

APPENDIX A **TRAFFIC COUNT DATA**



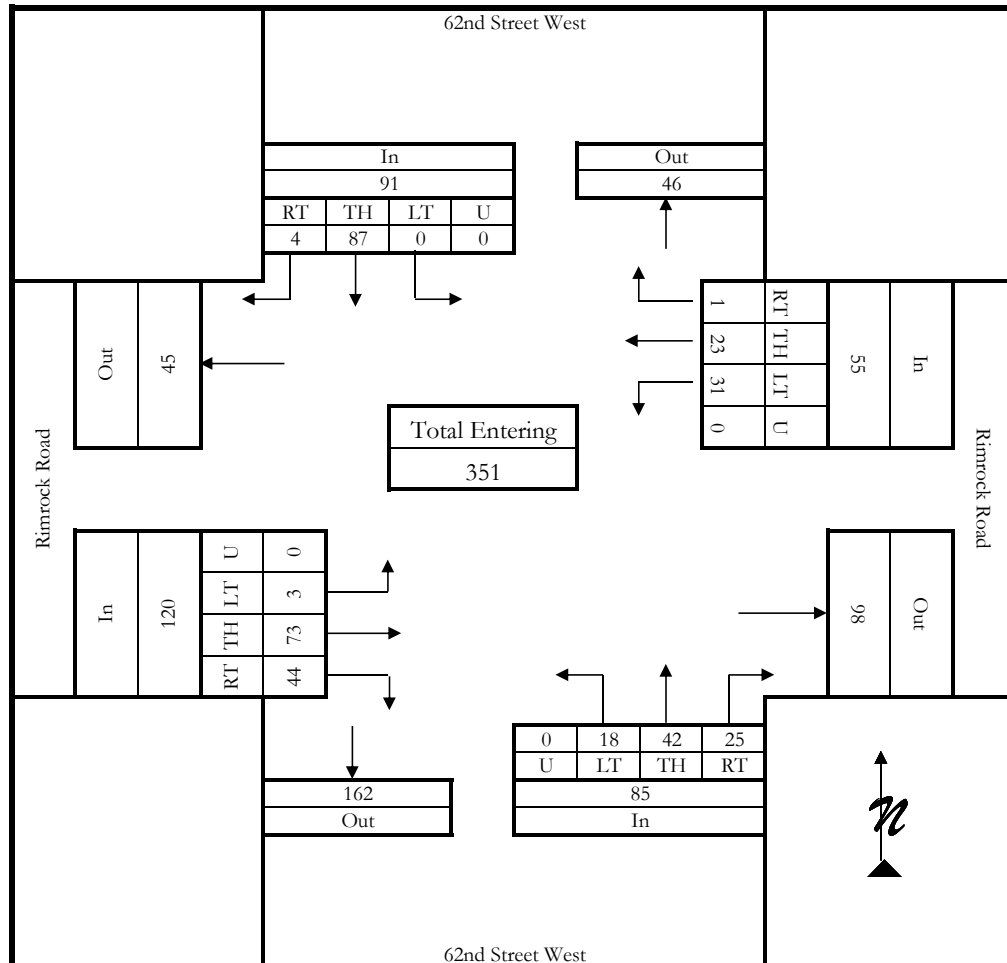
INTERSECTION TURNING MOVEMENT COUNT SUMMARY

General Information

Counted By:	V. Morasko	Intersection:	Rimrock Road & 62nd Street West
Agency/Company:	Sanderson Stewart	Jurisdiction:	City of Billings / MDT
Date Performed:	Friday, May 29, 2015		
Count Time Period:	AM Peak Hour (7:30 - 8:30 AM)		
Project Number:	14063.01	Project Description:	West End Middle School TIS
North/South Street:	62nd Street West	East/West Street:	Rimrock Road

Vehicle Volumes and Adjustments

	62nd Street West Southbound					62nd Street West Northbound					Rimrock Road Eastbound					Rimrock Road Westbound					Int. Total
Start Time	Right	Thru	Left	U-turn	Total	Right	Thru	Left	U-turn	Total	Right	Thru	Left	U-turn	Total	Right	Thru	Left	U-turn	Total	
Factor	0.93	0.93	0.93	0.93		0.93	0.93	0.93	0.93		1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00		
7:30 AM	0	29	0	0	29	9	7	0	0	16	13	26	0	0	39	0	4	8	0	12	96
7:45 AM	0	30	0	0	30	5	7	6	0	18	14	22	1	0	37	1	8	12	0	21	106
8:00 AM	2	11	0	0	13	5	10	3	0	18	8	14	1	0	23	0	3	6	0	9	63
8:15 AM	2	17	0	0	19	6	18	9	0	33	9	11	1	0	21	0	8	5	0	13	86
Grand Total	4	87	0	0	91	25	42	18	0	85	44	73	3	0	120	1	23	31	0	55	351
Medium Truck %	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Heavy Truck %	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	30.4	3.2	0.0	14.5	
Total Truck %	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	30.4	3.2	0.0	14.5	
Total %	1.1	24.8	0.0	0.0	25.9	7.1	12.0	5.1	0.0	24.2	12.5	20.8	0.9	0.0	34.2	0.3	6.6	8.8	0.0	15.7	100.0
PHF	0.76	0.76	0.76			0.64	0.64	0.64			0.77	0.77	0.77			0.65	0.65	0.65			0.83



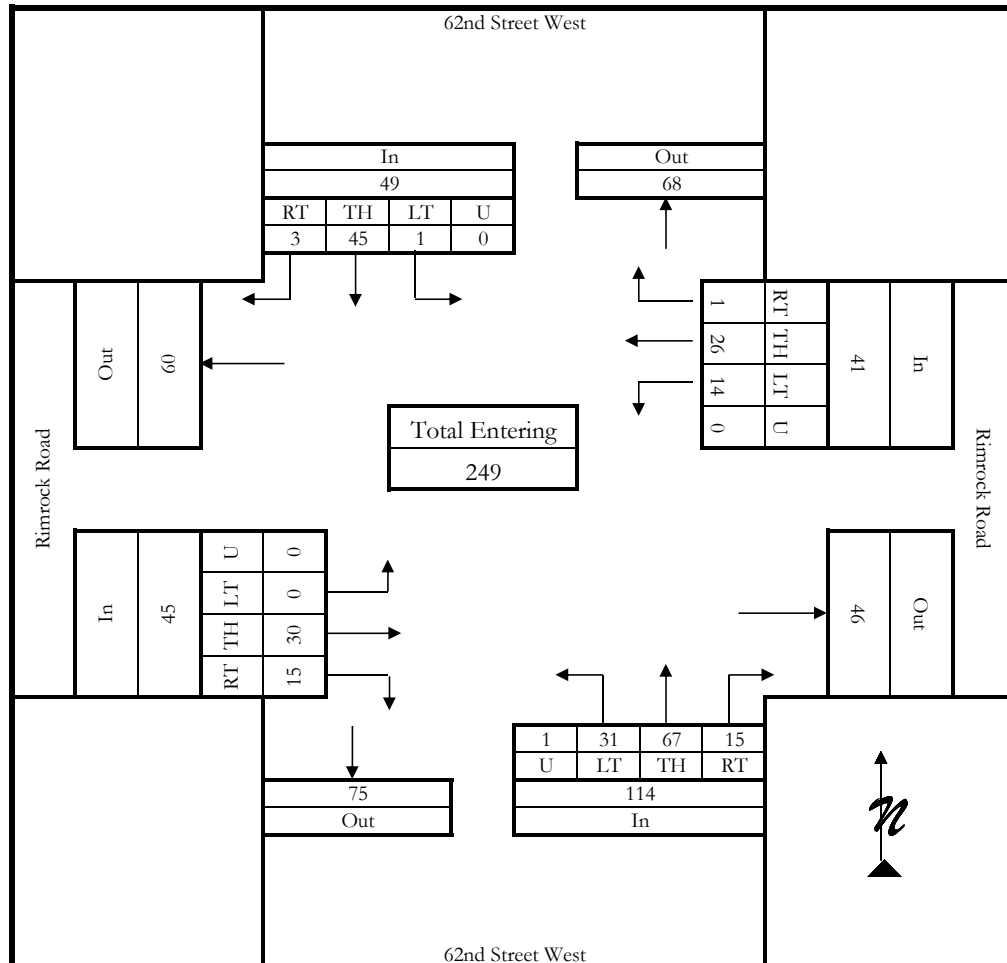
INTERSECTION TURNING MOVEMENT COUNT SUMMARY

General Information

Counted By:	V. Morasko	Intersection:	Rimrock Road & 62nd Street West
Agency/Company:	Sanderson Stewart	Jurisdiction:	City of Billings / MDT
Date Performed:	Thursday, May 28, 2015		
Count Time Period:	PM Peak Hour (3:30 - 4:30 PM)		
Project Number:	14063.01	Project Description:	West End Middle School TIS
North/South Street:	62nd Street West	East/West Street:	Rimrock Road

Vehicle Volumes and Adjustments

	62nd Street West Southbound					62nd Street West Northbound					Rimrock Road Eastbound					Rimrock Road Westbound					Int. Total
Start Time	Right	Thru	Left	U-turn	Total	Right	Thru	Left	U-turn	Total	Right	Thru	Left	U-turn	Total	Right	Thru	Left	U-turn	Total	
Factor	0.96	0.96	0.96	0.96		0.96	0.96	0.96	0.96		1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00		
3:30 PM	0	13	0	0	13	3	21	7	0	31	3	6	0	0	9	1	10	3	0	14	67
3:45 PM	1	8	1	0	10	4	12	8	0	24	2	6	0	0	8	0	4	4	0	8	50
4:00 PM	1	15	0	0	16	6	15	7	1	29	4	9	0	0	13	0	9	2	0	11	69
4:15 PM	1	9	0	0	10	2	19	9	0	30	6	9	0	0	15	0	3	5	0	8	63
Grand Total	3	45	1	0	49	15	67	31	1	114	15	30	0	0	45	1	26	14	0	41	249
Medium Truck %	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Heavy Truck %	33.3	2.2	0.0	0.0	4.1	6.7	1.5	3.2	0.0	2.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Truck %	33.3	2.2	0.0	0.0	4.1	6.7	1.5	3.2	0.0	2.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total %	1.2	18.1	0.4	0.0	19.7	6.0	26.9	12.4	0.4	45.8	6.0	12.0	0.0	0.0	18.1	0.4	10.4	5.6	0.0	16.5	100.0
PHF	0.77	0.77	0.77			0.92	0.92	0.92			0.75	0.75	0.75			0.73	0.73	0.73			0.90



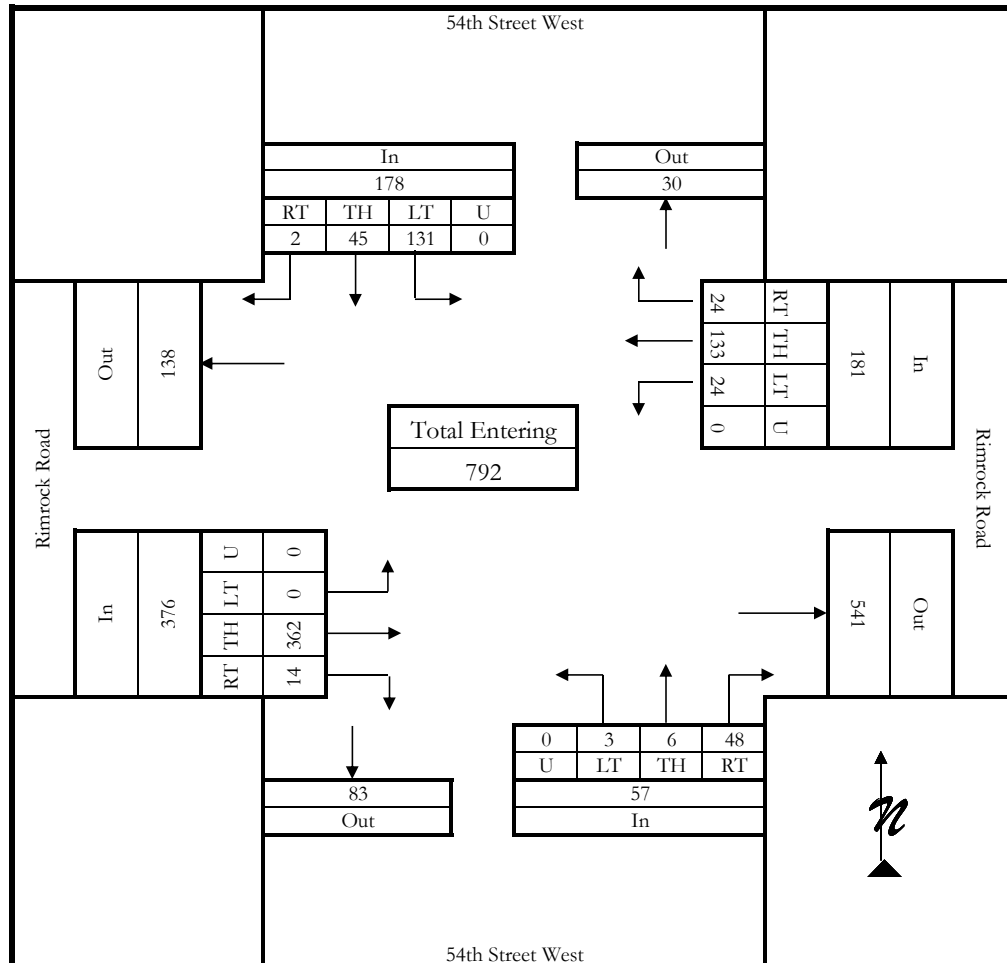
INTERSECTION TURNING MOVEMENT COUNT SUMMARY

General Information

Counted By:	V. Morasko	Intersection:	Rimrock Road & 54th Street West
Agency/Company:	Sanderson Stewart	Jurisdiction:	City of Billings / MDT
Date Performed:	Thursday, May 14, 2015		
Count Time Period:	AM Peak Hour (7:15 - 8:15 AM)		
Project Number:	14063.01	Project Description:	West End Middle School TIS
North/South Street:	54th Street West	East/West Street:	Rimrock Road

Vehicle Volumes and Adjustments

	54th Street West Southbound					54th Street West Northbound					Rimrock Road Eastbound					Rimrock Road Westbound					Int. Total
Start Time	Right	Thru	Left	U-turn	Total	Right	Thru	Left	U-turn	Total	Right	Thru	Left	U-turn	Total	Right	Thru	Left	U-turn	Total	
Factor	1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00		0.96	0.96	0.96	0.96		0.96	0.96	0.96	0.96		
7:15 AM	1	11	34	0	46	6	1	1	0	8	3	80	0	0	83	4	30	3	0	37	174
7:30 AM	0	12	34	0	46	13	1	0	0	14	4	130	0	0	134	6	24	7	0	37	231
7:45 AM	1	15	25	0	41	10	2	1	0	13	4	83	0	0	87	5	39	7	0	51	192
8:00 AM	0	7	38	0	45	19	2	1	0	22	3	69	0	0	72	9	40	7	0	56	195
Grand Total	2	45	131	0	178	48	6	3	0	57	14	362	0	0	376	24	133	24	0	181	792
Medium Truck %	50.0	2.2	0.8	0.0	1.7	8.3	0.0	33.3	0.0	8.8	7.1	3.0	0.0	0.0	3.2	12.5	10.5	12.5	0.0	11.0	
Heavy Truck %	50.0	0.0	0.0	0.0	0.6	4.2	0.0	0.0	0.0	3.5	0.0	0.3	0.0	0.0	0.3	0.0	0.0	4.2	0.0	0.6	
Total Truck %	100.0	2.2	0.8	0.0	2.2	12.5	0.0	33.3	0.0	12.3	7.1	3.3	0.0	0.0	3.5	12.5	10.5	16.7	0.0	11.6	
Total %	0.3	5.7	16.5	0.0	22.5	6.1	0.8	0.4	0.0	7.2	1.8	45.7	0.0	0.0	47.5	3.0	16.8	3.0	0.0	22.9	100.0
PHF	0.97	0.97	0.97			0.65	0.65	0.65			0.70	0.70	0.70			0.81	0.81	0.81			0.86



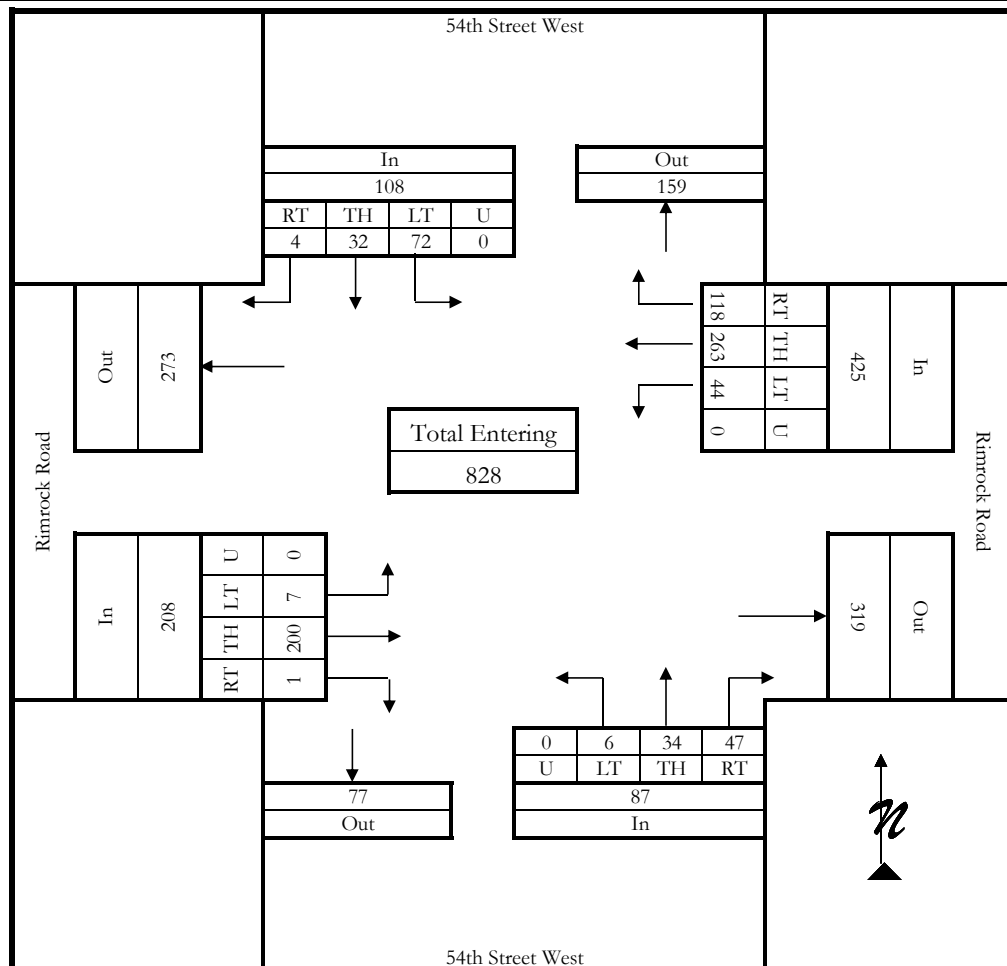
INTERSECTION TURNING MOVEMENT COUNT SUMMARY

General Information

Counted By:	V. Morasko	Intersection:	Rimrock Road & 54th Street West
Agency/Company:	Sanderson Stewart	Jurisdiction:	City of Billings / MDT
Date Performed:	Thursday, May 14, 2015		
Count Time Period:	PM Peak Hour (4:45 - 5:45 PM)		
Project Number:	14063.01	Project Description:	West End Middle School TIS
North/South Street:	54th Street West	East/West Street:	Rimrock Road

