



# Richwood Ave & Willey St Intersection Study

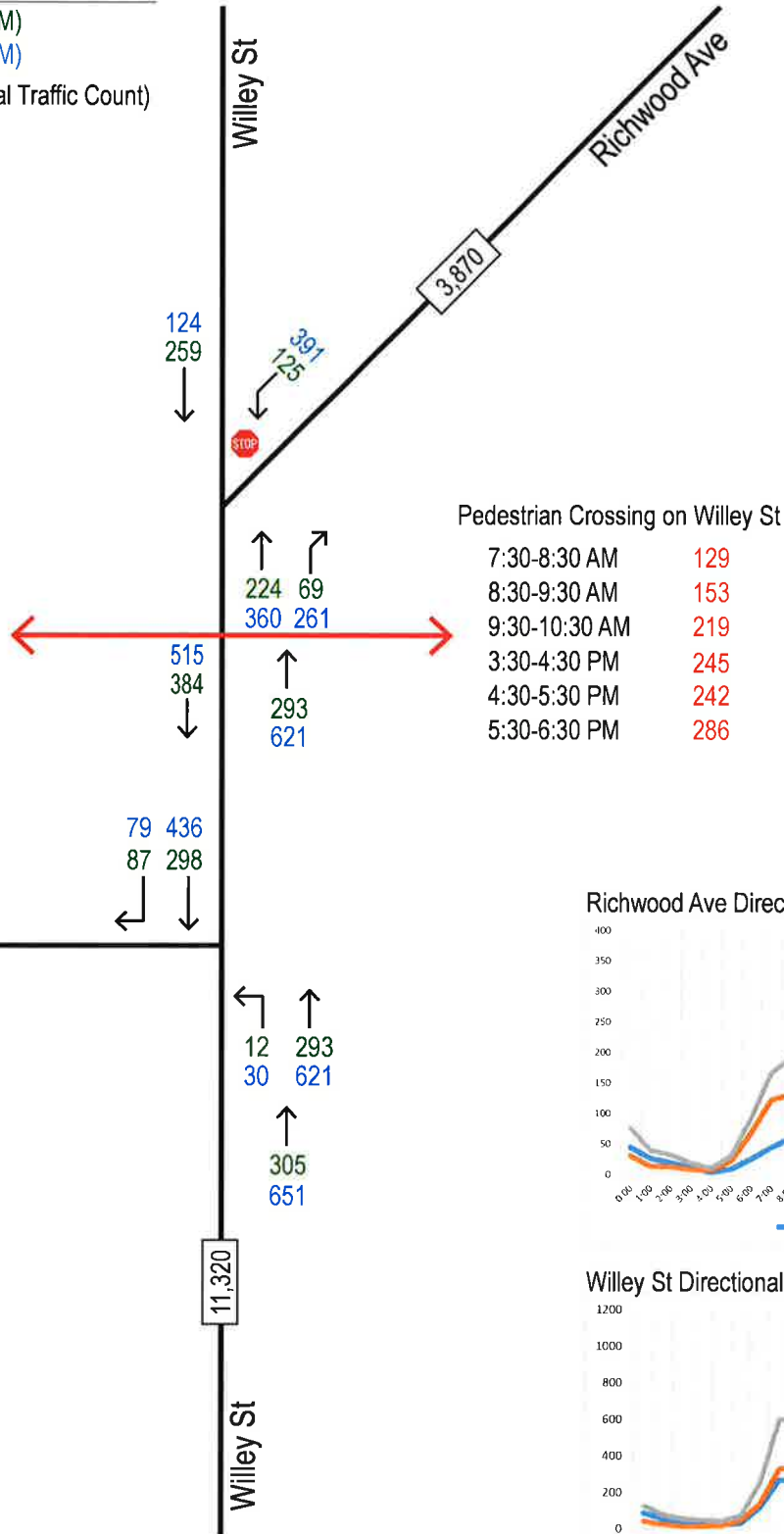
## Turning Movement Counts & Pedestrian Volume Summary

