7								HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio			0.55									
Actuated Cycle Length (s)			80.0							8.0		
Intersection Capacity Utilization			50.6%								ICU Level of Service	A
Analysis Period (min)			15									
c Critical Lane Group												

HCM Signalized Intersection Capacity Analysis

23: Westlake Ave & 7th Ave

8/5/2015

												
Movement	NBL	NBT	NBR	SBL	SBT	SBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Traffic Volume (vph)	1	221	0	108	104	5	4	234	25	0	0	0
Future Volume (vph)	1	221	0	108	104	5	4	234	25	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	12	10	12	12	9	16	12	10	12	12	12	12
Grade (%)		0%			0%			0%				-5%
Total Lost time (s)		3.5		3.5	3.5			3.5				
Lane Util. Factor		0.95		1.00	1.00			1.00				
Frbp, ped/bikes		1.00		1.00	0.99			1.00				
Flpb, ped/bikes		1.00		0.77	1.00			1.00				
Frt		1.00		1.00	0.99			0.99				
Flt Protected		1.00		0.95	1.00			1.00				
Satd. Flow (prot)		2633		1189	1188			1229				
Flt Permitted		0.95		0.61	1.00			1.00				
Satd. Flow (perm)		2513		758	1188			1229				
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	1	233	0	114	109	5	4	246	26	0	0	0
RTOR Reduction (vph)	0	0	0	0	2	0	0	5	0	0	0	0
Lane Group Flow (vph)	0	234	0	114	112	0	0	271	0	0	0	0
Confl. Peds. (#/hr)	125		369	369		125	178		17			86
Confl. Bikes (#/hr)			20			20			20			
Parking (#/hr)		15			15			15				
Turn Type	Perm	NA		Perm	NA		Perm	NA				
Protected Phases		1			1			2				
Permitted Phases	1			1			2					
Actuated Green, G (s)		33.5		33.5	33.5			35.5				
Effective Green, g (s)		35.5		35.5	35.5			37.5				
Actuated g/C Ratio		0.44		0.44	0.44			0.47				
Clearance Time (s)		5.5		5.5	5.5			5.5				
Lane Grp Cap (vph)		1115		336	527			576				
v/s Ratio Prot					0.09							
v/s Ratio Perm		0.09		0.15				0.22				
v/c Ratio		0.21		0.34	0.21			0.47				
Uniform Delay, d1		13.6		14.6	13.7			14.5				
Progression Factor		0.93		0.40	0.39			1.00				
Incremental Delay, d2		0.4		2.6	0.9			2.7				
Delay (s)		13.1		8.4	6.2			17.2				
Level of Service		B		A	A			B				
Approach Delay (s)		13.1			7.3			17.2			0.0	
Approach LOS		B			A			B			A	
Intersection Summary												
HCM 2000 Control Delay			12.9									B
HCM 2000 Volume to Capacity ratio			0.41									
Actuated Cycle Length (s)			80.0									7.0
Intersection Capacity Utilization			65.8%									C
Analysis Period (min)			15									

c Critical Lane Group

HCM Signalized Intersection Capacity Analysis

24: Lenora St & Westlake Ave & 8th Ave

8/5/2015



Movement	NBL2	NBL	NBT	SBT	SBR	SBR2	SEL2	SER	SER2	NWL2	NWL	NWT
Lane Configurations			↕↕	↕↕			↕	↕				↕↕
Traffic Volume (vph)	12	5	182	136	58	18	7	31	17	24	112	191
Future Volume (vph)	12	5	182	136	58	18	7	31	17	24	112	191
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	12	12	9	10	12	12	12	11	12	12	12	9
Total Lost time (s)			4.5	4.5			8.5	4.5				4.5
Lane Util. Factor			0.95	0.95			1.00	1.00				0.95
Frbp, ped/bikes			1.00	0.87			1.00	0.49				0.96
Flpb, ped/bikes			0.98	1.00			0.95	1.00				0.86
Frt			1.00	0.95			1.00	0.85				0.95
Flt Protected			1.00	1.00			0.95	1.00				0.99
Satd. Flow (prot)			2523	2209			1263	559				1970
Flt Permitted			0.91	1.00			0.39	1.00				0.99
Satd. Flow (perm)			2314	2209			524	559				1970
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	12	5	188	140	60	19	7	32	18	25	115	197
RTOR Reduction (vph)	0	0	0	9	0	0	0	31	0	0	0	0
Lane Group Flow (vph)	0	0	205	210	0	0	7	19	0	0	0	506
Confl. Peds. (#/hr)	167	174			167	174	123	230	167	230	167	
Parking (#/hr)		8	8	8	8		8	8			16	16
Turn Type	Perm	Perm	NA	NA			D.Pm	Perm		Perm	Perm	NA
Protected Phases			1	1								2
Permitted Phases	1	1					2	2		2	2	
Actuated Green, G (s)			14.5	14.5			26.5	26.5				26.5
Effective Green, g (s)			17.5	17.5			26.5	30.5				30.5
Actuated g/C Ratio			0.22	0.22			0.33	0.38				0.38
Clearance Time (s)			7.5	7.5			8.5	8.5				8.5
Lane Grp Cap (vph)			506	483			173	213				751
v/s Ratio Prot				c0.10								
v/s Ratio Perm			0.09				0.01	0.03				0.26
v/c Ratio			0.41	0.44			0.04	0.09				0.67
Uniform Delay, d1			26.8	27.0			18.1	15.9				20.6
Progression Factor			0.37	1.00			1.00	1.00				0.64
Incremental Delay, d2			2.4	2.8			0.4	0.8				4.6
Delay (s)			12.3	29.8			18.6	16.7				17.7
Level of Service			B	C			B	B				B
Approach Delay (s)			12.3	29.8								17.7
Approach LOS			B	C								B