Vehicle Volumes and Adjustments

	54th Street West Southbound					54th Street West Northbound					Rimrock Road Eastbound					Rimrock Road Westbound					Int. Total
Start Time	Right	Thru	Left	U-turn	Total	Right	Thru	Left	U-turn	Total	Right	Thru	Left	U-turn	Total	Right	Thru	Left	U-turn	Total	
Factor	1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00		0.96	0.96	0.96	0.96		0.96	0.96	0.96	0.96		
4:45 PM	2	9	14	0	25	15	11	3	0	29	0	45	3	0	48	27	72	6	0	105	207
5:00 PM	0	6	21	0	27	12	6	2	0	20	0	53	1	0	54	32	42	14	0	88	189
5:15 PM	1	7	18	0	26	10	5	1	0	16	0	57	3	0	60	31	76	15	0	122	224
5:30 PM	1	10	19	0	30	10	12	0	0	22	1	45	0	0	46	28	73	9	0	110	208
Grand Total	4	32	72	0	108	47	34	6	0	87	1	200	7	0	208	118	263	44	0	425	828
Medium Truck %	0.0	0.0	1.4	0.0	0.9	4.3	0.0	0.0	0.0	2.3	0.0	2.0	14.3	0.0	2.4	0.0	0.0	4.5	0.0	0.5	
Heavy Truck %	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Truck %	0.0	0.0	1.4	0.0	0.9	4.3	0.0	0.0	0.0	2.3	0.0	2.0	14.3	0.0	2.4	0.0	0.0	4.5	0.0	0.5	
Total %	0.5	3.9	8.7	0.0	13.0	5.7	4.1	0.7	0.0	10.5	0.1	24.2	0.8	0.0	25.1	14.3	31.8	5.3	0.0	51.3	100.0
PHF	0.90	0.90	0.90			0.75	0.75	0.75			0.87	0.87	0.87			0.87	0.87	0.87			0.92



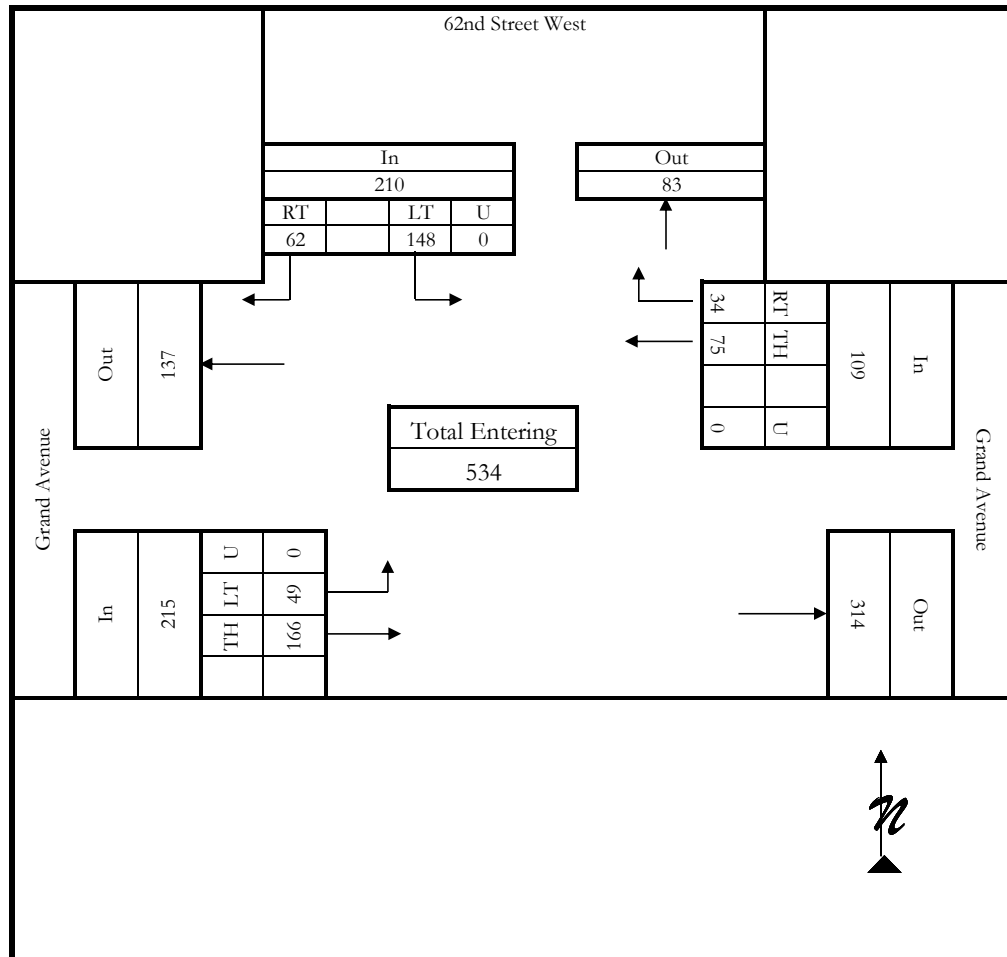
INTERSECTION TURNING MOVEMENT COUNT SUMMARY

General Information

Counted By:	V. Morasko	Intersection:	Grand Avenue & 62nd Street West
Agency/Company:	Sanderson Stewart	Jurisdiction:	City of Billings / MDT
Date Performed:	Tuesday, May 19, 2015		
Count Time Period:	AM Peak Hour (7:15 - 8:15 AM)		
Project Number:	14063.01	Project Description:	West End Middle School TIS
North/South Street:	62nd Street West	East/West Street:	Grand Avenue

Vehicle Volumes and Adjustments

	62nd Street West Southbound					Northbound					Grand Avenue Eastbound					Grand Avenue Westbound					Int. Total
Start Time	Right	Thru	Left	U-turn	Total	Right	Thru	Left	U-turn	Total	Right	Thru	Left	U-turn	Total	Right	Thru	Left	U-turn	Total	
Factor	0.96	0.96	0.96	0.96		0.00	0.00	0.00	0.00		0.96	0.96	0.96	0.96		0.96	0.96	0.96	0.96		
7:15 AM	18	0	29	0	47	0	0	0	0	0	0	38	11	0	49	5	19	0	0	24	120
7:30 AM	9	0	43	0	52	0	0	0	0	0	0	46	16	0	62	8	16	0	0	24	138
7:45 AM	19	0	47	0	66	0	0	0	0	0	0	43	11	0	54	7	20	0	0	27	147
8:00 AM	16	0	29	0	45	0	0	0	0	0	0	39	11	0	50	14	20	0	0	34	129
Grand Total	62	0	148	0	210	0	0	0	0	0	0	166	49	0	215	34	75	0	0	109	534
Medium Truck %	4.8	0.0	1.4	0.0	2.4	0.0	0.0	0.0	0.0	0.0	0.0	4.8	6.1	0.0	5.1	5.9	2.7	0.0	0.0	3.7	
Heavy Truck %	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.9	1.3	0.0	0.0	1.8	
Total Truck %	4.8	0.0	1.4	0.0	2.4	0.0	0.0	0.0	0.0	0.0	0.0	4.8	6.1	0.0	5.1	8.8	4.0	0.0	0.0	5.5	
Total %	11.6	0.0	27.7	0.0	39.3	0.0	0.0	0.0	0.0	0.0	0.0	31.1	9.2	0.0	40.3	6.4	14.0	0.0	0.0	20.4	100.0
PHF	0.80	0.80	0.80			0.00	0.00	0.00			0.87	0.87	0.87			0.80	0.80	0.80			0.91



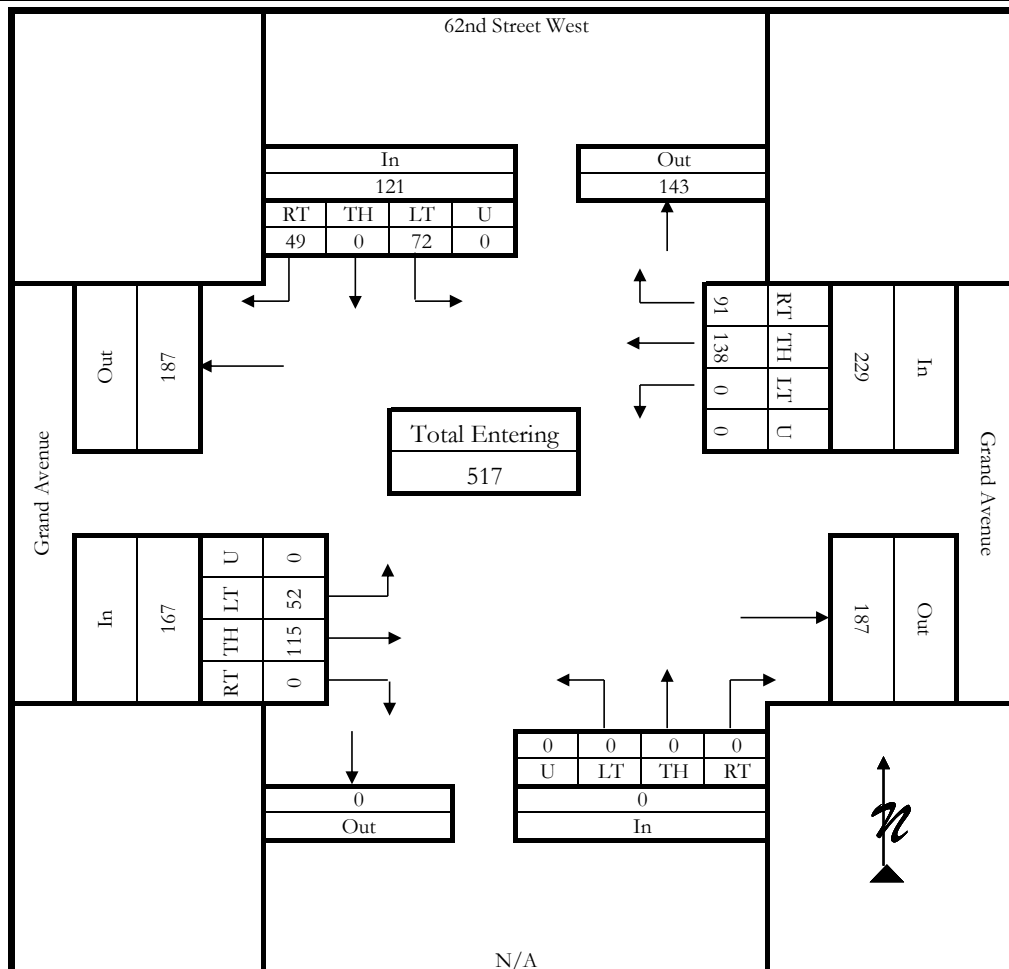
INTERSECTION TURNING MOVEMENT COUNT SUMMARY

General Information

Counted By:	V. Morasko	Intersection:	Grand Avenue & 48th Street West
Agency/Company:	Sanderson Stewart	Jurisdiction:	City of Billings / MDT
Date Performed:	Tuesday, May 19, 2015		
Count Time Period:	PM Peak Hour (4:45 - 5:45 PM)		
Project Number:	15053	Project Description:	West End Multi-Modal Traffic Modeling
North/South Street:	62nd Street West	East/West Street:	Grand Avenue

Vehicle Volumes and Adjustments

	62nd Street West Southbound					N/A Northbound					Grand Avenue Eastbound					Grand Avenue Westbound					Int. Total
Start Time	Right	Thru	Left	U-turn	Total	Right	Thru	Left	U-turn	Total	Right	Thru	Left	U-turn	Total	Right	Thru	Left	U-turn	Total	
Factor	1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00		0.96	0.96	0.96	0.96		0.96	0.96	0.96	0.96		
4:45 PM	11	0	16	0	27	0	0	0	0	0	0	29	15	0	44	22	29	0	0	51	122
5:00 PM	14	0	16	0	30	0	0	0	0	0	0	31	14	0	45	19	33	0	0	52	127
5:15 PM	14	0	27	0	41	0	0	0	0	0	0	27	13	0	40	28	40	0	0	68	149
5:30 PM	10	0	13	0	23	0	0	0	0	0	0	28	10	0	38	22	36	0	0	58	119
Grand Total	49	0	72	0	121	0	0	0	0	0	0	115	52	0	167	91	138	0	0	229	517
Medium Truck %	2.0	0.0	2.8	0.0	2.5	0.0	0.0	0.0	0.0	0.0	0.0	1.7	1.9	0.0	1.8	0.0	0.0	0.0	0.0	0.0	
Heavy Truck %	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.7	0.0	0.0	0.4	
Total Truck %	2.0	0.0	2.8	0.0	2.5	0.0	0.0	0.0	0.0	0.0	0.0	1.7	1.9	0.0	1.8	0.0	0.7	0.0	0.0	0.4	
Total %	9.5	0.0	13.9	0.0	23.4	0.0	0.0	0.0	0.0	0.0	0.0	22.2	10.1	0.0	32.3	17.6	26.7	0.0	0.0	44.3	100.0
PHF	0.74	0.74	0.74			0.00	0.00	0.00			0.93	0.93	0.93			0.84	0.84	0.84			0.87



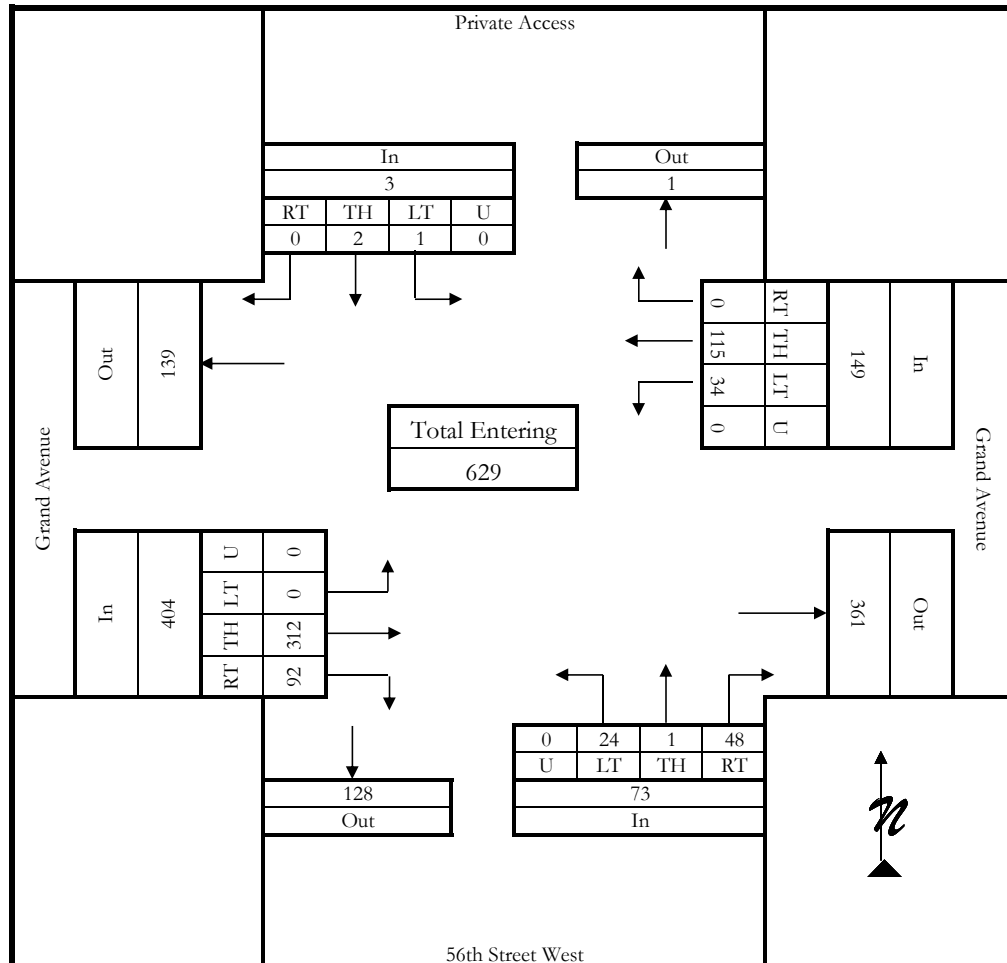
INTERSECTION TURNING MOVEMENT COUNT SUMMARY

General Information

Counted By:	V. Morasko	Intersection:	Grand Avenue & 56th Street West
Agency/Company:	Sanderson Stewart	Jurisdiction:	City of Billings / MDT
Date Performed:	Tuesday, May 19, 2015		
Count Time Period:	AM Peak Hour (7:15 - 8:15 AM)		
Project Number:	14063.01	Project Description:	West End Middle School TIS
North/South Street:	56th Street West	East/West Street:	Grand Avenue

Vehicle Volumes and Adjustments

	Private Access Southbound					56th Street West Northbound					Grand Avenue Eastbound					Grand Avenue Westbound					Int. Total
Start Time	Right	Thru	Left	U-turn	Total	Right	Thru	Left	U-turn	Total	Right	Thru	Left	U-turn	Total	Right	Thru	Left	U-turn	Total	
Factor	1.00	1.00	1.00	1.00		0.96	0.96	0.96	0.96		0.96	0.96	0.96	0.96		0.96	0.96	0.96	0.96		
7:15 AM	0	0	1	0	1	9	0	4	0	13	18	72	0	0	90	0	28	9	0	37	141
7:30 AM	0	0	0	0	0	10	1	4	0	15	28	86	0	0	114	0	27	7	0	34	163
7:45 AM	0	2	0	0	2	17	0	7	0	24	30	83	0	0	113	0	24	14	0	38	177
8:00 AM	0	0	0	0	0	12	0	9	0	21	16	71	0	0	87	0	36	4	0	40	148
Grand Total	0	2	1	0	3	48	1	24	0	73	92	312	0	0	404	0	115	34	0	149	629
Medium Truck %	0.0	0.0	0.0	0.0	0.0	18.8	100.0	4.2	0.0	15.1	2.2	1.9	0.0	0.0	2.0	0.0	7.8	2.9	0.0	6.7	
Heavy Truck %	0.0	0.0	0.0	0.0	0.0	6.3	0.0	0.0	0.0	4.1	0.0	0.0	0.0	0.0	0.0	0.0	0.9	8.8	0.0	2.7	
Total Truck %	0.0	0.0	0.0	0.0	0.0	25.0	100.0	4.2	0.0	19.2	2.2	1.9	0.0	0.0	2.0	0.0	8.7	11.8	0.0	9.4	
Total %	0.0	0.3	0.2	0.0	0.5	7.6	0.2	3.8	0.0	11.6	14.6	49.6	0.0	0.0	64.2	0.0	18.3	5.4	0.0	23.7	100.0
PHF	0.38	0.38	0.38			0.76	0.76	0.76			0.89	0.89	0.89			0.93	0.93	0.93			0.89



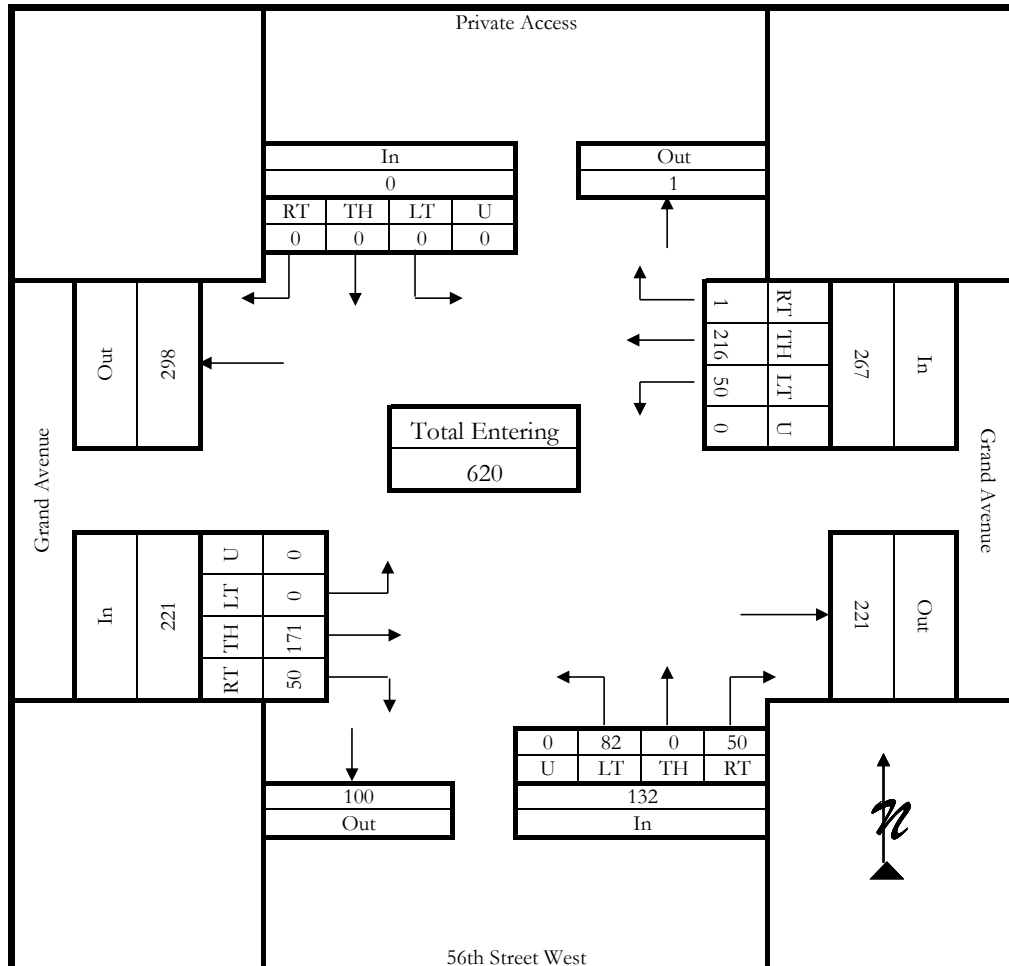
INTERSECTION TURNING MOVEMENT COUNT SUMMARY