### Key

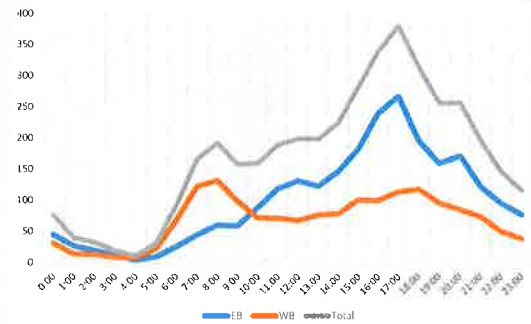
259 = AM Peak (8:30-9:30 AM)

124 = PM Peak (4:30-5:30 PM)

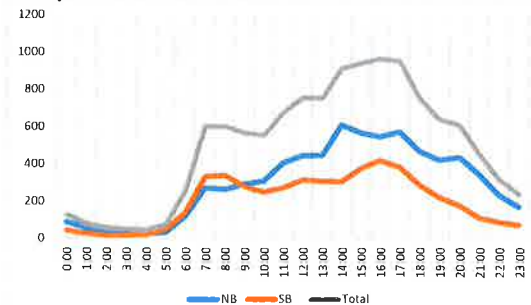
3,872 = 2018 ADT (Annual Traffic Count)