Intersection Summary

HCM 2000 Control Delay	19.2	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.42		
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	13.5
Intersection Capacity Utilization	62.2%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

HCM Signalized Intersection Capacity Analysis
 24: Lenora St & Westlake Ave & 8th Ave

8/5/2015


















Movement	NWR	SWT
Lane Configurations		
Traffic Volume (vph)	164	0
Future Volume (vph)	164	0
Ideal Flow (vphpl)	1900	1900
Lane Width	12	12
Total Lost time (s)		
Lane Util. Factor		
Frbp, ped/bikes		
Flpb, ped/bikes		
Frt		
Flt Protected		
Satd. Flow (prot)		
Flt Permitted		
Satd. Flow (perm)		
Peak-hour factor, PHF	0.97	0.97
Adj. Flow (vph)	169	0
RTOR Reduction (vph)	0	0
Lane Group Flow (vph)	0	0
Confl. Peds. (#/hr)	123	
Parking (#/hr)	16	
Turn Type		
Protected Phases		3
Permitted Phases		
Actuated Green, G (s)		
Effective Green, g (s)		
Actuated g/C Ratio		
Clearance Time (s)		
Lane Grp Cap (vph)		
v/s Ratio Prot		
v/s Ratio Perm		
v/c Ratio		
Uniform Delay, d1		
Progression Factor		
Incremental Delay, d2		
Delay (s)		
Level of Service		
Approach Delay (s)		0.0
Approach LOS		A
Intersection Summary		

HCM 2010 Signalized Intersection Summary


















25: Blanchard St & Westlake Ave & 9th Ave

8/5/2015

											
Movement	NBL	NBT	NBR	SBL	SBT	SBR	NWL	NWR	NEL	NER	NER2
Lane Configurations											
Traffic Volume (veh/h)	0	293	53	81	211	0	0	107	171	293	11
Future Volume (veh/h)	0	293	53	81	211	0	0	107	171	293	11
Number	5	2	12	1	6	16	3	18	7	14	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00	1.00	1.00	1.00	1.00	1.00
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
Adj Sat Flow, veh/h/ln	0	1563	1710	1710	1629	0	0	1629	1629	1710	1710
Adj Flow Rate, veh/h	0	308	56	85	222	0	0	113	180	12	12
Adj No. of Lanes	0	2	0	0	2	0	0	1	2	0	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	5	5	5	5	0	0	5	5	0	0
Cap, veh/h	0	1107	199	303	823	0	0	0	1326	0	0
Arrive On Green	0.00	0.44	0.44	0.45	0.44	0.00	0.00	0.01	0.44	0.01	0.01
Sat Flow, veh/h	0	2590	451	518	1942	0	0		3009		
Grp Volume(v), veh/h	0	181	183	149	158	0	0.0		180		
Grp Sat Flow(s),veh/h/ln	0	1485	1477	978	1408	0			1504		
Q Serve(g_s), s	0.0	5.9	6.0	4.9	5.4	0.0			2.7		
Cycle Q Clear(g_c), s	0.0	5.9	6.0	10.9	5.4	0.0			2.7		
Prop In Lane	0.00		0.31	0.57		0.00			1.00		
Lane Grp Cap(c), veh/h	0	655	651	518	621	0			1326		
V/C Ratio(X)	0.00	0.28	0.28	0.29	0.25	0.00			0.14		
Avail Cap(c_a), veh/h	0	655	651	518	621	0			1326		
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00			1.00		
Upstream Filter(I)	0.00	1.00	1.00	1.00	1.00	0.00			1.00		
Uniform Delay (d), s/veh	0.0	13.5	13.6	15.2	13.4	0.0			12.6		
Incr Delay (d2), s/veh	0.0	1.0	1.1	1.4	1.0	0.0			0.2		
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0			0.0		
%ile BackOfQ(50%),veh/ln	0.0	2.6	2.6	2.3	2.2	0.0			1.2		
LnGrp Delay(d),s/veh	0.0	14.6	14.7	16.6	14.4	0.0			12.9		
LnGrp LOS		B	B	B	B				B		
Approach Vol, veh/h		364			307				180		
Approach Delay, s/veh		14.6			15.4				12.9		
Approach LOS		B			B				B		
Timer	1	2	3	4	5	6	7	8			
Assigned Phs		2				6	7				
Phs Duration (G+Y+Rc), s		38.0				38.0	38.0				
Change Period (Y+Rc), s		4.5				4.5	4.5				
Max Green Setting (Gmax), s		33.5				33.5	33.5				
Max Q Clear Time (g_c+I1), s		8.0				12.9	4.7				
Green Ext Time (p_c), s		3.0				2.9	0.8				
Intersection Summary											
HCM 2010 Ctrl Delay				14.5							
HCM 2010 LOS				B							