General Information

Counted By:	V. Morasko	Intersection:	Grand Avenue & 56th Street West
Agency/Company:	Sanderson Stewart	Jurisdiction:	City of Billings / MDT
Date Performed:	Tuesday, May 19, 2015		
Count Time Period:	PM Peak Hour (4:45 - 5:45 PM)		
Project Number:	15053	Project Description:	West End Multi-Modal Traffic Modeling
North/South Street:	56th Street West	East/West Street:	Grand Avenue

Vehicle Volumes and Adjustments

	Private Access Southbound					56th Street West Northbound					Grand Avenue Eastbound					Grand Avenue Westbound					Int. Total
Start Time	Right	Thru	Left	U-turn	Total	Right	Thru	Left	U-turn	Total	Right	Thru	Left	U-turn	Total	Right	Thru	Left	U-turn	Total	
Factor	1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00		0.96	0.96	0.96	0.96		0.96	0.96	0.96	0.96		
4:45 PM	0	0	0	0	0	8	0	16	0	24	11	43	0	0	54	0	50	9	0	59	137
5:00 PM	0	0	0	0	0	18	0	16	0	34	17	47	0	0	64	1	52	16	0	69	167
5:15 PM	0	0	0	0	0	14	0	30	0	44	14	41	0	0	55	0	58	14	0	72	171
5:30 PM	0	0	0	0	0	10	0	20	0	30	8	40	0	0	48	0	56	11	0	67	145
Grand Total	0	0	0	0	0	50	0	82	0	132	50	171	0	0	221	1	216	50	0	267	620
Medium Truck %	0.0	0.0	0.0	0.0	0.0	6.0	0.0	0.0	0.0	2.3	2.0	2.3	0.0	0.0	2.3	0.0	0.0	16.0	0.0	3.0	
Heavy Truck %	0.0	0.0	0.0	0.0	0.0	2.0	0.0	0.0	0.0	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.5	2.0	0.0	0.7	
Total Truck %	0.0	0.0	0.0	0.0	0.0	8.0	0.0	0.0	0.0	3.0	2.0	2.3	0.0	0.0	2.3	0.0	0.5	18.0	0.0	3.7	
Total %	0.0	0.0	0.0	0.0	0.0	8.1	0.0	13.2	0.0	21.3	8.1	27.6	0.0	0.0	35.6	0.2	34.8	8.1	0.0	43.1	100.0
PHF	0.00	0.00	0.00			0.75	0.75	0.75			0.86	0.86	0.86			0.93	0.93	0.93			0.91



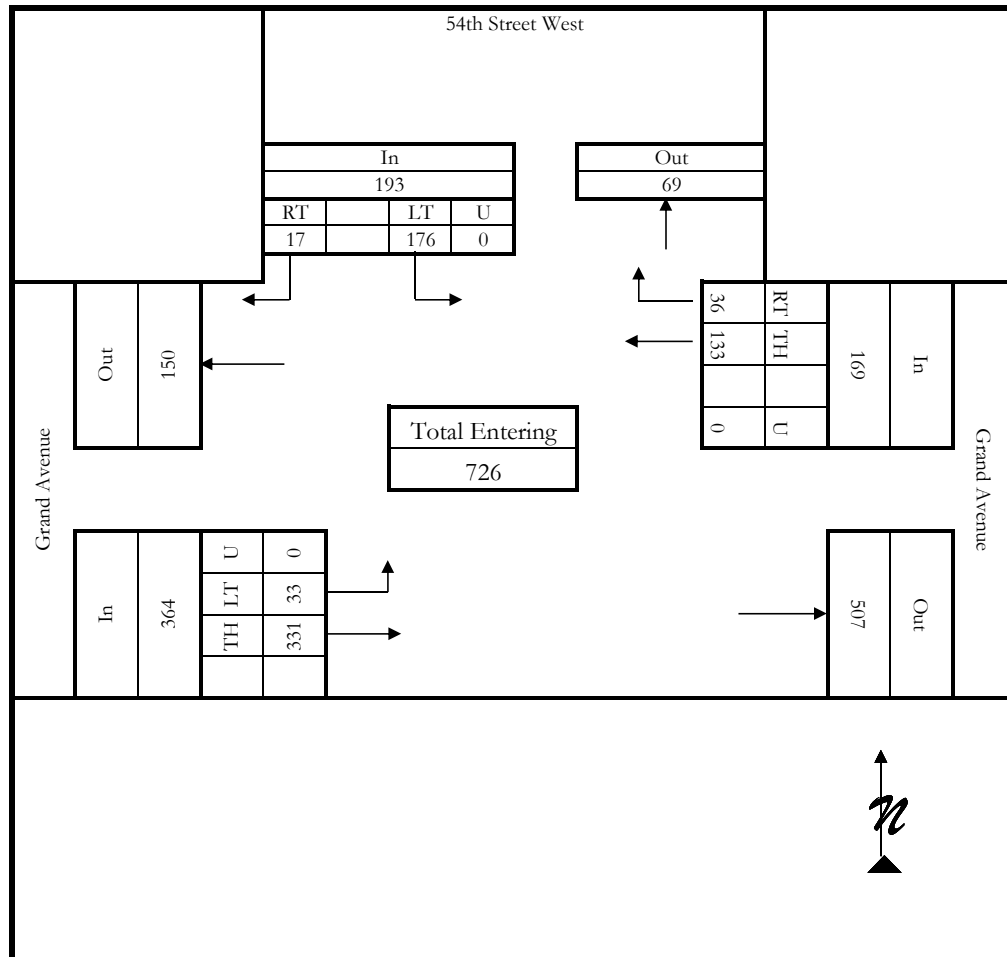
INTERSECTION TURNING MOVEMENT COUNT SUMMARY

General Information

Counted By:	V. Morasko	Intersection:	Grand Avenue & 54th Street West
Agency/Company:	Sanderson Stewart	Jurisdiction:	City of Billings / MDT
Date Performed:	Tuesday, May 19, 2015		
Count Time Period:	AM Peak Hour (7:15 - 8:15 AM)		
Project Number:	14063.01	Project Description:	West End Middle School TIS
North/South Street:	54th Street West	East/West Street:	Grand Avenue

Vehicle Volumes and Adjustments

	54th Street West Southbound					Northbound					Grand Avenue Eastbound					Grand Avenue Westbound					Int. Total
Start Time	Right	Thru	Left	U-turn	Total	Right	Thru	Left	U-turn	Total	Right	Thru	Left	U-turn	Total	Right	Thru	Left	U-turn	Total	
Factor	1.00	1.00	1.00	1.00		0.00	0.00	0.00	0.00		0.96	0.96	0.96	0.96		0.96	0.96	0.96	0.96		
7:15 AM	2	0	44	0	46	0	0	0	0	0	0	75	7	0	82	7	36	0	0	43	171
7:30 AM	5	0	45	0	50	0	0	0	0	0	0	86	10	0	96	7	31	0	0	38	184
7:45 AM	9	0	42	0	51	0	0	0	0	0	0	93	5	0	98	8	27	0	0	35	184
8:00 AM	1	0	45	0	46	0	0	0	0	0	0	77	11	0	88	14	39	0	0	53	187
Grand Total	17	0	176	0	193	0	0	0	0	0	0	331	33	0	364	36	133	0	0	169	726
Medium Truck %	0.0	0.0	2.8	0.0	2.6	0.0	0.0	0.0	0.0	0.0	0.0	2.4	24.2	0.0	4.4	22.2	8.3	0.0	0.0	11.2	
Heavy Truck %	5.9	0.0	0.0	0.0	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.1	0.0	0.5	0.0	1.5	0.0	0.0	1.2	
Total Truck %	5.9	0.0	2.8	0.0	3.1	0.0	0.0	0.0	0.0	0.0	0.0	2.4	30.3	0.0	4.9	22.2	9.8	0.0	0.0	12.4	
Total %	2.3	0.0	24.2	0.0	26.6	0.0	0.0	0.0	0.0	0.0	0.0	45.6	4.5	0.0	50.1	5.0	18.3	0.0	0.0	23.3	100.0
PHF	0.95	0.95	0.95			0.00	0.00	0.00			0.93	0.93	0.93			0.80	0.80	0.80			0.97



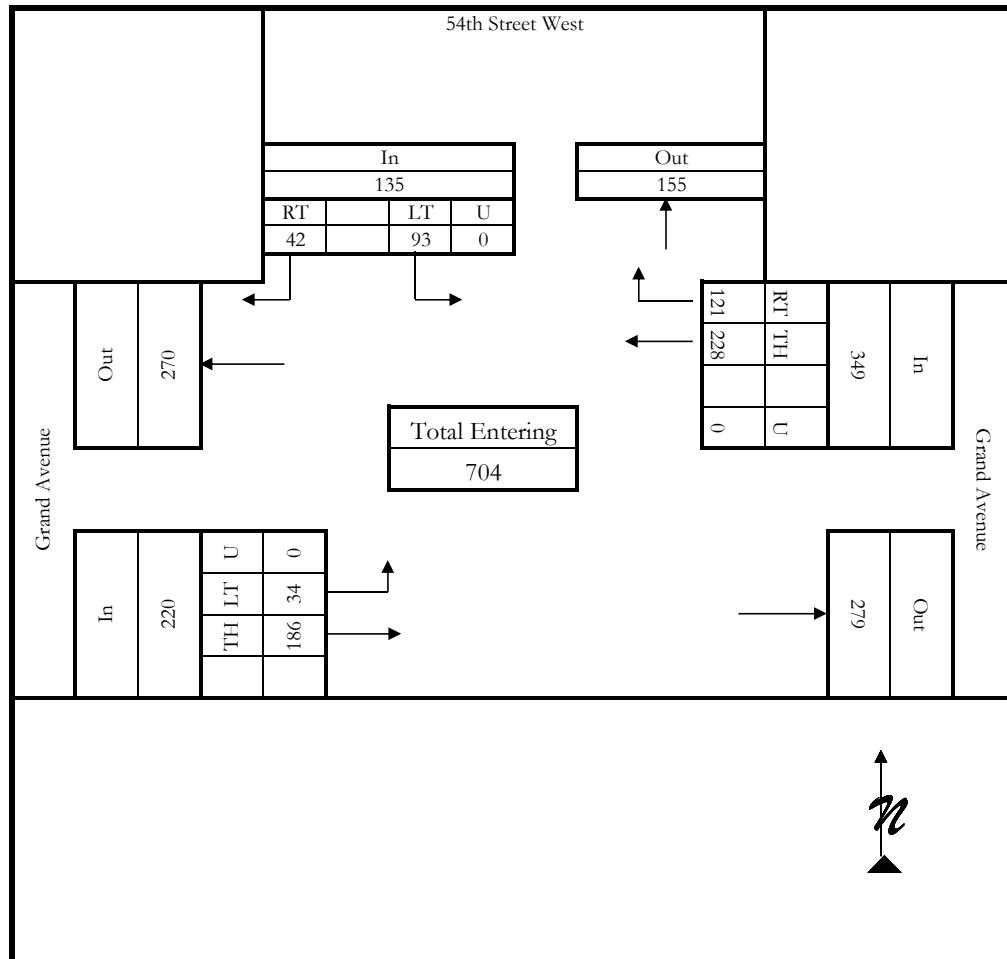
INTERSECTION TURNING MOVEMENT COUNT SUMMARY

General Information

Counted By:	V. Morasko	Intersection:	Grand Avenue & 54th Street West
Agency/Company:	Sanderson Stewart	Jurisdiction:	City of Billings / MDT
Date Performed:	Tuesday, May 19, 2015		
Count Time Period:	PM Peak Hour (4:45 - 5:45 PM)		
Project Number:	14063.01	Project Description:	West End Middle School TIS
North/South Street:	54th Street West	East/West Street:	Grand Avenue

Vehicle Volumes and Adjustments

	54th Street West Southbound					Northbound					Grand Avenue Eastbound					Grand Avenue Westbound					Int. Total
Start Time	Right	Thru	Left	U-turn	Total	Right	Thru	Left	U-turn	Total	Right	Thru	Left	U-turn	Total	Right	Thru	Left	U-turn	Total	
Factor	1.00	1.00	1.00	1.00		0.00	0.00	0.00	0.00		0.96	0.96	0.96	0.96		0.96	0.96	0.96	0.96		
4:45 PM	9	0	27	0	36	0	0	0	0	0	0	49	4	0	53	30	51	0	0	81	170
5:00 PM	9	0	23	0	32	0	0	0	0	0	0	53	13	0	66	24	62	0	0	86	184
5:15 PM	12	0	18	0	30	0	0	0	0	0	0	42	11	0	53	33	61	0	0	94	177
5:30 PM	12	0	25	0	37	0	0	0	0	0	0	42	6	0	48	34	54	0	0	88	173
Grand Total	42	0	93	0	135	0	0	0	0	0	0	186	34	0	220	121	228	0	0	349	704
Medium Truck %	16.7	0.0	1.1	0.0	5.9	0.0	0.0	0.0	0.0	0.0	0.0	2.7	2.9	0.0	2.7	0.8	0.0	0.0	0.0	0.3	
Heavy Truck %	2.4	0.0	0.0	0.0	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.0	0.0	0.5	0.0	0.9	0.0	0.0	0.6	
Total Truck %	19.0	0.0	1.1	0.0	6.7	0.0	0.0	0.0	0.0	0.0	0.0	3.2	2.9	0.0	3.2	0.8	0.9	0.0	0.0	0.9	
Total %	6.0	0.0	13.2	0.0	19.2	0.0	0.0	0.0	0.0	0.0	0.0	26.4	4.8	0.0	31.3	17.2	32.4	0.0	0.0	49.6	100.0
PHF	0.91	0.91	0.91			0.00	0.00	0.00			0.83	0.83	0.83			0.93	0.93	0.93			0.96



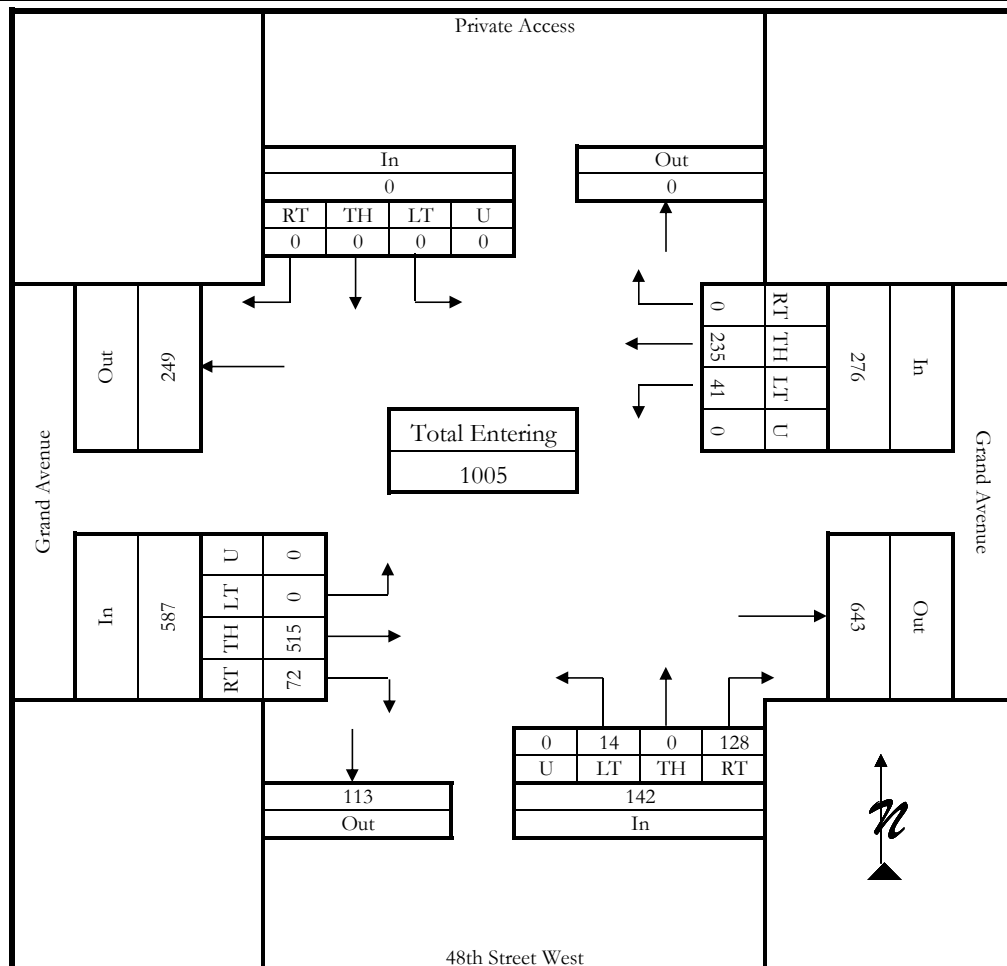
INTERSECTION TURNING MOVEMENT COUNT SUMMARY

General Information

Counted By:	V. Morasko	Intersection:	Grand Avenue & 48th Street West
Agency/Company:	Sanderson Stewart	Jurisdiction:	City of Billings / MDT
Date Performed:	Tuesday, May 19, 2015		
Count Time Period:	AM Peak Hour (7:15 - 8:15 AM)		
Project Number:	14063.01	Project Description:	West End Middle School TIS
North/South Street:	48th Street West	East/West Street:	Grand Avenue

Vehicle Volumes and Adjustments

	Private Access Southbound					48th Street West Northbound					Grand Avenue Eastbound					Grand Avenue Westbound					Int. Total
Start Time	Right	Thru	Left	U-turn	Total	Right	Thru	Left	U-turn	Total	Right	Thru	Left	U-turn	Total	Right	Thru	Left	U-turn	Total	
Factor	1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00		0.96	0.96	0.96	0.96		0.96	0.96	0.96	0.96		
7:15 AM	0	0	0	0	0	26	0	2	0	28	19	110	0	0	129	0	51	5	0	56	213
7:30 AM	0	0	0	0	0	29	0	6	0	35	10	131	0	0	141	0	39	3	0	42	218
7:45 AM	0	0	0	0	0	36	0	6	0	42	19	135	0	0	154	0	61	15	0	76	272
8:00 AM	0	0	0	0	0	37	0	0	0	37	24	139	0	0	163	0	84	18	0	102	302
Grand Total	0	0	0	0	0	128	0	14	0	142	72	515	0	0	587	0	235	41	0	276	1005
Medium Truck %	0.0	0.0	0.0	0.0	0.0	0.8	0.0	7.1	0.0	1.4	1.4	2.1	0.0	0.0	2.0	0.0	5.5	2.4	0.0	5.1	
Heavy Truck %	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.9	0.0	0.0	0.7	
Total Truck %	0.0	0.0	0.0	0.0	0.0	0.8	0.0	7.1	0.0	1.4	1.4	2.1	0.0	0.0	2.0	0.0	6.4	2.4	0.0	5.8	
Total %	0.0	0.0	0.0	0.0	0.0	12.7	0.0	1.4	0.0	14.1	7.2	51.2	0.0	0.0	58.4	0.0	23.4	4.1	0.0	27.5	100.0
PHF	0.00	0.00	0.00			0.85	0.85	0.85			0.90	0.90	0.90			0.68	0.68	0.68			0.83