Richwood Ave Directional Volume



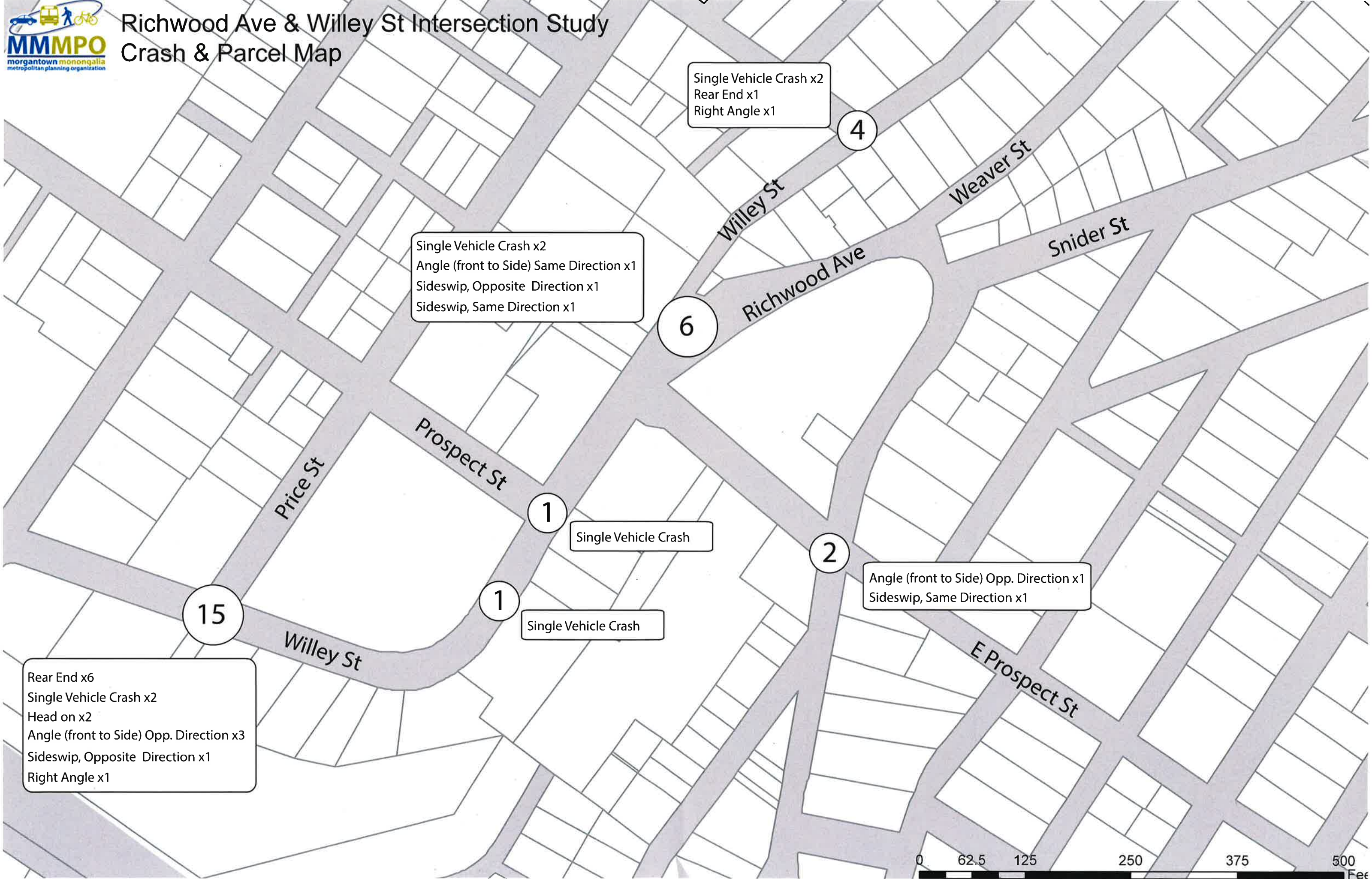
Willey St Directional Volume





# Richwood Ave & Willey St Intersection Study

## Crash & Parcel Map



Single Vehicle Crash x2  
Rear End x1  
Right Angle x1

Single Vehicle Crash x2  
Angle (front to Side) Same Direction x1  
Sideswip, Opposite Direction x1  
Sideswip, Same Direction x1

Single Vehicle Crash

Angle (front to Side) Opp. Direction x1  
Sideswip, Same Direction x1

Single Vehicle Crash

Rear End x6  
Single Vehicle Crash x2  
Head on x2  
Angle (front to Side) Opp. Direction x3  
Sideswip, Opposite Direction x1  
Right Angle x1





## Richwood Ave & Willey St Intersection Study

### Vehicle Traffic Counts

**Richwood Ave & Willey St**

Sept. 4 & 5, Average

		Willey St					Richwood Ave	Total	
		SB	NB		Sub-Total	SEB			
AM Peak Hours	From	To	TH	TH	RT	Sub-Total	RT	Total	
	7:30	7:45	32	62	13	75	30	211	
	7:45	8:00	22	58	18	76	43	216	
	8:00	8:15	101	59	17	76	32	285	
	8:15	8:30	66	45	21	65	40	236	
	7:30	8:30	221	223	68	291	145	947	
	8:30	8:45	55	59	14	73	37	236	
	8:45	9:00	63	54	24	77	32	249	
	9:00	9:15	76	61	15	76	27	254	
	9:15	9:30	66	51	17	68	31	231	
	8:30	9:30	259	224	69	293	125	969	
	9:30	9:45	63	49	17	66	20	214	
	9:45	10:00	65	63	15	78	27	248	
	10:00	10:15	55	57	20	77	22	232	
	10:15	10:30	58	57	15	72	23	224	
	9:30	10:30	241	226	66	292	92	917	
	AM Total (3 hours)								2833
	AM Average (3 hours)								944
			Willey St					Richwood Ave	Total
			SB	NB		Sub-Total	SEB		
PM Peak Hours	From	To	TH	TH	RT	Sub-Total	RT	Total	
	15:30	15:45	40	97	37	134	76	383	
	15:45	16:00	54	106	45	150	68	422	
	16:00	16:15	38	101	42	143	87	410	
	16:15	16:30	25	92	61	153	80	411	
	15:30	16:30	157	395	184	579	311	1625	
	16:30	16:45	46	102	53	155	83	439	
	16:45	17:00	48	91	57	148	92	436	
	17:00	17:15	13	73	73	146	114	418	
	17:15	17:30	18	94	78	172	102	464	
	16:30	17:30	124	360	261	621	311	1757	
	17:30	17:45	49	89	72	161	90	460	
	17:45	18:00	44	77	63	140	76	399	
	18:00	18:15	24	71	61	132	73	360	
	18:15	18:30	14	93	55	148	81	390	
	17:30	18:30	131	329	250	579	391	1608	
	PM Total (3 hours)								4990
	PM Average (3 hours)								1663