HCM 2010 Signalized Intersection Summary
 26: Westlake Ave & Denny Way





















8/5/2015

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	909	27	0	709	97	56	426	89	131	239	45
Future Volume (veh/h)	0	909	27	0	709	97	56	426	89	131	239	45
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.87	1.00		0.81	0.86		0.77	1.00		0.83
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	0.88
Adj Sat Flow, veh/h/ln	0	1629	1710	0	1629	1710	1710	1629	1710	1629	1629	1710
Adj Flow Rate, veh/h	0	977	29	0	762	104	60	458	96	141	257	48
Adj No. of Lanes	0	2	0	0	2	0	0	2	0	1	2	0
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	0	5	5	0	5	5	5	5	5	5	5	5
Cap, veh/h	0	1457	43	0	1265	172	106	660	135	275	1048	188
Arrive On Green	0.00	0.48	0.47	0.00	0.32	0.32	0.11	0.11	0.10	0.08	0.44	0.44
Sat Flow, veh/h	0	3134	91	0	2731	361	197	2063	422	1551	2367	425
Grp Volume(v), veh/h	0	495	511	0	445	421	328	0	286	141	164	141
Grp Sat Flow(s),veh/h/ln	0	1547	1596	0	1547	1463	1426	0	1256	1551	1547	1245
Q Serve(g_s), s	0.0	24.6	24.6	0.0	24.2	24.3	15.0	0.0	22.0	5.8	6.6	7.1
Cycle Q Clear(g_c), s	0.0	24.6	24.6	0.0	24.2	24.3	21.9	0.0	22.0	5.8	6.6	7.1
Prop In Lane	0.00		0.06	0.00		0.25	0.18		0.34	1.00		0.34
Lane Grp Cap(c), veh/h	0	739	762	0	739	699	499	0	402	275	685	551
V/C Ratio(X)	0.00	0.67	0.67	0.00	0.60	0.60	0.66	0.00	0.71	0.51	0.24	0.26
Avail Cap(c_a), veh/h	0	739	762	0	739	699	499	0	402	333	743	597
HCM Platoon Ratio	1.00	1.00	1.00	1.00	0.67	0.67	0.33	0.33	0.33	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	0.00	0.73	0.73	0.88	0.00	0.88	1.00	1.00	1.00
Uniform Delay (d), s/veh	0.0	20.1	20.1	0.0	26.0	26.1	39.8	0.0	40.3	21.9	17.4	17.6
Incr Delay (d2), s/veh	0.0	4.8	4.7	0.0	2.6	2.8	5.9	0.0	9.1	1.5	0.2	0.2
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
%ile BackOfQ(50%),veh/ln	0.0	11.4	11.8	0.0	10.9	10.4	9.6	0.0	8.7	2.5	2.9	2.5
LnGrp Delay(d),s/veh	0.0	24.9	24.8	0.0	28.7	28.9	45.7	0.0	49.4	23.4	17.6	17.8
LnGrp LOS		C	C		C	C	D		D	C	B	B
Approach Vol, veh/h		1006			866			614			446	
Approach Delay, s/veh		24.8			28.8			47.4			19.5	
Approach LOS		C			C			D			B	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2		4		6		8				
Phs Duration (G+Y+Rc), s	12.3	36.0		51.7		48.3		51.7				
Change Period (Y+Rc), s	4.5	4.5		4.5		4.5		4.5				
Max Green Setting (Gmax), s	11.5	31.5		43.5		47.5		43.5				
Max Q Clear Time (g_c+I1), s	7.8	24.0		26.6		9.1		26.3				
Green Ext Time (p_c), s	0.1	2.6		8.3		4.6		8.4				
Intersection Summary												
HCM 2010 Ctrl Delay			29.9									
HCM 2010 LOS			C									