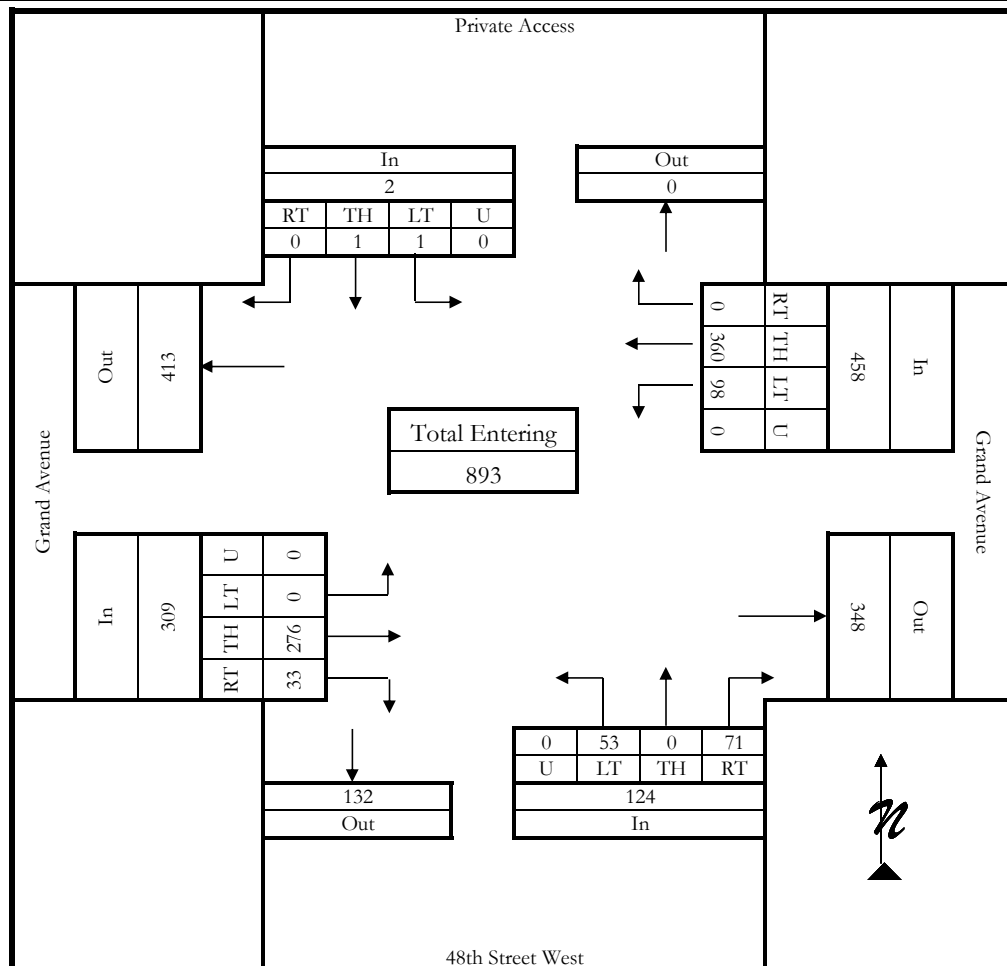
INTERSECTION TURNING MOVEMENT COUNT SUMMARY

General Information

Counted By:	V. Morasko	Intersection:	Grand Avenue & 48th Street West
Agency/Company:	Sanderson Stewart	Jurisdiction:	City of Billings / MDT
Date Performed:	Tuesday, May 19, 2015		
Count Time Period:	PM Peak Hour (4:45 - 5:45 PM)		
Project Number:	14063.01	Project Description:	West End Middle School TIS
North/South Street:	48th Street West	East/West Street:	Grand Avenue

Vehicle Volumes and Adjustments

	Private Access Southbound					48th Street West Northbound					Grand Avenue Eastbound					Grand Avenue Westbound					Int. Total
Start Time	Right	Thru	Left	U-turn	Total	Right	Thru	Left	U-turn	Total	Right	Thru	Left	U-turn	Total	Right	Thru	Left	U-turn	Total	
Factor	1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00		0.96	0.96	0.96	0.96		0.96	0.96	0.96	0.96		
4:45 PM	0	0	0	0	0	15	0	13	0	28	10	73	0	0	83	0	80	21	0	101	212
5:00 PM	0	0	0	0	0	22	0	13	0	35	7	76	0	0	83	0	93	26	0	119	237
5:15 PM	0	1	1	0	2	17	0	16	0	33	8	60	0	0	68	0	95	25	0	120	223
5:30 PM	0	0	0	0	0	17	0	11	0	28	8	67	0	0	75	0	92	26	0	118	221
Grand Total	0	1	1	0	2	71	0	53	0	124	33	276	0	0	309	0	360	98	0	458	893
Medium Truck %	0.0	0.0	0.0	0.0	0.0	2.8	0.0	0.0	0.0	1.6	3.0	1.8	0.0	0.0	1.9	0.0	0.3	0.0	0.0	0.2	
Heavy Truck %	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.0	0.0	0.3	0.0	0.6	0.0	0.0	0.4	
Total Truck %	0.0	0.0	0.0	0.0	0.0	2.8	0.0	0.0	0.0	1.6	3.0	2.2	0.0	0.0	2.3	0.0	0.8	0.0	0.0	0.7	
Total %	0.0	0.1	0.1	0.0	0.2	8.0	0.0	5.9	0.0	13.9	3.7	30.9	0.0	0.0	34.6	0.0	40.3	11.0	0.0	51.3	100.0
PHF	0.25	0.25	0.25			0.89	0.89	0.89			0.93	0.93	0.93			0.95	0.95	0.95			0.94



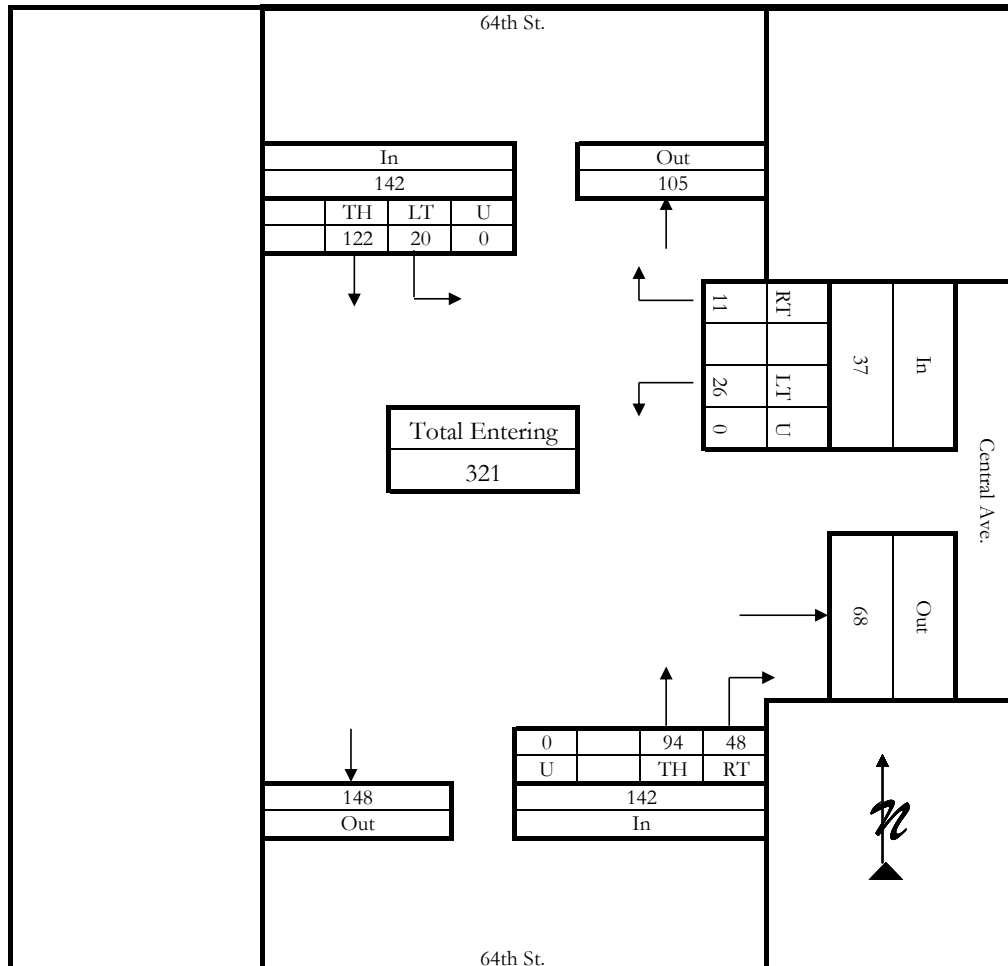
INTERSECTION TURNING MOVEMENT COUNT SUMMARY

General Information

Counted By:	J. Staszczuk	Intersection:	Central Ave. & 64th St.
Agency/Company:	Sanderson Stewart	Jurisdiction:	City of Billings / MDT
Date Performed:	Thursday, January 21, 2016		
Count Time Period:	AM Peak Hour (7:15 - 8:15 AM)		
Project Number:	15053	Project Description:	West End Multi-Modal Traffic Modeling
North/South Street:	64th St.	East/West Street:	Central Ave.

Vehicle Volumes and Adjustments

	64th St. Southbound					64th St. Northbound					N/A Eastbound					Central Ave. Westbound					Int. Total
Start Time	Right	Thru	Left	U-turn	Total	Right	Thru	Left	U-turn	Total	Right	Thru	Left	U-turn	Total	Right	Thru	Left	U-turn	Total	
Factor	1.12	1.12	1.12	1.12		1.12	1.12	1.12	1.12		0.00	0.00	0.00	0.00		1.12	1.12	1.12	1.12		
7:15 AM	0	26	8	0	34	9	16	0	0	25	0	0	0	0	0	1	0	3	0	4	63
7:30 AM	0	31	3	0	34	8	17	0	0	25	0	0	0	0	0	4	0	7	0	11	70
7:45 AM	0	41	9	0	50	15	30	0	0	45	0	0	0	0	0	6	0	10	0	16	111
8:00 AM	0	24	0	0	24	16	31	0	0	47	0	0	0	0	0	0	0	6	0	6	77
Grand Total	0	122	20	0	142	48	94	0	0	142	0	0	0	0	0	11	0	26	0	37	321
Medium Truck %	0.0	0.8	0.0	0.0	0.7	0.0	1.1	0.0	0.0	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Heavy Truck %	0.0	0.0	0.0	0.0	0.0	0.0	2.1	0.0	0.0	1.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Truck %	0.0	0.8	0.0	0.0	0.7	0.0	3.2	0.0	0.0	2.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total %	0.0	38.0	6.2	0.0	44.2	15.0	29.3	0.0	0.0	44.2	0.0	0.0	0.0	0.0	0.0	3.4	0.0	8.1	0.0	11.5	100.0
PHF	0.71	0.71	0.71			0.76	0.76	0.76			0.00	0.00	0.00			0.58	0.58	0.58			0.72



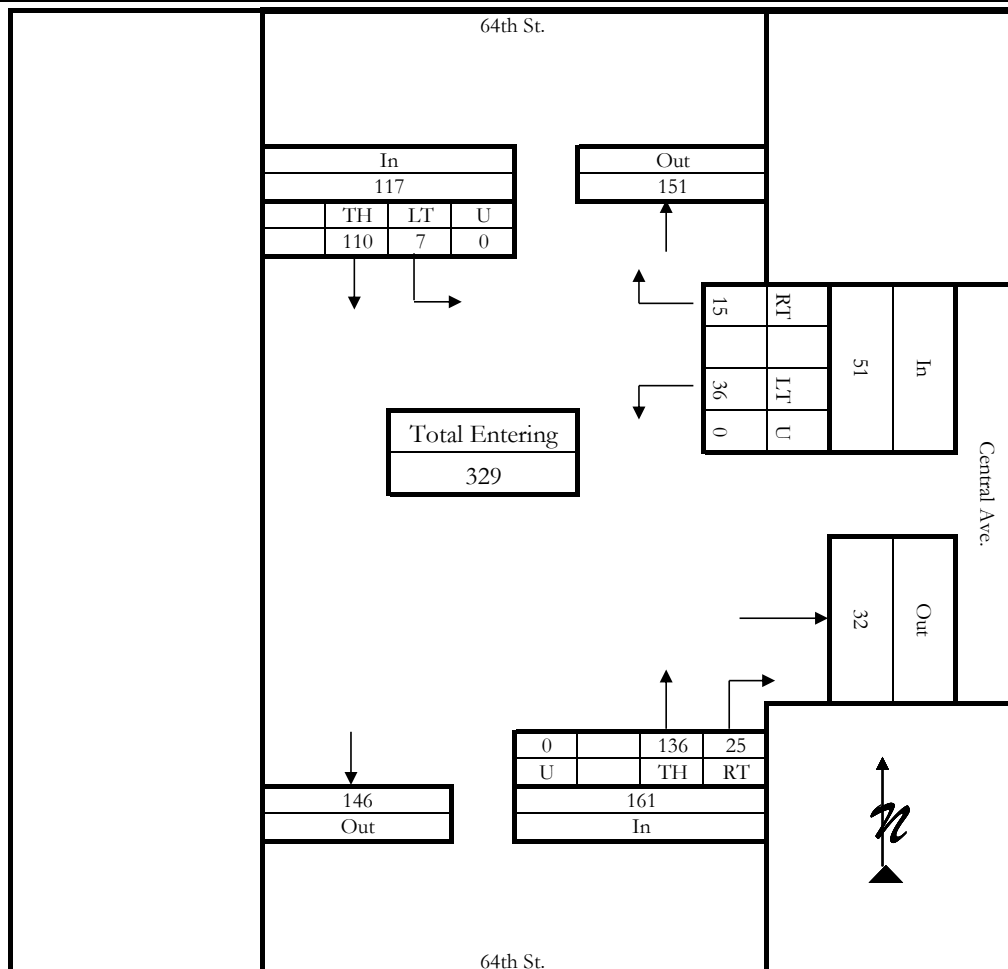
INTERSECTION TURNING MOVEMENT COUNT SUMMARY

General Information

Counted By:	J. Staszczuk	Intersection:	Central Ave. & 64th St.
Agency/Company:	Sanderson Stewart	Jurisdiction:	City of Billings / MDT
Date Performed:	Thursday, January 21, 2016		
Count Time Period:	PM Peak Hour (4:45 - 5:45 PM)		
Project Number:	15053	Project Description:	West End Multi-Modal Traffic Modeling
North/South Street:	64th St.	East/West Street:	Central Ave.

Vehicle Volumes and Adjustments

	64th St. Southbound					64th St. Northbound					N/A Eastbound					Central Ave. Westbound					Int. Total
Start Time	Right	Thru	Left	U-turn	Total	Right	Thru	Left	U-turn	Total	Right	Thru	Left	U-turn	Total	Right	Thru	Left	U-turn	Total	
Factor	1.12	1.12	1.12	1.12		1.12	1.12	1.12	1.12		0.00	0.00	0.00	0.00		1.12	1.12	1.12	1.12		
4:45 PM	0	29	2	0	31	2	32	0	0	34	0	0	0	0	0	4	0	8	0	12	77
5:00 PM	0	39	2	0	41	7	34	0	0	41	0	0	0	0	0	3	0	15	0	18	100
5:15 PM	0	21	1	0	22	7	40	0	0	47	0	0	0	0	0	4	0	7	0	11	80
5:30 PM	0	21	2	0	23	9	30	0	0	39	0	0	0	0	0	4	0	6	0	10	72
Grand Total	0	110	7	0	117	25	136	0	0	161	0	0	0	0	0	15	0	36	0	51	329
Medium Truck %	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Heavy Truck %	0.0	0.9	0.0	0.0	0.9	4.0	0.0	0.0	0.0	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Truck %	0.0	0.9	0.0	0.0	0.9	4.0	0.0	0.0	0.0	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total %	0.0	33.4	2.1	0.0	35.6	7.6	41.3	0.0	0.0	48.9	0.0	0.0	0.0	0.0	0.0	4.6	0.0	10.9	0.0	15.5	100.0
PHF	0.71	0.71	0.71			0.86	0.86	0.86			0.00	0.00	0.00			0.71	0.71	0.71			0.82



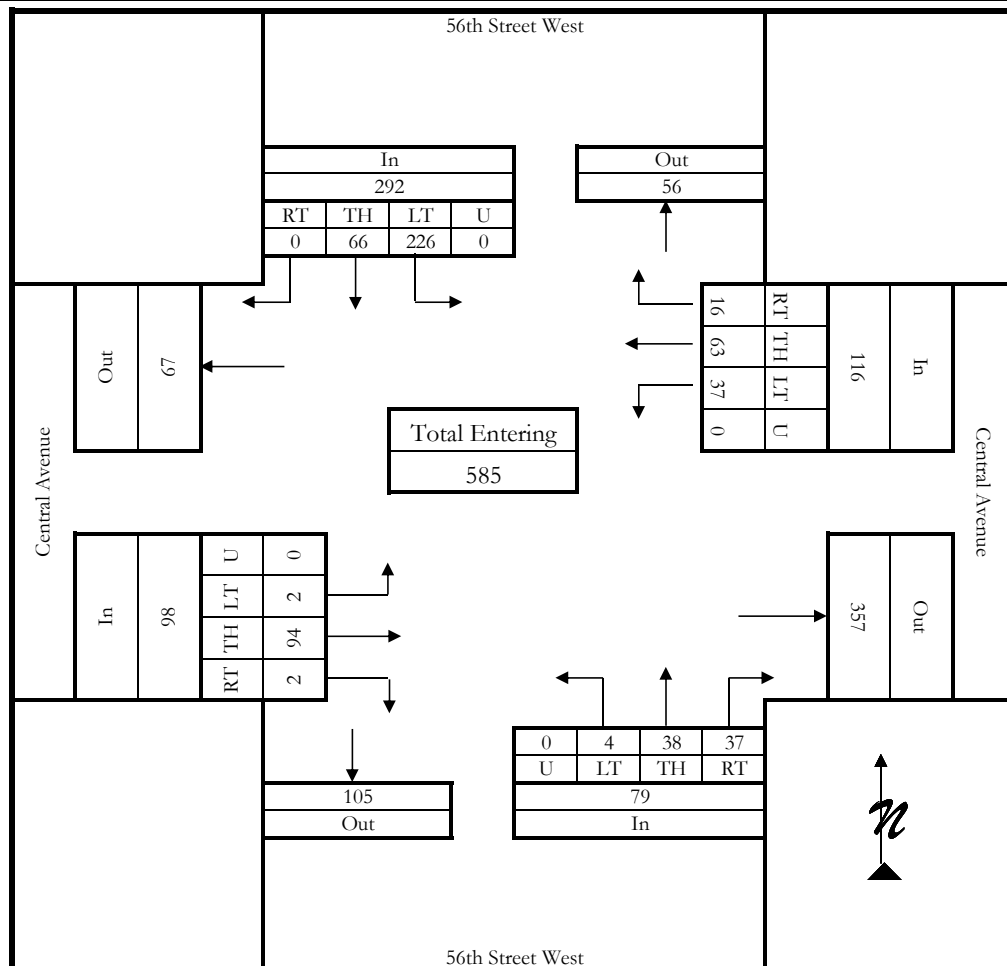
INTERSECTION TURNING MOVEMENT COUNT SUMMARY

General Information

Counted By:	V. Morasko	Intersection:	Central Avenue & 56th Street West
Agency/Company:	Sanderson Stewart	Jurisdiction:	City of Billings / MDT
Date Performed:	Tuesday, April 14, 2015		
Count Time Period:	AM Peak Hour (7:15 - 8:15 AM)		
Project Number:	14063.01	Project Description:	West End Middle School TIS
North/South Street:	56th Street West	East/West Street:	Central Avenue