## Richwood Ave & Willey St Intersection Study

### Vehicle Traffic Counts

**Prospect St & Willey St**

Sept. 4 & 5, Average

		Willey St							Total		
		SB			NB						
		From	To	TH	RT	Sub-Total	LT	TH		Sub-Total	
<b>AM Peak Hours</b>		7:30	7:45	52	10	62	0	75	75	136	
		7:45	8:00	52	13	65	1	76	76	141	
		8:00	8:15	119	14	133	3	76	78	211	
		8:15	8:30	84	22	106	2	65	67	173	
		7:30	8:30	307	59	365	5	291	296	661	
		8:30	8:45	81	11	91	5	73	78	169	
		8:45	9:00	72	23	95	1	77	78	172	
		9:00	9:15	78	25	103	1	76	77	179	
		9:15	9:30	68	29	96	6	68	73	169	
		8:30	9:30	298	87	384	12	293	305	689	
		9:30	9:45	72	11	83	6	66	71	154	
		9:45	10:00	71	21	92	9	78	87	179	
		10:00	10:15	61	17	78	13	77	90	167	
		10:15	10:30	62	20	81	11	72	82	163	
		9:30	10:30	265	68	333	38	292	329.5	663	
		AM Total (3 hours)									2012
		AM Average (3 hours)									671
			Willey St							Total	
SB			NB								
From			To	TH	RT	Sub-Total	LT	TH	Sub-Total		
<b>PM Peak Hours</b>		15:30	15:45	96	21	116	3	134	137	273	
		15:45	16:00	105	17	122	8	150	158	296	
		16:00	16:15	103	22	125	11	143	153	300	
		16:15	16:30	86	20	106	15	153	167	292	
		15:30	16:30	389	79	468	36	579	614	1161	
		16:30	16:45	118	12	129	12	155	167	296	
		16:45	17:00	116	25	140	2	148	150	290	
		17:00	17:15	105	22	126	9	146	155	281	
		17:15	17:30	99	22	120	9	172	181	301	
		16:30	17:30	436	79	515	30	621	651	1166	
		17:30	17:45	118	21	139	6	161	166	305	
		17:45	18:00	99	21	120	8	140	148	268	
		18:00	18:15	81	16	97	15	132	146	243	
		18:15	18:30	85	11	95	6	148	154	249	
		17:30	18:30	382	68	450	34	579	613	1063	
		PM Total (3 hours)									3390
		PM Average (3 hours)									1130

## Richwood Ave & Willey St Intersection Study

### Pedestrian Counts

Sept. 11, Tuesday, 2018

	From	To	WB	EB	SB	NB	Conflict Total	Total	
	<b>AM Peak Hours</b>	7:30	7:45	15	0	7	0	15	22
7:45		8:00	30	3	10	0	33	43	
8:00		8:15	27	4	11	0	31	42	
8:15		8:30	15	5	7	0	20	27	
7:30		8:30	87	12	35	0	99	134	
8:30		8:45	20	3	4	0	23	27	
8:45		9:00	27	0	9	3	27	39	
9:00		9:15	33	7	2	0	40	42	
9:15		9:30	37	2	2	1	39	42	
8:30		9:30	117	12	17	4	129	150	
9:30		9:45	35	11	10	3	46	59	
9:45		10:00	41	10	11	2	51	64	
10:00		10:15	27	9	6	4	36	46	
10:15		10:30	22	10	3	1	32	36	
9:30		10:30	125	40	30	10	165	205	
AM Total (3 hours)								489	
AM Average (3 hours)								163	
<b>PM Peak Hours</b>		From	To	WB	EB	SB	NB	Conflict Total	Total
		15:30	15:45	11	33	7	11	44	62
	15:45	16:00	14	19	3	11	33	47	
	16:00	16:15	24	26	5	7	50	62	
	16:15	16:30	22	50	9	14	72	95	
	15:30	16:30	71	128	24	43	199	266	
	16:30	16:45	17	40	5	15	57	77	
	16:45	17:00	22	22	7	8	44	59	
	17:00	17:15	25	11	6	3	36	45	
	17:15	17:30	12	25	4	18	37	59	
	16:30	17:30	76	98	22	44	174	240	
	17:30	17:45	33	23	3	22	56	81	
	17:45	18:00	26	40	0	13	66	79	
	18:00	18:15	19	24	3	15	43	61	
	18:15	18:30	28	26	6	17	54	77	
	17:30	18:30	106	113	12	67	219	298	
	PM Total (3 hours)								804
	PM Average (3 hours)								268