HCM 2010 Signalized Intersection Summary

34: Fairview Ave & Denny Way

7/9/2015

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	98	740	3	64	516	68	314	455	156	98	347	64
Future Volume (veh/h)	98	740	3	64	516	68	314	455	156	98	347	64
Number	1	6	16	5	2	12	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.82	1.00		0.80	1.00		0.77	1.00		0.71
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	0.88
Adj Sat Flow, veh/h/ln	1629	1629	1710	1629	1629	1710	1629	1629	1710	1629	1629	1710
Adj Flow Rate, veh/h	104	787	3	68	549	72	334	484	166	104	369	68
Adj No. of Lanes	1	2	0	1	2	0	2	2	0	1	2	0
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	5	5	5	5	5	5	5	5	5	5	5	5
Cap, veh/h	143	1299	5	99	1021	133	445	616	207	141	545	97
Arrive On Green	0.03	0.14	0.13	0.06	0.38	0.37	0.05	0.10	0.09	0.09	0.24	0.23
Sat Flow, veh/h	1551	3158	12	1551	2668	347	3009	2094	705	1551	2297	407
Grp Volume(v), veh/h	104	385	405	68	317	304	334	355	295	104	244	193
Grp Sat Flow(s),veh/h/ln	1551	1547	1623	1551	1547	1468	1504	1547	1252	1551	1547	1157
Q Serve(g_s), s	6.6	23.5	23.5	4.3	15.9	16.2	11.0	22.4	23.1	6.5	14.3	15.3
Cycle Q Clear(g_c), s	6.6	23.5	23.5	4.3	15.9	16.2	11.0	22.4	23.1	6.5	14.3	15.3
Prop In Lane	1.00		0.01	1.00		0.24	1.00		0.56	1.00		0.35
Lane Grp Cap(c), veh/h	143	636	667	99	592	562	445	455	368	141	367	274
V/C Ratio(X)	0.73	0.61	0.61	0.69	0.53	0.54	0.75	0.78	0.80	0.74	0.66	0.70
Avail Cap(c_a), veh/h	178	636	667	163	592	562	617	534	432	163	379	283
HCM Platoon Ratio	0.33	0.33	0.33	1.00	1.00	1.00	0.33	0.33	0.33	1.00	1.00	1.00
Upstream Filter(I)	0.67	0.67	0.67	1.00	1.00	1.00	0.86	0.86	0.86	0.88	0.88	0.88
Uniform Delay (d), s/veh	47.2	35.6	35.6	45.8	23.9	24.1	45.7	42.0	42.4	44.3	34.5	35.1
Incr Delay (d2), s/veh	7.3	2.9	2.7	8.2	3.4	3.7	2.9	5.4	7.8	12.5	3.7	6.6
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
%ile BackOfQ(50%),veh/ln	3.2	10.6	11.1	2.1	7.3	7.1	4.8	10.3	8.8	3.3	6.5	5.4
LnGrp Delay(d),s/veh	54.6	38.4	38.3	54.0	27.4	27.9	48.6	47.4	50.1	56.8	38.2	41.7
LnGrp LOS	D	D	D	D	C	C	D	D	D	E	D	D
Approach Vol, veh/h		894			689			984			541	
Approach Delay, s/veh		40.3			30.2			48.6			43.0	
Approach LOS		D			C			D			D	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	12.7	41.8	18.3	27.2	9.9	44.6	12.6	32.9				
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5				
Max Green Setting (Gmax), s	10.5	28.5	19.5	23.5	9.5	29.5	9.5	33.5				
Max Q Clear Time (g_c+I1), s	8.6	18.2	13.0	17.3	6.3	25.5	8.5	25.1				
Green Ext Time (p_c), s	0.0	4.6	0.8	2.7	0.0	2.3	0.0	3.4				
Intersection Summary												
HCM 2010 Ctrl Delay				41.2								
HCM 2010 LOS				D								