Vehicle Volumes and Adjustments

	56th Street West Southbound					56th Street West Northbound					Central Avenue Eastbound					Central Avenue Westbound					Int. Total
Start Time	Right	Thru	Left	U-turn	Total	Right	Thru	Left	U-turn	Total	Right	Thru	Left	U-turn	Total	Right	Thru	Left	U-turn	Total	
Factor	0.99	0.99	0.99	0.99		0.99	0.99	0.99	0.99		0.99	0.99	0.99	0.99		0.99	0.99	0.99	0.99		
7:15 AM	0	18	51	0	69	7	7	2	0	16	1	16	0	0	17	4	16	7	0	27	129
7:30 AM	0	15	72	0	87	10	6	0	0	16	1	26	1	0	28	4	7	8	0	19	150
7:45 AM	0	16	53	0	69	9	9	1	0	19	0	30	1	0	31	5	24	15	0	44	163
8:00 AM	0	17	50	0	67	11	16	1	0	28	0	22	0	0	22	3	16	7	0	26	143
Grand Total	0	66	226	0	292	37	38	4	0	79	2	94	2	0	98	16	63	37	0	116	585
Medium Truck %	0.0	3.0	2.7	0.0	2.7	2.7	13.2	0.0	0.0	7.6	0.0	3.2	0.0	0.0	3.1	18.8	1.6	2.7	0.0	4.3	
Heavy Truck %	0.0	4.5	0.0	0.0	1.0	5.4	5.3	0.0	0.0	5.1	0.0	1.1	0.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0	
Total Truck %	0.0	7.6	2.7	0.0	3.8	8.1	18.4	0.0	0.0	12.7	0.0	4.3	0.0	0.0	4.1	18.8	1.6	2.7	0.0	4.3	
Total %	0.0	11.3	38.6	0.0	49.9	6.3	6.5	0.7	0.0	13.5	0.3	16.1	0.3	0.0	16.8	2.7	10.8	6.3	0.0	19.8	100.0
PHF	0.84	0.84	0.84			0.71	0.71	0.71			0.79	0.79	0.79			0.66	0.66	0.66			0.90



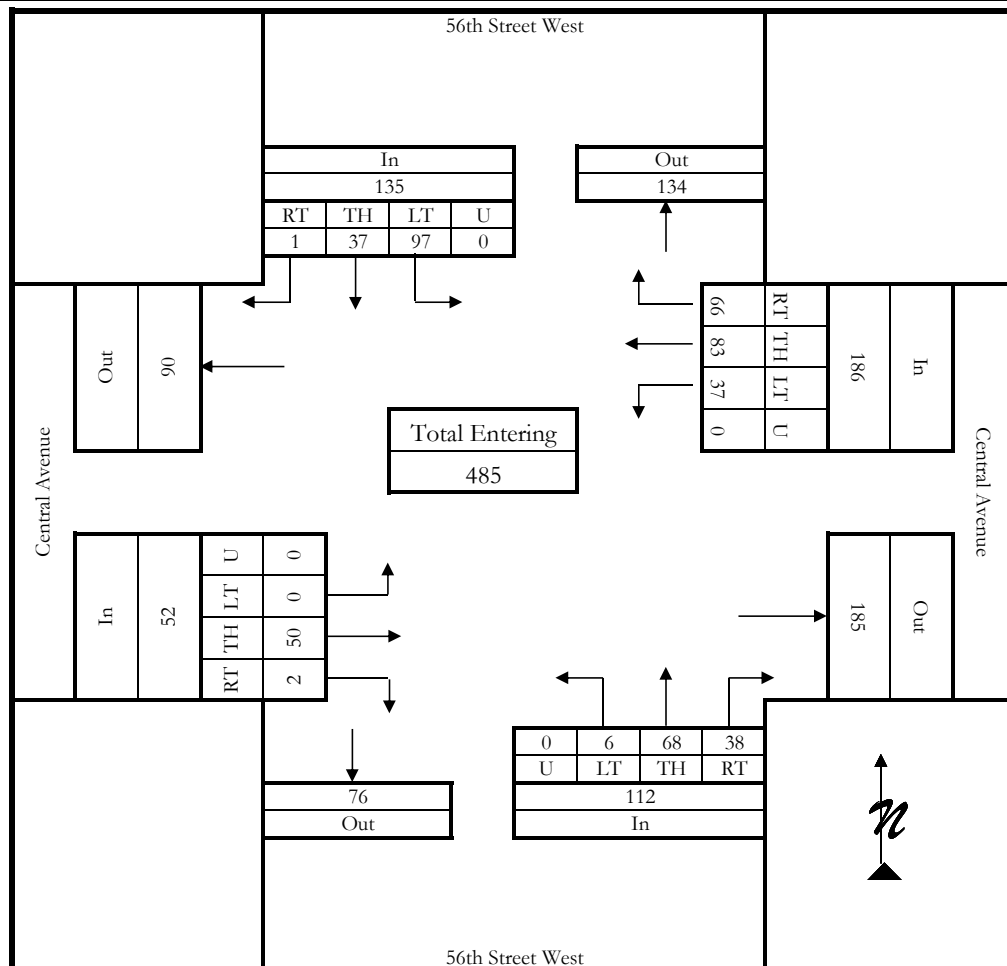
INTERSECTION TURNING MOVEMENT COUNT SUMMARY

General Information

Counted By:	V. Morasko	Intersection:	Central Avenue & 56th Street West
Agency/Company:	Sanderson Stewart	Jurisdiction:	City of Billings / MDT
Date Performed:	Tuesday, April 14, 2015		
Count Time Period:	PM Peak Hour (5:00 - 6:00 PM)		
Project Number:	HSIP 56(82)	Project Description:	SF 139 - Rndabout Central & 56th
North/South Street:	56th Street West	East/West Street:	Central Avenue

Vehicle Volumes and Adjustments

	56th Street West Southbound					56th Street West Northbound					Central Avenue Eastbound					Central Avenue Westbound					Int. Total
Start Time	Right	Thru	Left	U-turn	Total	Right	Thru	Left	U-turn	Total	Right	Thru	Left	U-turn	Total	Right	Thru	Left	U-turn	Total	
Factor	0.99	0.99	0.99	0.99		0.99	0.99	0.99	0.99		0.99	0.99	0.99	0.99		0.99	0.99	0.99	0.99		
4:45 PM	0	11	27	0	38	6	12	1	0	19	0	10	0	0	10	13	25	4	0	42	109
5:00 PM	1	4	26	0	31	2	16	5	0	23	0	18	0	0	18	11	22	13	0	46	118
5:15 PM	0	11	22	0	33	15	20	0	0	35	1	11	0	0	12	21	18	10	0	49	129
5:30 PM	0	11	22	0	33	15	20	0	0	35	1	11	0	0	12	21	18	10	0	49	129
Grand Total	1	37	97	0	135	38	68	6	0	112	2	50	0	0	52	66	83	37	0	186	485
Medium Truck %	0.0	0.0	1.0	0.0	0.7	5.3	1.5	16.7	0.0	3.6	0.0	2.0	0.0	0.0	1.9	0.0	0.0	0.0	0.0	0.0	
Heavy Truck %	0.0	0.0	0.0	0.0	0.0	0.0	2.9	0.0	0.0	1.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Truck %	0.0	0.0	1.0	0.0	0.7	5.3	4.4	16.7	0.0	5.4	0.0	2.0	0.0	0.0	1.9	0.0	0.0	0.0	0.0	0.0	
Total %	0.2	7.6	20.0	0.0	27.8	7.8	14.0	1.2	0.0	23.1	0.4	10.3	0.0	0.0	10.7	13.6	17.1	7.6	0.0	38.4	100.0
PHF	0.89	0.89	0.89			0.80	0.80	0.80			0.72	0.72	0.72			0.95	0.95	0.95			0.94



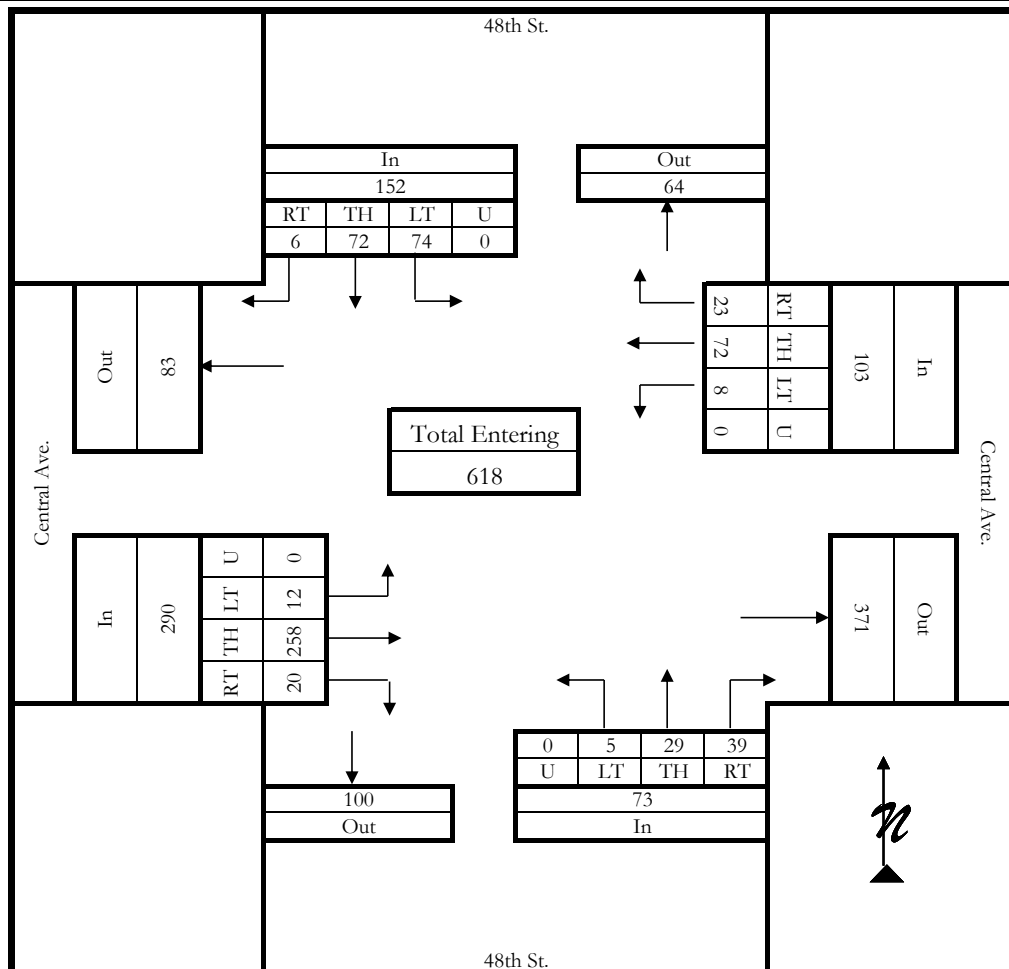
INTERSECTION TURNING MOVEMENT COUNT SUMMARY

General Information

Counted By:	J. Staszczuk	Intersection:	Central Ave. & 48th St.
Agency/Company:	Sanderson Stewart	Jurisdiction:	City of Billings / MDT
Date Performed:	Thursday, January 21, 2016		
Count Time Period:	AM Peak Hour (7:15 - 8:15 AM)		
Project Number:	15053	Project Description:	West End Multi-Modal Traffic Modeling
North/South Street:	48th St.	East/West Street:	Central Ave.

Vehicle Volumes and Adjustments

	48th St. Southbound					48th St. Northbound					Central Ave. Eastbound					Central Ave. Westbound					Int. Total
Start Time	Right	Thru	Left	U-turn	Total	Right	Thru	Left	U-turn	Total	Right	Thru	Left	U-turn	Total	Right	Thru	Left	U-turn	Total	
Factor	1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00		1.12	1.12	1.12	1.12		1.12	1.12	1.12	1.12		
7:15 AM	1	15	7	0	23	6	4	1	0	11	3	58	2	0	63	9	15	1	0	25	122
7:30 AM	0	26	28	0	54	16	6	2	0	24	9	72	2	0	83	6	15	3	0	24	185
7:45 AM	1	13	20	0	34	9	7	0	0	16	1	80	6	0	87	4	24	2	0	30	167
8:00 AM	4	18	19	0	41	8	12	2	0	22	7	48	2	0	57	4	18	2	0	24	144
Grand Total	6	72	74	0	152	39	29	5	0	73	20	258	12	0	290	23	72	8	0	103	618
Medium Truck %	0.0	0.0	2.7	0.0	1.3	0.0	0.0	20.0	0.0	1.4	0.0	1.2	0.0	0.0	1.0	0.0	2.8	0.0	0.0	1.9	
Heavy Truck %	0.0	0.0	0.0	0.0	0.0	0.0	3.4	0.0	0.0	1.4	0.0	0.0	0.0	0.0	0.0	0.0	1.4	0.0	0.0	1.0	
Total Truck %	0.0	0.0	2.7	0.0	1.3	0.0	3.4	20.0	0.0	2.7	0.0	1.2	0.0	0.0	1.0	0.0	4.2	0.0	0.0	2.9	
Total %	1.0	11.7	12.0	0.0	24.6	6.3	4.7	0.8	0.0	11.8	3.2	41.7	1.9	0.0	46.9	3.7	11.7	1.3	0.0	16.7	100.0
PHF	0.70	0.70	0.70			0.76	0.76	0.76			0.83	0.83	0.83			0.86	0.86	0.86			0.84



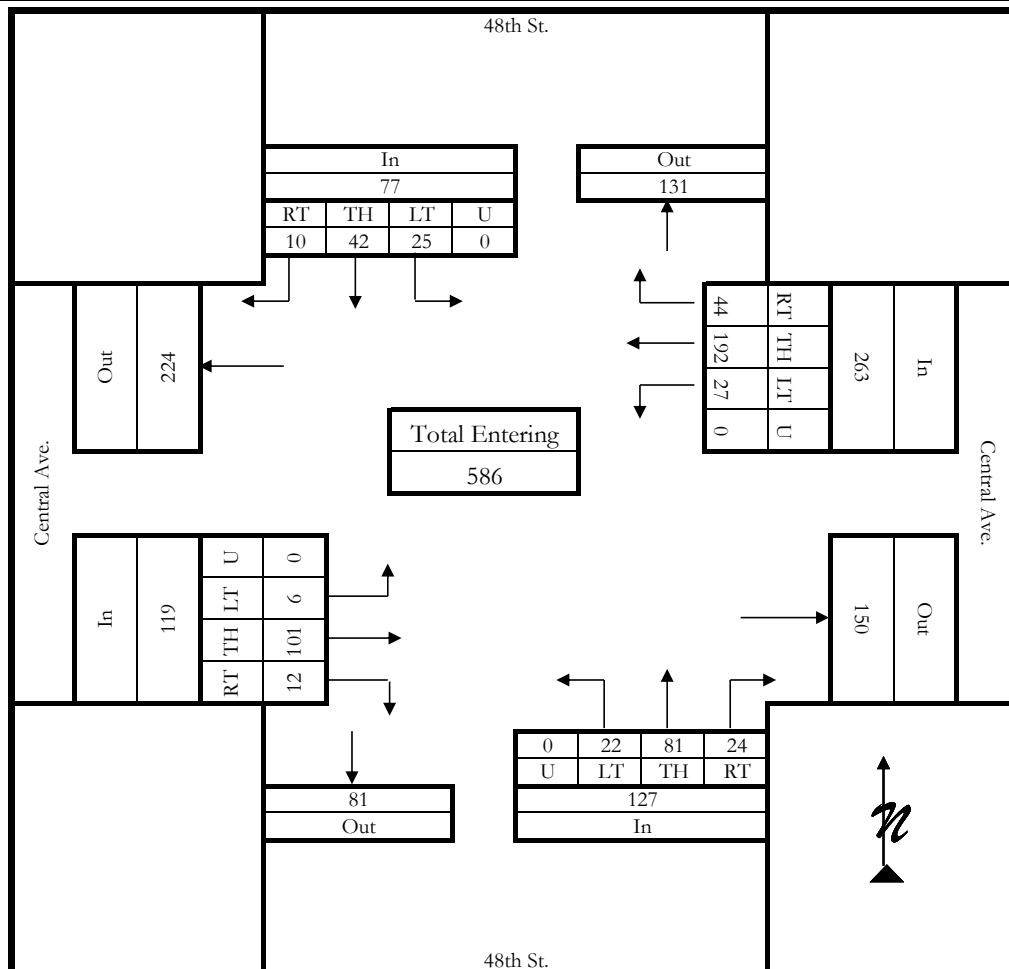
INTERSECTION TURNING MOVEMENT COUNT SUMMARY

General Information

Counted By:	J. Staszczuk	Intersection:	Central Ave. & 48th St.
Agency/Company:	Sanderson Stewart	Jurisdiction:	City of Billings / MDT
Date Performed:	Thursday, January 21, 2016		
Count Time Period:	PM Peak Hour (4:45 - 5:45 PM)		
Project Number:	15053	Project Description:	West End Multi-Modal Traffic Modeling
North/South Street:	48th St.	East/West Street:	Central Ave.

Vehicle Volumes and Adjustments

	48th St. Southbound					48th St. Northbound					Central Ave. Eastbound					Central Ave. Westbound					Int. Total
Start Time	Right	Thru	Left	U-turn	Total	Right	Thru	Left	U-turn	Total	Right	Thru	Left	U-turn	Total	Right	Thru	Left	U-turn	Total	
Factor	1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00		1.12	1.12	1.12	1.12		1.12	1.12	1.12	1.12		
4:45 PM	1	12	10	0	23	6	20	6	0	32	4	22	1	0	27	7	35	10	0	52	134
5:00 PM	2	11	6	0	19	3	25	5	0	33	2	24	1	0	27	8	49	7	0	64	143
5:15 PM	2	10	6	0	18	9	22	5	0	36	3	25	3	0	31	17	52	6	0	75	160
5:30 PM	5	9	3	0	17	6	14	6	0	26	3	30	1	0	34	12	56	4	0	72	149
Grand Total	10	42	25	0	77	24	81	22	0	127	12	101	6	0	119	44	192	27	0	263	586
Medium Truck %	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Heavy Truck %	0.0	0.0	4.0	0.0	1.3	0.0	1.2	0.0	0.0	0.8	0.0	1.0	0.0	0.0	0.8	2.3	0.5	0.0	0.0	0.8	
Total Truck %	0.0	0.0	4.0	0.0	1.3	0.0	1.2	0.0	0.0	0.8	0.0	1.0	0.0	0.0	0.8	2.3	0.5	0.0	0.0	0.8	
Total %	1.7	7.2	4.3	0.0	13.1	4.1	13.8	3.8	0.0	21.7	2.0	17.2	1.0	0.0	20.3	7.5	32.8	4.6	0.0	44.9	100.0
PHF	0.84	0.84	0.84			0.88	0.88	0.88			0.88	0.88	0.88			0.88	0.88	0.88			0.92



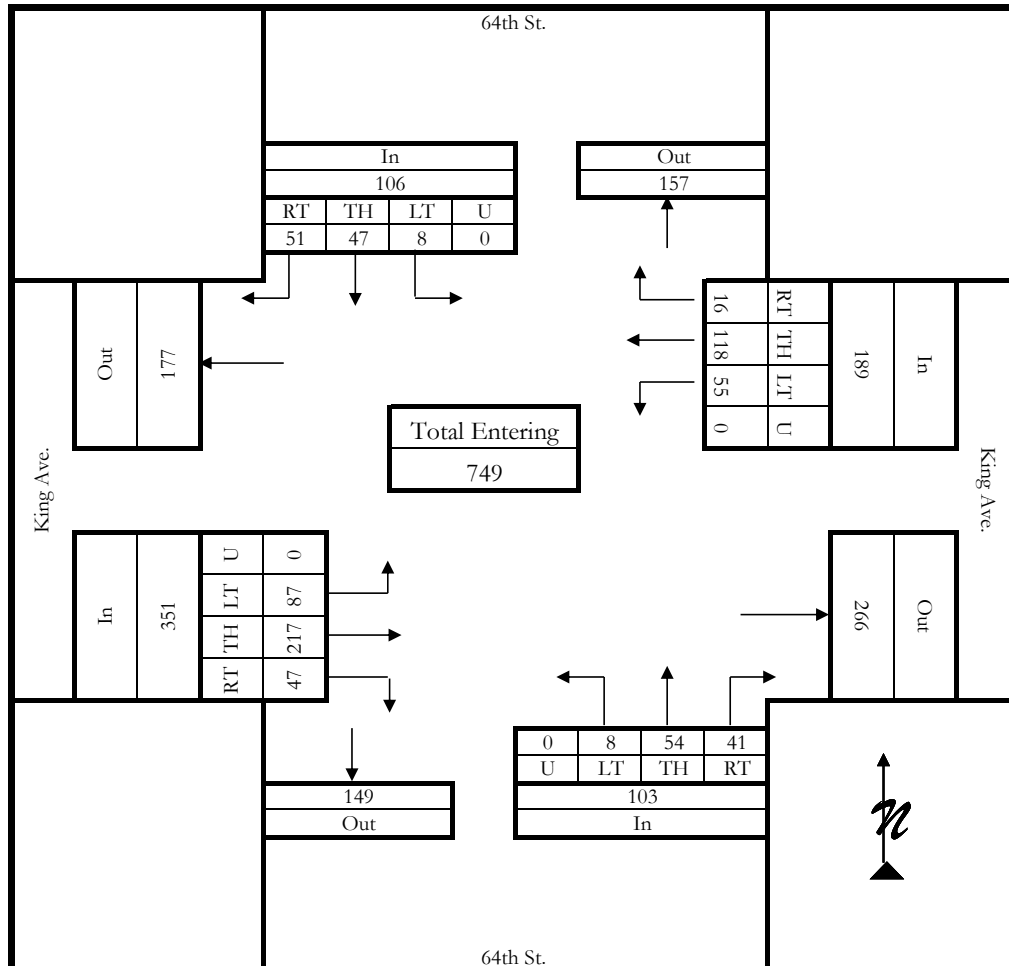
INTERSECTION TURNING MOVEMENT COUNT SUMMARY

General Information

Counted By:	J. Staszczuk	Intersection:	King Ave. & 64th St.
Agency/Company:	Sanderson Stewart	Jurisdiction:	City of Billings / MDT
Date Performed:	Thursday, January 21, 2016		
Count Time Period:	AM Peak Hour (7:15 - 8:15 AM)		
Project Number:	15053	Project Description:	West End Multi-Modal Traffic Modeling
North/South Street:	64th St.	East/West Street:	King Ave.