## Richwood Ave & Willey St Intersection Study

### Pedestrian Counts

Sept. 12 Wednesday, 2018

	From	To	WB	EB	SB	NB	Conflict Total	Total	
	<b>AM Peak Hours</b>	7:30	7:45	7	0	8	0	7	15
7:45		8:00	29	0	8	2	29	39	
8:00		8:15	26	8	9	0	34	43	
8:15		8:30	11	5	9	2	16	27	
7:30		8:30	73	13	34	4	86	124	
8:30		8:45	33	5	3	0	38	41	
8:45		9:00	20	2	2	0	22	24	
9:00		9:15	31	5	3	2	36	41	
9:15		9:30	41	4	2	2	45	49	
8:30		9:30	125	16	10	4	141	155	
9:30		9:45	33	10	11	4	43	58	
9:45		10:00	40	15	20	3	55	78	
10:00		10:15	22	16	7	3	38	48	
10:15		10:30	24	15	4	5	39	48	
9:30		10:30	119	56	42	15	175	232	
AM Total (3 hours)								511	
AM Average (3 hours)								170	
<b>PM Peak Hours</b>		15:30	15:45	10	40	5	10	50	65
		15:45	16:00	10	21	4	9	31	44
	16:00	16:15	29	22	6	9	51	66	
	16:15	16:30	33	42	7	15	75	97	
	15:30	16:30	82	125	22	43	207	272	
	16:30	16:45	20	40	5	14	60	79	
	16:45	17:00	35	33	7	10	68	85	
	17:00	17:15	26	21	6	6	47	59	
	17:15	17:30	20	11	4	25	31	60	
	16:30	17:30	101	105	22	55	206	283	
	17:30	17:45	22	13	3	20	35	58	
	17:45	18:00	25	33	0	9	58	67	
	18:00	18:15	20	33	3	11	53	67	
	18:15	18:30	30	35	6	10	65	81	
	17:30	18:30	97	114	12	50	211	273	
	PM Total (3 hours)								828
	PM Average (3 hours)								276

## Richwood Ave & Willey St Intersection Study

### Pedestrian Counts

Two Day Average (Sept. 11 and 12, 2018)

	From	To	WB	EB	SB	NB	Conflict Total	Total	
	<b>AM Peak Hours</b>	7:30	7:45	11	0	8	0	11	19
7:45		8:00	30	2	9	1	31	41	
8:00		8:15	27	6	10	0	32.5	43	
8:15		8:30	13	5	8	1	18	27	
7:30		8:30	80	13	35	2	93	129	
8:30		8:45	27	4	4	0	30.5	34	
8:45		9:00	24	1	6	2	24.5	32	
9:00		9:15	32	6	3	1	38	42	
9:15		9:30	39	3	2	2	42	46	
8:30		9:30	121	14	14	4	135	153	
9:30		9:45	34	11	11	4	44.5	59	
9:45		10:00	41	13	16	3	53	71	
10:00		10:15	25	13	7	4	37	47	
10:15		10:30	23	13	4	3	35.5	42	
9:30		10:30	122	48	36	13	170	219	
AM Total (3 hours)								500	
AM Average (3 hours)								167	
<b>PM Peak Hours</b>		15:30	15:45	11	37	6	11	47	64
		15:45	16:00	12	20	4	10	32	46
	16:00	16:15	27	24	6	8	50.5	64	
	16:15	16:30	28	46	8	15	73.5	96	
	15:30	16:30	77	127	23	43	203	269	
	16:30	16:45	19	40	5	15	58.5	78	
	16:45	17:00	29	28	7	9	56	72	
	17:00	17:15	26	16	6	5	41.5	52	
	17:15	17:30	16	18	4	22	34	60	
	16:30	17:30	89	102	22	50	190	262	
	17:30	17:45	28	18	3	21	45.5	70	
	17:45	18:00	26	37	0	11	62	73	
	18:00	18:15	20	29	3	13	48	64	
	18:15	18:30	29	31	6	14	59.5	79	
	17:30	18:30	102	114	12	59	215	286	
	PM Total (3 hours)								816
	PM Average (3 hours)								272