Vehicle Volumes and Adjustments

	64th St. Southbound					64th St. Northbound					King Ave. Eastbound					King Ave. Westbound					Int. Total
Start Time	Right	Thru	Left	U-turn	Total	Right	Thru	Left	U-turn	Total	Right	Thru	Left	U-turn	Total	Right	Thru	Left	U-turn	Total	
Factor	1.00	1.00	1.00	1.00		1.12	1.12	1.12	1.12		1.12	1.12	1.12	1.12		1.12	1.12	1.12	1.12		
7:15 AM	14	7	0	0	21	2	3	0	0	5	3	57	20	0	80	6	20	3	0	29	135
7:30 AM	10	8	3	0	21	0	6	1	0	7	13	66	22	0	101	4	38	18	0	60	189
7:45 AM	12	26	2	0	40	22	21	4	0	47	30	48	24	0	102	6	38	32	0	76	265
8:00 AM	15	6	3	0	24	17	24	3	0	44	1	46	21	0	68	0	22	2	0	24	160
Grand Total	51	47	8	0	106	41	54	8	0	103	47	217	87	0	351	16	118	55	0	189	749
Medium Truck %	0.0	2.1	0.0	0.0	0.9	0.0	0.0	0.0	0.0	0.0	4.3	0.5	0.0	0.0	0.9	6.3	1.7	0.0	0.0	1.6	
Heavy Truck %	0.0	0.0	0.0	0.0	0.0	2.4	0.0	0.0	0.0	1.0	0.0	1.4	0.0	0.0	0.9	12.5	5.9	0.0	0.0	4.8	
Total Truck %	0.0	2.1	0.0	0.0	0.9	2.4	0.0	0.0	0.0	1.0	4.3	1.8	0.0	0.0	1.7	18.8	7.6	0.0	0.0	6.3	
Total %	6.8	6.3	1.1	0.0	14.2	5.5	7.2	1.1	0.0	13.8	6.3	29.0	11.6	0.0	46.9	2.1	15.8	7.3	0.0	25.2	100.0
PHF	0.66	0.66	0.66			0.55	0.55	0.55			0.86	0.86	0.86			0.62	0.62	0.62			0.71



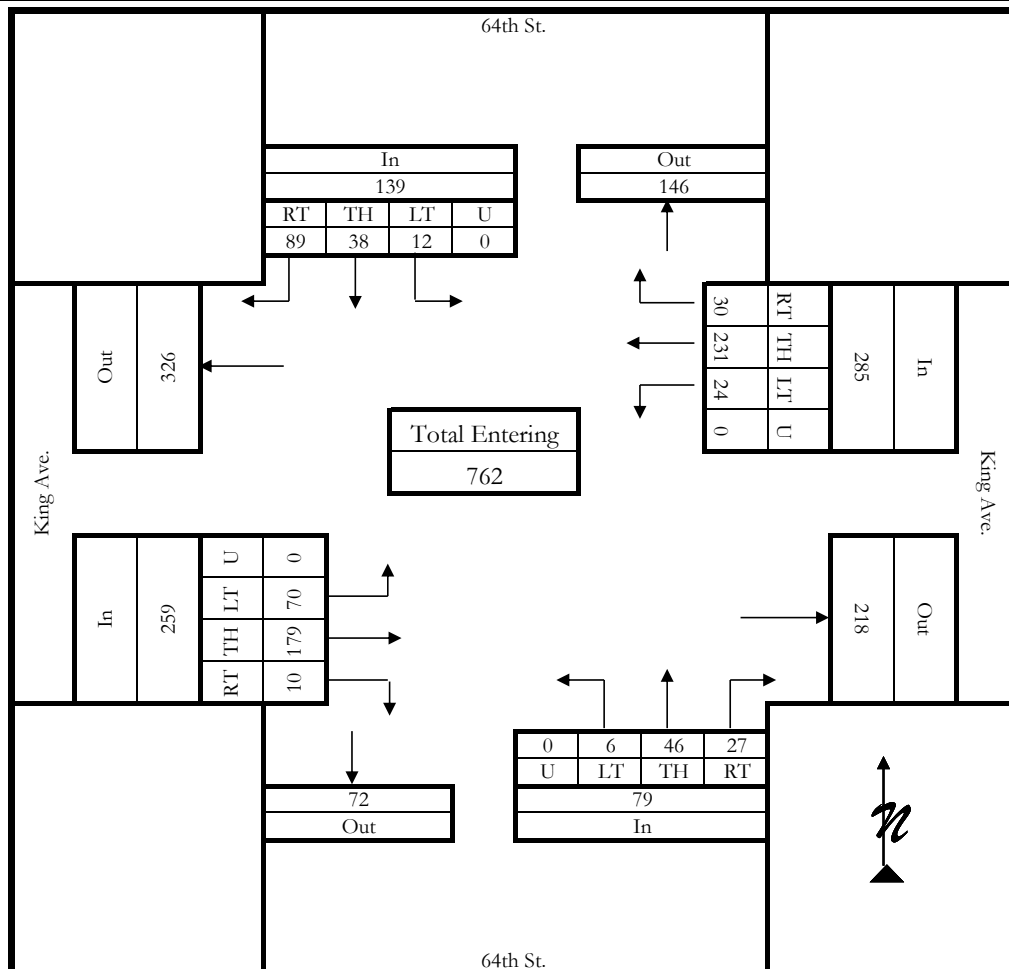
INTERSECTION TURNING MOVEMENT COUNT SUMMARY

General Information

Counted By:	J. Staszczuk	Intersection:	King Ave. & 64th St.
Agency/Company:	Sanderson Stewart	Jurisdiction:	City of Billings / MDT
Date Performed:	Thursday, January 21, 2016		
Count Time Period:	PM Peak Hour (4:45 - 5:45 PM)		
Project Number:	15053	Project Description:	West End Multi-Modal Traffic Modeling
North/South Street:	64th St.	East/West Street:	King Ave.

Vehicle Volumes and Adjustments

	64th St. Southbound					64th St. Northbound					King Ave. Eastbound					King Ave. Westbound					Int. Total
Start Time	Right	Thru	Left	U-turn	Total	Right	Thru	Left	U-turn	Total	Right	Thru	Left	U-turn	Total	Right	Thru	Left	U-turn	Total	
Factor	1.00	1.00	1.00	1.00		1.12	1.12	1.12	1.12		1.12	1.12	1.12	1.12		1.12	1.12	1.12	1.12		
4:45 PM	21	9	1	0	31	11	7	2	0	20	3	36	11	0	50	8	53	9	0	70	171
5:00 PM	30	12	6	0	48	6	13	1	0	20	6	59	19	0	84	8	71	8	0	87	239
5:15 PM	23	8	2	0	33	6	18	2	0	26	1	43	19	0	63	6	66	4	0	76	198
5:30 PM	15	9	3	0	27	4	8	1	0	13	0	41	21	0	62	8	41	3	0	52	154
Grand Total	89	38	12	0	139	27	46	6	0	79	10	179	70	0	259	30	231	24	0	285	762
Medium Truck %	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Heavy Truck %	1.1	0.0	0.0	0.0	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.3	1.3	0.0	0.0	1.4	
Total Truck %	1.1	0.0	0.0	0.0	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.3	1.3	0.0	0.0	1.4	
Total %	11.7	5.0	1.6	0.0	18.2	3.5	6.0	0.8	0.0	10.4	1.3	23.5	9.2	0.0	34.0	3.9	30.3	3.1	0.0	37.4	100.0
PHF	0.72	0.72	0.72			0.76	0.76	0.76			0.77	0.77	0.77			0.82	0.82	0.82			0.80



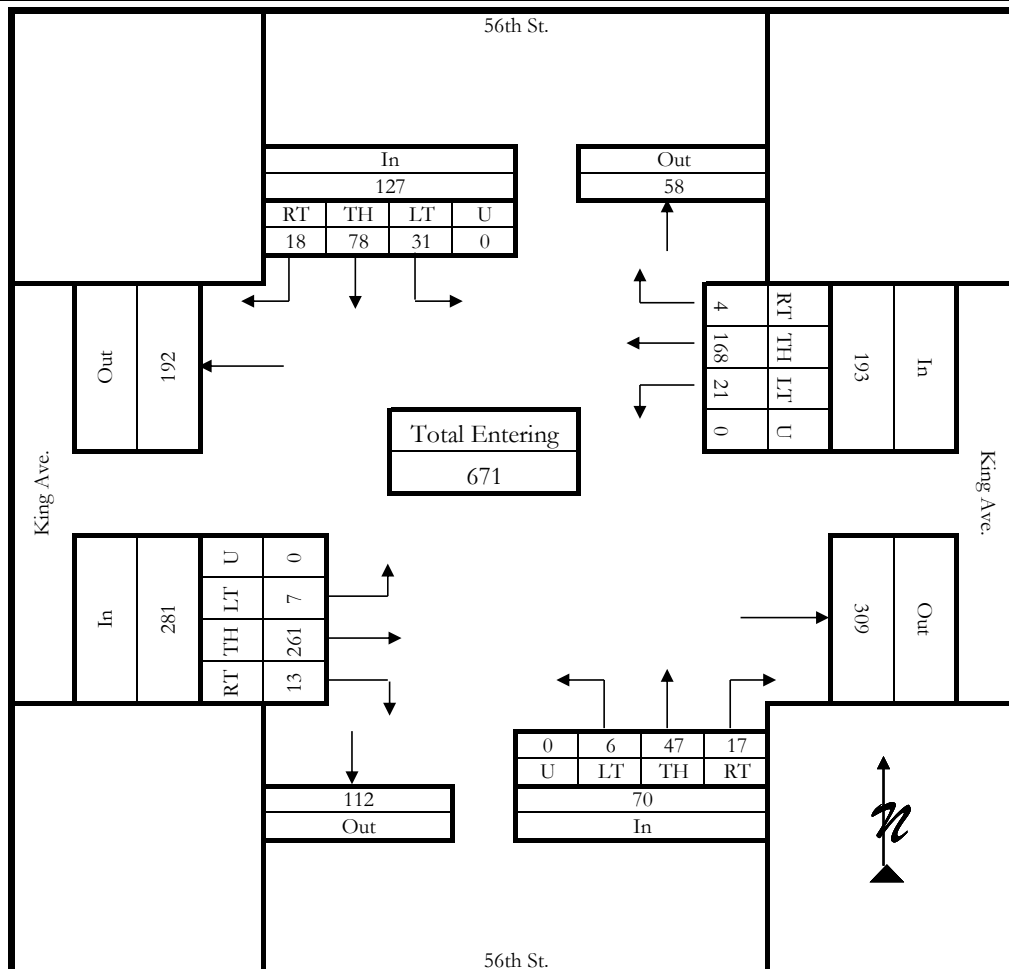
INTERSECTION TURNING MOVEMENT COUNT SUMMARY

General Information

Counted By:	J. Staszczuk	Intersection:	King Ave. West & 56th St. West
Agency/Company:	Sanderson Stewart	Jurisdiction:	City of Billings / MDT
Date Performed:	Thursday, January 21, 2016		
Count Time Period:	AM Peak Hour (7:15 - 8:15 AM)		
Project Number:	15053	Project Description:	West End Multi-Modal Traffic Modeling
North/South Street:	56th St.	East/West Street:	King Ave.

Vehicle Volumes and Adjustments

	56th St. Southbound					56th St. Northbound					King Ave. Eastbound					King Ave. Westbound					Int. Total
Start Time	Right	Thru	Left	U-turn	Total	Right	Thru	Left	U-turn	Total	Right	Thru	Left	U-turn	Total	Right	Thru	Left	U-turn	Total	
Factor	1.12	1.12	1.12	1.12		1.12	1.12	1.12	1.12		1.12	1.12	1.12	1.12		1.12	1.12	1.12	1.12		
7:15 AM	0	12	8	0	20	7	3	3	0	13	4	53	1	0	58	1	27	6	0	34	125
7:30 AM	9	21	6	0	36	3	13	1	0	17	4	73	2	0	79	1	56	8	0	65	197
7:45 AM	8	25	10	0	43	3	21	2	0	26	3	78	1	0	82	1	56	4	0	61	212
8:00 AM	1	20	7	0	28	4	10	0	0	14	2	57	3	0	62	1	29	3	0	33	137
Grand Total	18	78	31	0	127	17	47	6	0	70	13	261	7	0	281	4	168	21	0	193	671
Medium Truck %	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7.7	0.0	0.0	0.0	0.4	0.0	1.8	0.0	0.0	1.6	
Heavy Truck %	0.0	3.8	0.0	0.0	2.4	0.0	2.1	16.7	0.0	2.9	7.7	1.5	14.3	0.0	2.1	0.0	6.5	9.5	0.0	6.7	
Total Truck %	0.0	3.8	0.0	0.0	2.4	0.0	2.1	16.7	0.0	2.9	15.4	1.5	14.3	0.0	2.5	0.0	8.3	9.5	0.0	8.3	
Total %	2.7	11.6	4.6	0.0	18.9	2.5	7.0	0.9	0.0	10.4	1.9	38.9	1.0	0.0	41.9	0.6	25.0	3.1	0.0	28.8	100.0
PHF	0.74	0.74	0.74			0.67	0.67	0.67			0.86	0.86	0.86			0.74	0.74	0.74			0.79



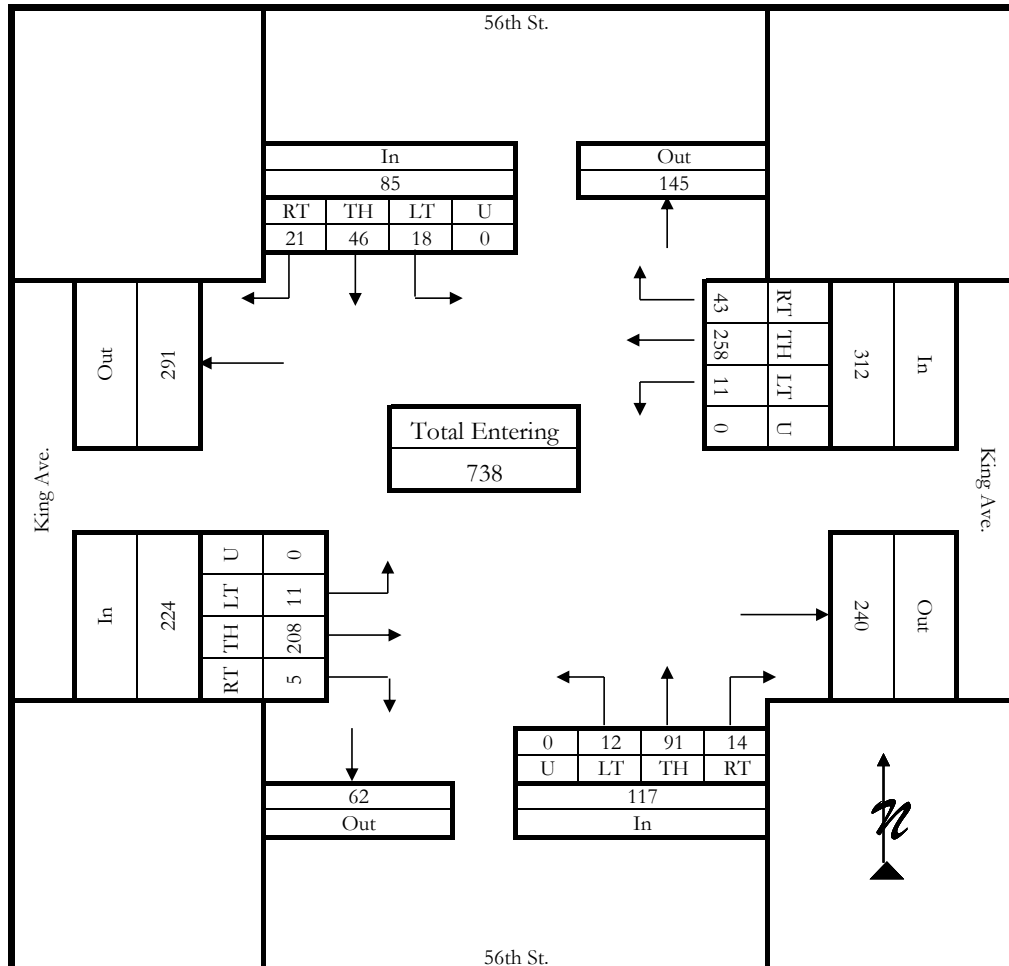
INTERSECTION TURNING MOVEMENT COUNT SUMMARY

General Information

Counted By:	J. Staszczuk	Intersection:	King Ave. West & 56th St. West
Agency/Company:	Sanderson Stewart	Jurisdiction:	City of Billings / MDT
Date Performed:	Thursday, January 21, 2016		
Count Time Period:	PM Peak Hour (4:45 - 5:45 PM)		
Project Number:	15053	Project Description:	West End Multi-Modal Traffic Modeling
North/South Street:	56th St.	East/West Street:	King Ave.

Vehicle Volumes and Adjustments

	56th St. Southbound					56th St. Northbound					King Ave. Eastbound					King Ave. Westbound					Int. Total
Start Time	Right	Thru	Left	U-turn	Total	Right	Thru	Left	U-turn	Total	Right	Thru	Left	U-turn	Total	Right	Thru	Left	U-turn	Total	
Factor	1.12	1.12	1.12	1.12		1.12	1.12	1.12	1.12		1.12	1.12	1.12	1.12		1.12	1.12	1.12	1.12		
4:45 PM	4	7	4	0	15	1	22	2	0	25	2	44	1	0	47	10	58	2	0	70	157
5:00 PM	6	11	4	0	21	8	29	7	0	44	3	66	4	0	73	10	73	4	0	87	225
5:15 PM	4	18	8	0	30	3	25	2	0	30	0	54	2	0	56	11	74	2	0	87	203
5:30 PM	7	10	2	0	19	2	15	1	0	18	0	44	4	0	48	12	53	3	0	68	153
Grand Total	21	46	18	0	85	14	91	12	0	117	5	208	11	0	224	43	258	11	0	312	738
Medium Truck %	4.8	0.0	0.0	0.0	1.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Heavy Truck %	0.0	4.3	11.1	0.0	4.7	0.0	2.2	0.0	0.0	1.7	0.0	0.0	0.0	0.0	0.0	0.0	1.6	0.0	0.0	1.3	
Total Truck %	4.8	4.3	11.1	0.0	5.9	0.0	2.2	0.0	0.0	1.7	0.0	0.0	0.0	0.0	0.0	0.0	1.6	0.0	0.0	1.3	
Total %	2.8	6.2	2.4	0.0	11.5	1.9	12.3	1.6	0.0	15.9	0.7	28.2	1.5	0.0	30.4	5.8	35.0	1.5	0.0	42.3	100.0
PHF	0.71	0.71	0.71			0.66	0.66	0.66			0.77	0.77	0.77			0.90	0.90	0.90			0.82



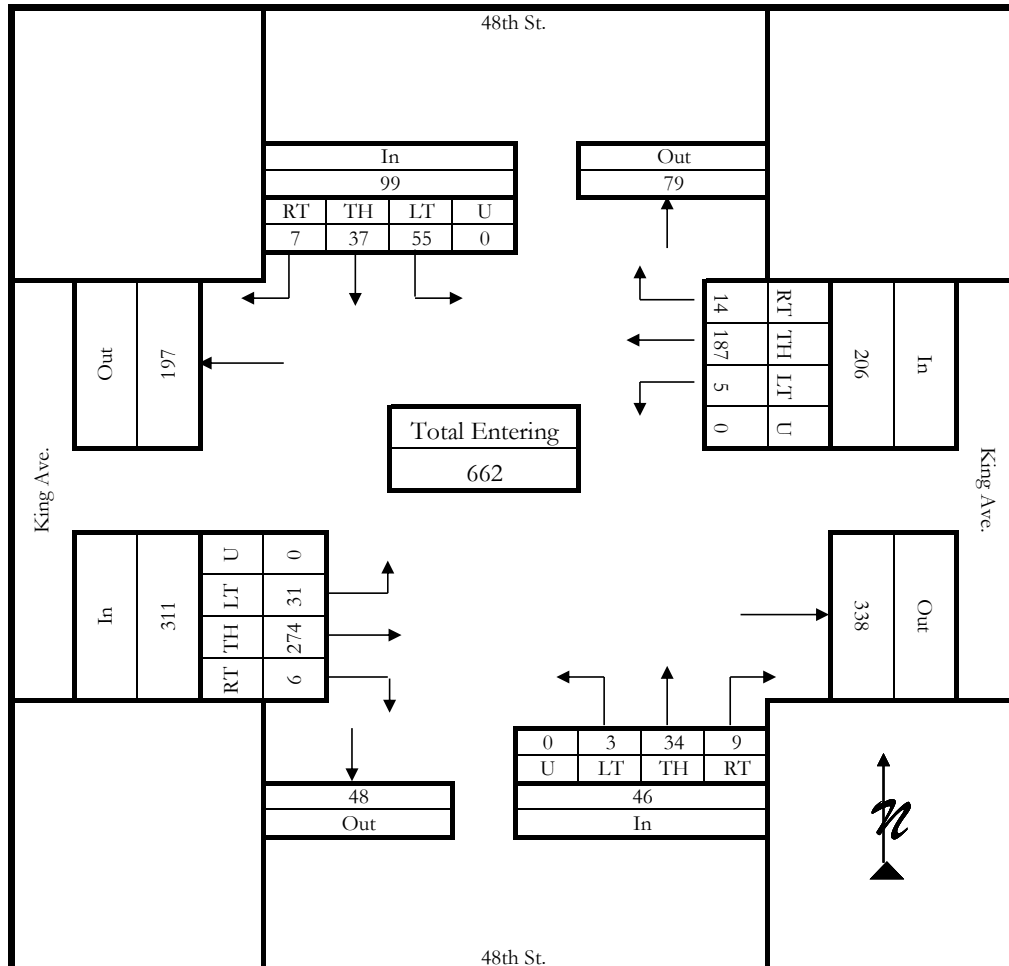
INTERSECTION TURNING MOVEMENT COUNT SUMMARY

General Information

Counted By:	J. Staszczuk	Intersection:	King Ave. & 48th St.
Agency/Company:	Sanderson Stewart	Jurisdiction:	City of Billings / MDT
Date Performed:	Thursday, January 21, 2016		
Count Time Period:	AM Peak Hour (7:15 - 8:15 AM)		
Project Number:	15053	Project Description:	West End Multi-Modal Traffic Modeling
North/South Street:	48th St.	East/West Street:	King Ave.

Vehicle Volumes and Adjustments

	48th St. Southbound					48th St. Northbound					King Ave. Eastbound					King Ave. Westbound					Int. Total
Start Time	Right	Thru	Left	U-turn	Total	Right	Thru	Left	U-turn	Total	Right	Thru	Left	U-turn	Total	Right	Thru	Left	U-turn	Total	
Factor	1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00		1.12	1.12	1.12	1.12		1.12	1.12	1.12	1.12		
7:15 AM	1	10	8	0	19	1	5	0	0	6	1	58	6	0	65	2	37	1	0	40	130
7:30 AM	2	12	19	0	33	4	11	1	0	16	2	82	9	0	93	3	59	1	0	63	205
7:45 AM	2	9	14	0	25	3	9	0	0	12	1	69	9	0	79	3	57	3	0	63	179
8:00 AM	2	6	14	0	22	1	9	2	0	12	2	65	7	0	74	6	34	0	0	40	148
Grand Total	7	37	55	0	99	9	34	3	0	46	6	274	31	0	311	14	187	5	0	206	662
Medium Truck %	0.0	0.0	0.0	0.0	0.0	11.1	0.0	0.0	0.0	2.2	0.0	0.0	0.0	0.0	0.0	7.1	1.6	0.0	0.0	1.9	
Heavy Truck %	0.0	0.0	0.0	0.0	0.0	0.0	0.0	33.3	0.0	2.2	0.0	1.5	0.0	0.0	1.3	0.0	7.0	40.0	0.0	7.3	
Total Truck %	0.0	0.0	0.0	0.0	0.0	11.1	0.0	33.3	0.0	4.3	0.0	1.5	0.0	0.0	1.3	7.1	8.6	40.0	0.0	9.2	
Total %	1.1	5.6	8.3	0.0	15.0	1.4	5.1	0.5	0.0	6.9	0.9	41.4	4.7	0.0	47.0	2.1	28.2	0.8	0.0	31.1	100.0
PHF	0.75	0.75	0.75			0.72	0.72	0.72			0.84	0.84	0.84			0.82	0.82	0.82			0.81



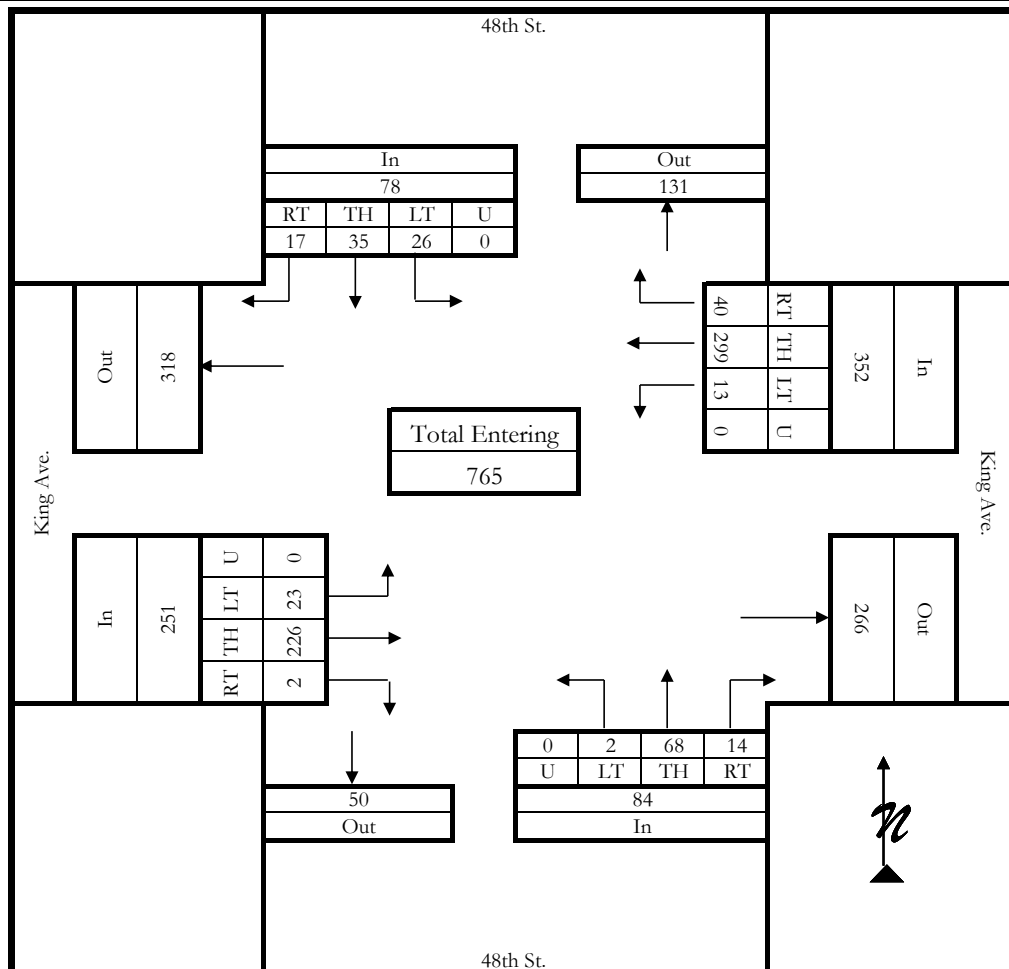
INTERSECTION TURNING MOVEMENT COUNT SUMMARY

General Information

Counted By:	J. Staszczuk	Intersection:	King Ave. & 48th St.
Agency/Company:	Sanderson Stewart	Jurisdiction:	City of Billings / MDT
Date Performed:	Thursday, January 21, 2016		
Count Time Period:	PM Peak Hour (4:45 - 5:45 PM)		
Project Number:	15053	Project Description:	West End Multi-Modal Traffic Modeling
North/South Street:	48th St.	East/West Street:	King Ave.

Vehicle Volumes and Adjustments

	48th St. Southbound					48th St. Northbound					King Ave. Eastbound					King Ave. Westbound					Int. Total
Start Time	Right	Thru	Left	U-turn	Total	Right	Thru	Left	U-turn	Total	Right	Thru	Left	U-turn	Total	Right	Thru	Left	U-turn	Total	
Factor	1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00		1.12	1.12	1.12	1.12		1.12	1.12	1.12	1.12		
4:45 PM	4	12	7	0	23	5	21	1	0	27	1	47	3	0	51	9	68	3	0	80	181
5:00 PM	2	10	3	0	15	4	18	0	0	22	1	67	7	0	75	12	86	1	0	99	211
5:15 PM	6	8	8	0	22	2	21	1	0	24	0	60	6	0	66	11	83	2	0	96	208
5:30 PM	5	5	8	0	18	3	8	0	0	11	0	52	7	0	59	8	62	7	0	77	165
Grand Total	17	35	26	0	78	14	68	2	0	84	2	226	23	0	251	40	299	13	0	352	765
Medium Truck %	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Heavy Truck %	0.0	0.0	0.0	0.0	0.0	7.1	0.0	0.0	0.0	1.2	0.0	0.0	0.0	0.0	0.0	2.5	1.0	0.0	0.0	1.1	
Total Truck %	0.0	0.0	0.0	0.0	0.0	7.1	0.0	0.0	0.0	1.2	0.0	0.0	0.0	0.0	0.0	2.5	1.0	0.0	0.0	1.1	
Total %	2.2	4.6	3.4	0.0	10.2	1.8	8.9	0.3	0.0	11.0	0.3	29.5	3.0	0.0	32.8	5.2	39.1	1.7	0.0	46.0	100.0
PHF	0.85	0.85	0.85			0.78	0.78	0.78			0.84	0.84	0.84			0.89	0.89	0.89			0.91



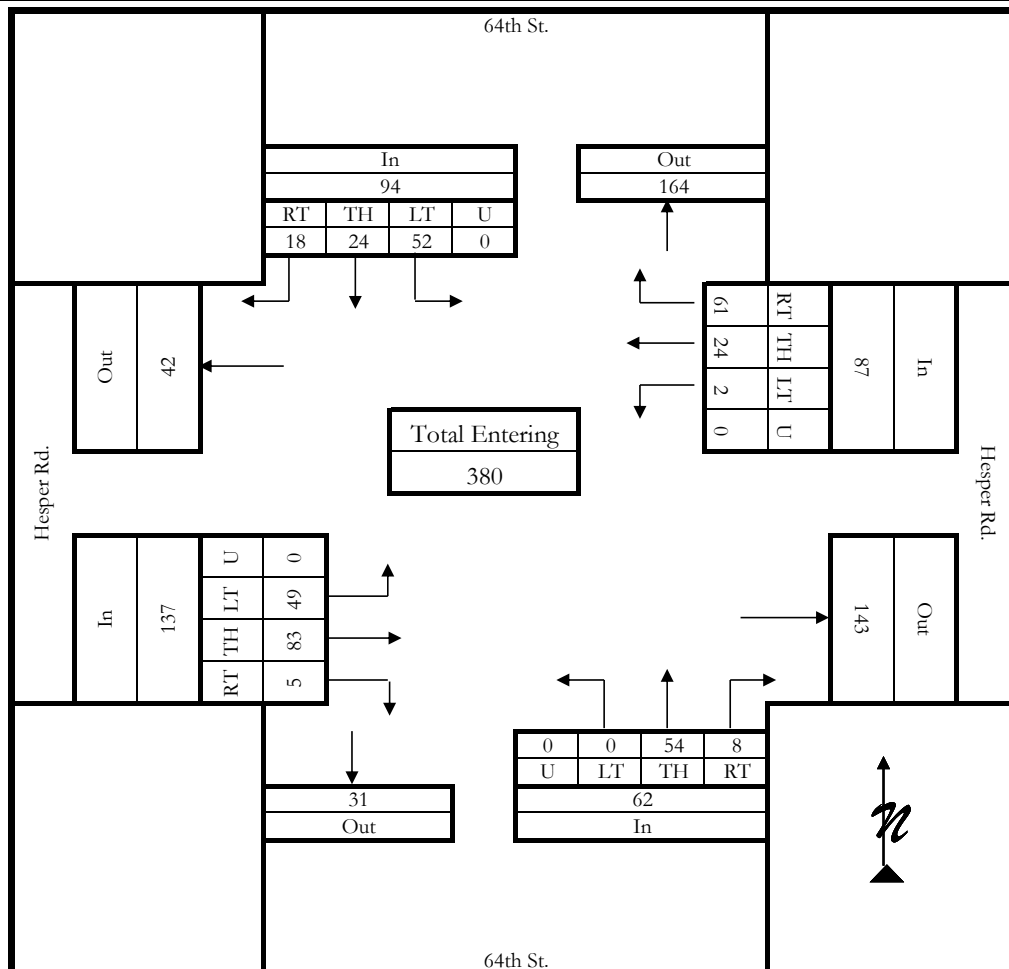
INTERSECTION TURNING MOVEMENT COUNT SUMMARY

General Information

Counted By:	J. Staszczuk	Intersection:	Hesper Rd. & 64th St.
Agency/Company:	Sanderson Stewart	Jurisdiction:	City of Billings / MDT
Date Performed:	Wednesday, January 20, 2016		
Count Time Period:	AM Peak Hour (7:15 - 8:15 AM)		
Project Number:	15053	Project Description:	West End Multi-Modal Traffic Modeling
North/South Street:	64th St.	East/West Street:	Hesper Rd.

Vehicle Volumes and Adjustments

	64th St. Southbound					64th St. Northbound					Hesper Rd. Eastbound					Hesper Rd. Westbound					Int. Total
Start Time	Right	Thru	Left	U-turn	Total	Right	Thru	Left	U-turn	Total	Right	Thru	Left	U-turn	Total	Right	Thru	Left	U-turn	Total	
Factor	1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00		
7:15 AM	1	3	6	0	10	1	5	0	0	6	1	13	7	0	21	9	4	0	0	13	50
7:30 AM	1	3	7	0	11	2	13	0	0	15	1	19	16	0	36	6	4	0	0	10	72
7:45 AM	11	11	17	0	39	5	26	0	0	31	1	32	23	0	56	33	3	1	0	37	163
8:00 AM	5	7	22	0	34	0	10	0	0	10	2	19	3	0	24	13	13	1	0	27	95
Grand Total	18	24	52	0	94	8	54	0	0	62	5	83	49	0	137	61	24	2	0	87	380
Medium Truck %	0.0	0.0	1.9	0.0	1.1	0.0	1.9	0.0	0.0	1.6	0.0	6.0	0.0	0.0	3.6	1.6	0.0	0.0	0.0	1.1	
Heavy Truck %	0.0	0.0	0.0	0.0	0.0	0.0	3.7	0.0	0.0	3.2	0.0	0.0	0.0	0.0	0.0	0.0	8.3	0.0	0.0	2.3	
Total Truck %	0.0	0.0	1.9	0.0	1.1	0.0	5.6	0.0	0.0	4.8	0.0	6.0	0.0	0.0	3.6	1.6	8.3	0.0	0.0	3.4	
Total %	4.7	6.3	13.7	0.0	24.7	2.1	14.2	0.0	0.0	16.3	1.3	21.8	12.9	0.0	36.1	16.1	6.3	0.5	0.0	22.9	100.0
PHF	0.60	0.60	0.60			0.50	0.50	0.50			0.61	0.61	0.61			0.59	0.59	0.59			0.58



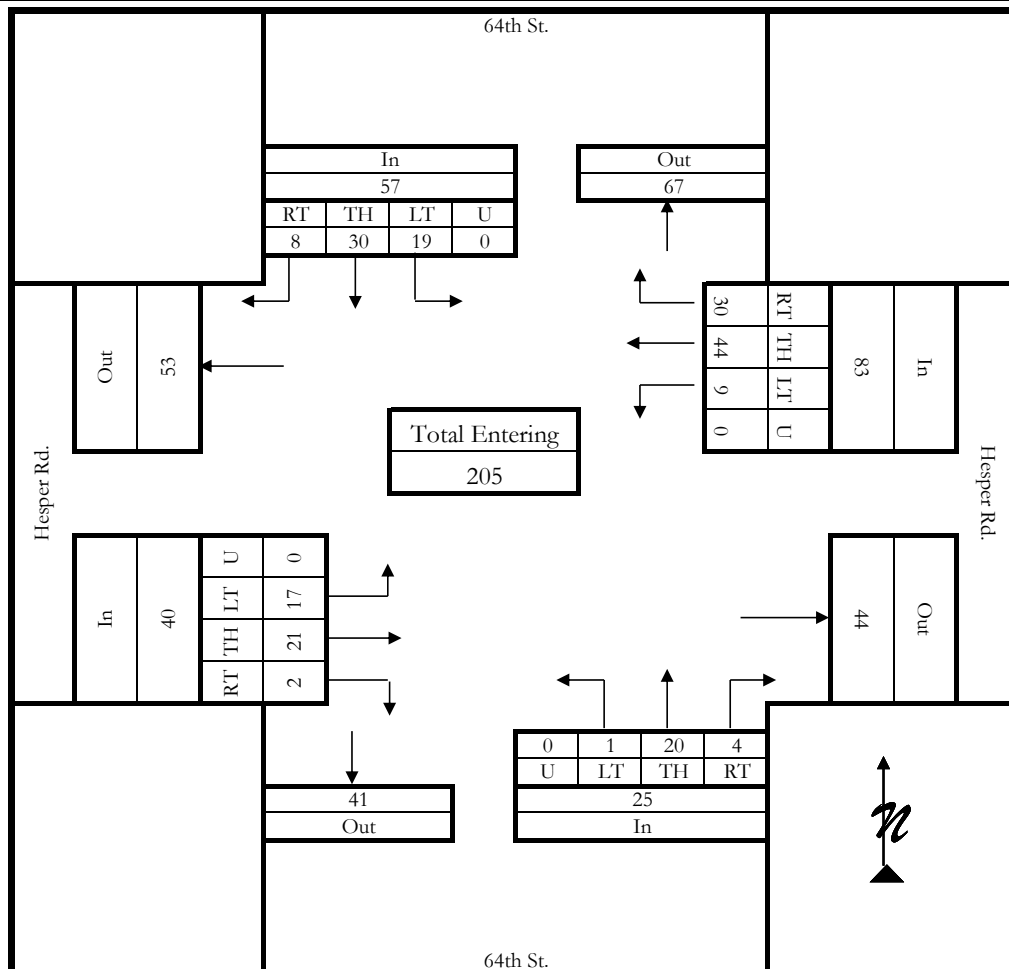
INTERSECTION TURNING MOVEMENT COUNT SUMMARY

General Information

Counted By:	J. Staszczuk	Intersection:	Hesper Rd. & 64th St.
Agency/Company:	Sanderson Stewart	Jurisdiction:	City of Billings / MDT
Date Performed:	Wednesday, January 20, 2016		
Count Time Period:	PM Peak Hour (4:45 - 5:45 PM)		
Project Number:	15053	Project Description:	West End Multi-Modal Traffic Modeling
North/South Street:	64th St.	East/West Street:	Hesper Rd.

Vehicle Volumes and Adjustments

	64th St. Southbound					64th St. Northbound					Hesper Rd. Eastbound					Hesper Rd. Westbound					Int. Total
Start Time	Right	Thru	Left	U-turn	Total	Right	Thru	Left	U-turn	Total	Right	Thru	Left	U-turn	Total	Right	Thru	Left	U-turn	Total	
Factor	1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00		
4:45 PM	1	6	4	0	11	2	5	0	0	7	0	8	3	0	11	6	11	0	0	17	46
5:00 PM	2	7	2	0	11	1	9	0	0	10	1	5	4	0	10	12	14	4	0	30	61
5:15 PM	3	10	9	0	22	1	3	1	0	5	1	2	7	0	10	9	16	3	0	28	65
5:30 PM	2	7	4	0	13	0	3	0	0	3	0	6	3	0	9	3	3	2	0	8	33
Grand Total	8	30	19	0	57	4	20	1	0	25	2	21	17	0	40	30	44	9	0	83	205
Medium Truck %	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Heavy Truck %	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	50.0	0.0	0.0	0.0	2.5	0.0	0.0	0.0	0.0	0.0	
Total Truck %	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	50.0	0.0	0.0	0.0	2.5	0.0	0.0	0.0	0.0	0.0	
Total %	3.9	14.6	9.3	0.0	27.8	2.0	9.8	0.5	0.0	12.2	1.0	10.2	8.3	0.0	19.5	14.6	21.5	4.4	0.0	40.5	100.0
PHF	0.65	0.65	0.65			0.63	0.63	0.63			0.91	0.91	0.91			0.69	0.69	0.69			0.79



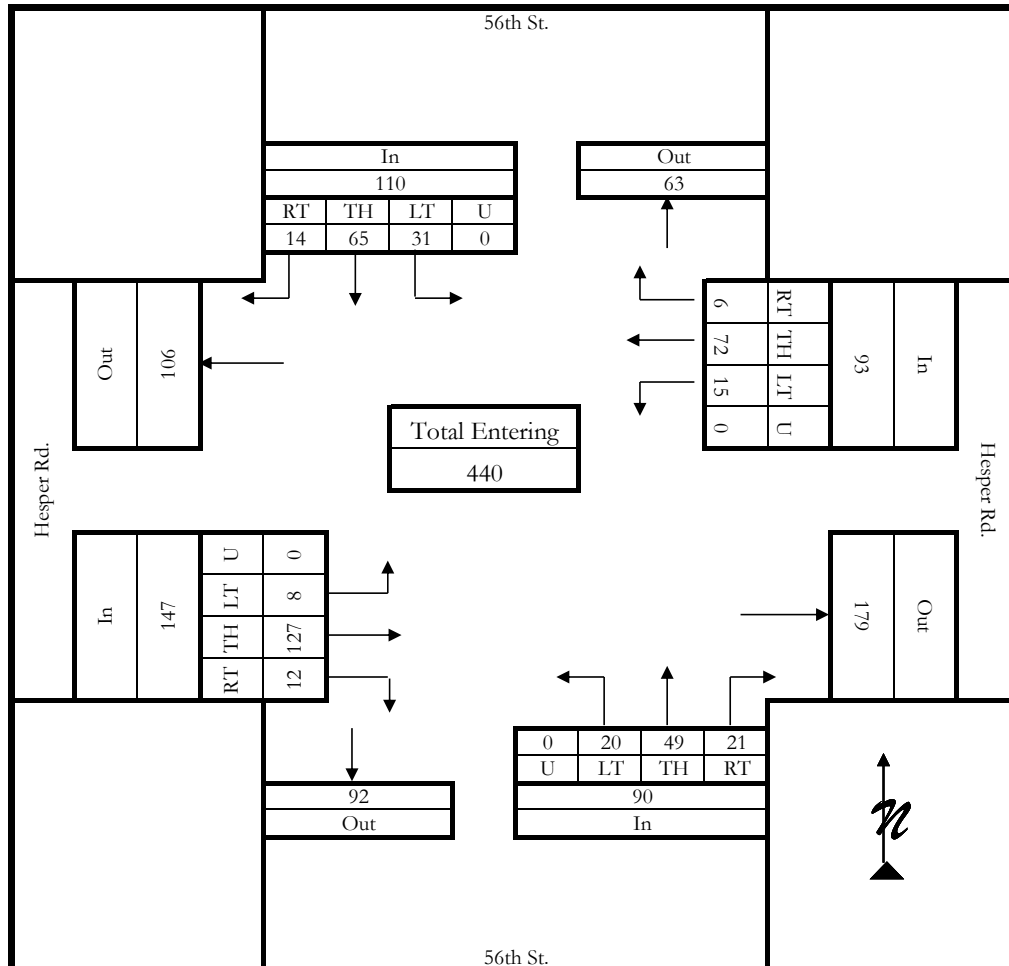
INTERSECTION TURNING MOVEMENT COUNT SUMMARY

General Information

Counted By:	J. Staszczuk	Intersection:	Hesper Rd. & 56th St.
Agency/Company:	Sanderson Stewart	Jurisdiction:	City of Billings / MDT
Date Performed:	Wednesday, January 20, 2016		
Count Time Period:	AM Peak Hour (7:15 - 8:15 AM)		
Project Number:	15053	Project Description:	West End Multi-Modal Traffic Modeling
North/South Street:	56th St.	East/West Street:	Hesper Rd.

Vehicle Volumes and Adjustments

	56th St. Southbound					56th St. Northbound					Hesper Rd. Eastbound					Hesper Rd. Westbound					Int. Total
Start Time	Right	Thru	Left	U-turn	Total	Right	Thru	Left	U-turn	Total	Right	Thru	Left	U-turn	Total	Right	Thru	Left	U-turn	Total	
Factor	1.12	1.12	1.12	1.12		1.12	1.12	1.12	1.12		1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00		
7:15 AM	1	20	6	0	27	4	8	1	0	13	0	20	1	0	21	0	13	3	0	16	77
7:30 AM	4	17	15	0	36	4	10	1	0	15	2	27	3	0	32	2	10	5	0	17	100
7:45 AM	6	13	6	0	25	6	13	17	0	36	7	44	2	0	53	2	32	2	0	36	150
8:00 AM	3	15	4	0	22	7	18	1	0	26	3	36	2	0	41	2	17	5	0	24	113
Grand Total	14	65	31	0	110	21	49	20	0	90	12	127	8	0	147	6	72	15	0	93	440
Medium Truck %	7.1	0.0	0.0	0.0	0.9	4.8	0.0	0.0	0.0	1.1	0.0	3.9	0.0	0.0	3.4	0.0	0.0	0.0	0.0	0.0	
Heavy Truck %	0.0	1.5	0.0	0.0	0.9	0.0	2.0	0.0	0.0	1.1	0.0	0.0	0.0	0.0	0.0	0.0	4.2	26.7	0.0	7.5	
Total Truck %	7.1	1.5	0.0	0.0	1.8	4.8	2.0	0.0	0.0	2.2	0.0	3.9	0.0	0.0	3.4	0.0	4.2	26.7	0.0	7.5	
Total %	3.2	14.8	7.0	0.0	25.0	4.8	11.1	4.5	0.0	20.5	2.7	28.9	1.8	0.0	33.4	1.4	16.4	3.4	0.0	21.1	100.0
PHF	0.76	0.76	0.76			0.63	0.63	0.63			0.69	0.69	0.69			0.65	0.65	0.65			0.73



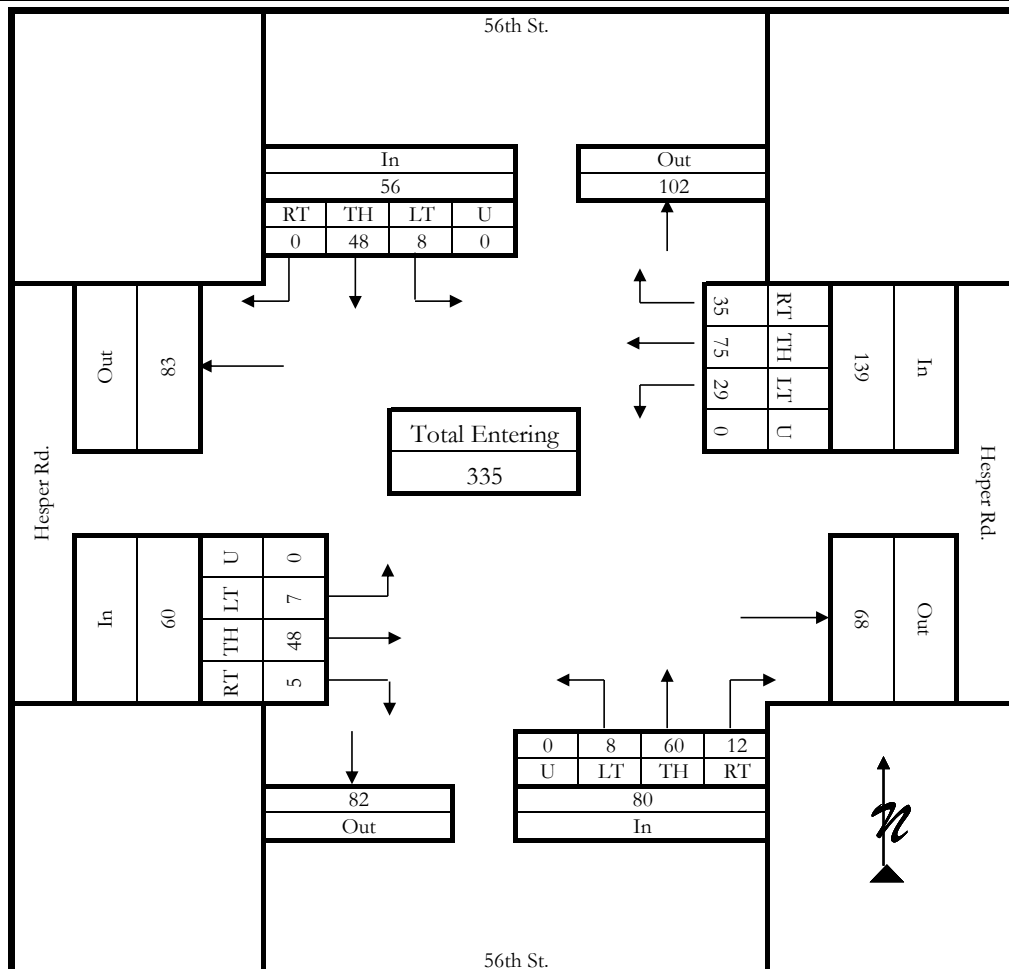
INTERSECTION TURNING MOVEMENT COUNT SUMMARY

General Information

Counted By:	J. Staszczuk	Intersection:	Hesper Rd. & 56th St.
Agency/Company:	Sanderson Stewart	Jurisdiction:	City of Billings / MDT
Date Performed:	Wednesday, January 20, 2016		
Count Time Period:	PM Peak Hour (4:45 - 5:45 PM)		
Project Number:	15053	Project Description:	West End Multi-Modal Traffic Modeling
North/South Street:	56th St.	East/West Street:	Hesper Rd.

Vehicle Volumes and Adjustments

	56th St. Southbound					56th St. Northbound					Hesper Rd. Eastbound					Hesper Rd. Westbound					Int. Total
Start Time	Right	Thru	Left	U-turn	Total	Right	Thru	Left	U-turn	Total	Right	Thru	Left	U-turn	Total	Right	Thru	Left	U-turn	Total	
Factor	1.12	1.12	1.12	1.12		1.12	1.12	1.12	1.12		1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00		
4:45 PM	0	12	3	0	15	3	13	2	0	18	1	15	4	0	20	8	20	4	0	32	85
5:00 PM	0	10	2	0	12	6	25	3	0	34	0	13	2	0	15	12	25	9	0	46	107
5:15 PM	0	15	2	0	17	1	13	0	0	14	3	10	0	0	13	9	21	8	0	38	82
5:30 PM	0	11	1	0	12	2	9	3	0	14	1	10	1	0	12	6	9	8	0	23	61
Grand Total	0	48	8	0	56	12	60	8	0	80	5	48	7	0	60	35	75	29	0	139	335
Medium Truck %	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Heavy Truck %	0.0	2.1	0.0	0.0	1.8	0.0	0.0	0.0	0.0	0.0	0.0	2.1	0.0	0.0	1.7	0.0	0.0	0.0	0.0	0.0	
Total Truck %	0.0	2.1	0.0	0.0	1.8	0.0	0.0	0.0	0.0	0.0	0.0	2.1	0.0	0.0	1.7	0.0	0.0	0.0	0.0	0.0	
Total %	0.0	14.3	2.4	0.0	16.7	3.6	17.9	2.4	0.0	23.9	1.5	14.3	2.1	0.0	17.9	10.4	22.4	8.7	0.0	41.5	100.0
PHF	0.82	0.82	0.82			0.59	0.59	0.59			0.75	0.75	0.75			0.76	0.76	0.76			0.78



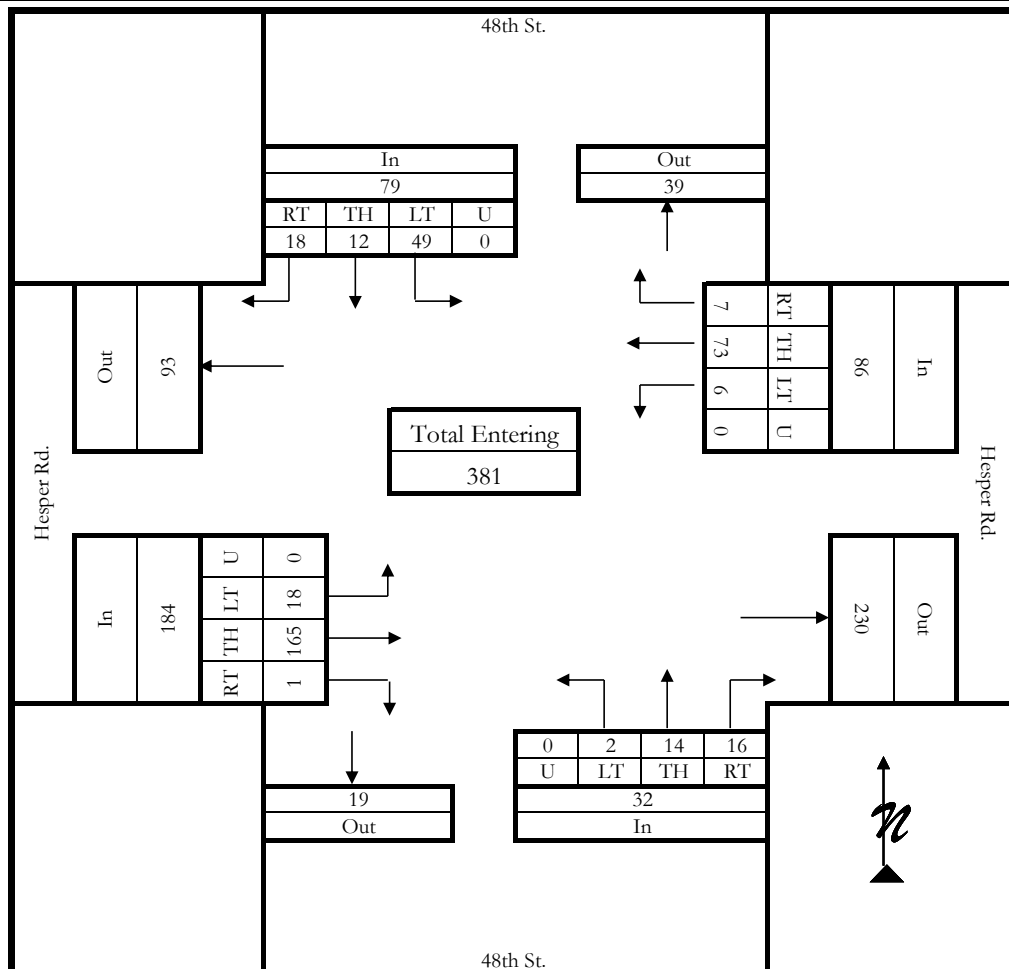
INTERSECTION TURNING MOVEMENT COUNT SUMMARY

General Information

Counted By:	J. Staszczuk	Intersection:	Hesper Rd. & 48th St.
Agency/Company:	Sanderson Stewart	Jurisdiction:	City of Billings / MDT
Date Performed:	Wednesday, January 20, 2016		
Count Time Period:	AM Peak Hour (7:15 - 8:15 AM)		
Project Number:	15053	Project Description:	West End Multi-Modal Traffic Modeling
North/South Street:	48th St.	East/West Street:	Hesper Rd.

Vehicle Volumes and Adjustments

	48th St. Southbound					48th St. Northbound					Hesper Rd. Eastbound					Hesper Rd. Westbound					Int. Total
Start Time	Right	Thru	Left	U-turn	Total	Right	Thru	Left	U-turn	Total	Right	Thru	Left	U-turn	Total	Right	Thru	Left	U-turn	Total	
Factor	1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00		
7:15 AM	1	3	8	0	12	7	0	0	0	7	0	31	3	0	34	1	17	1	0	19	72
7:30 AM	2	3	14	0	19	4	6	1	0	11	1	42	4	0	47	2	14	2	0	18	95
7:45 AM	13	2	20	0	35	2	4	0	0	6	0	47	3	0	50	0	21	1	0	22	113
8:00 AM	2	4	7	0	13	3	4	1	0	8	0	45	8	0	53	4	21	2	0	27	101
Grand Total	18	12	49	0	79	16	14	2	0	32	1	165	18	0	184	7	73	6	0	86	381
Medium Truck %	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	3.0	5.6	0.0	3.8	0.0	0.0	0.0	0.0	0.0	
Heavy Truck %	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.8	0.0	0.0	5.8	
Total Truck %	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	3.0	5.6	0.0	3.8	0.0	6.8	0.0	0.0	5.8	
Total %	4.7	3.1	12.9	0.0	20.7	4.2	3.7	0.5	0.0	8.4	0.3	43.3	4.7	0.0	48.3	1.8	19.2	1.6	0.0	22.6	100.0
PHF	0.56	0.56	0.56			0.73	0.73	0.73			0.87	0.87	0.87			0.80	0.80	0.80			0.84



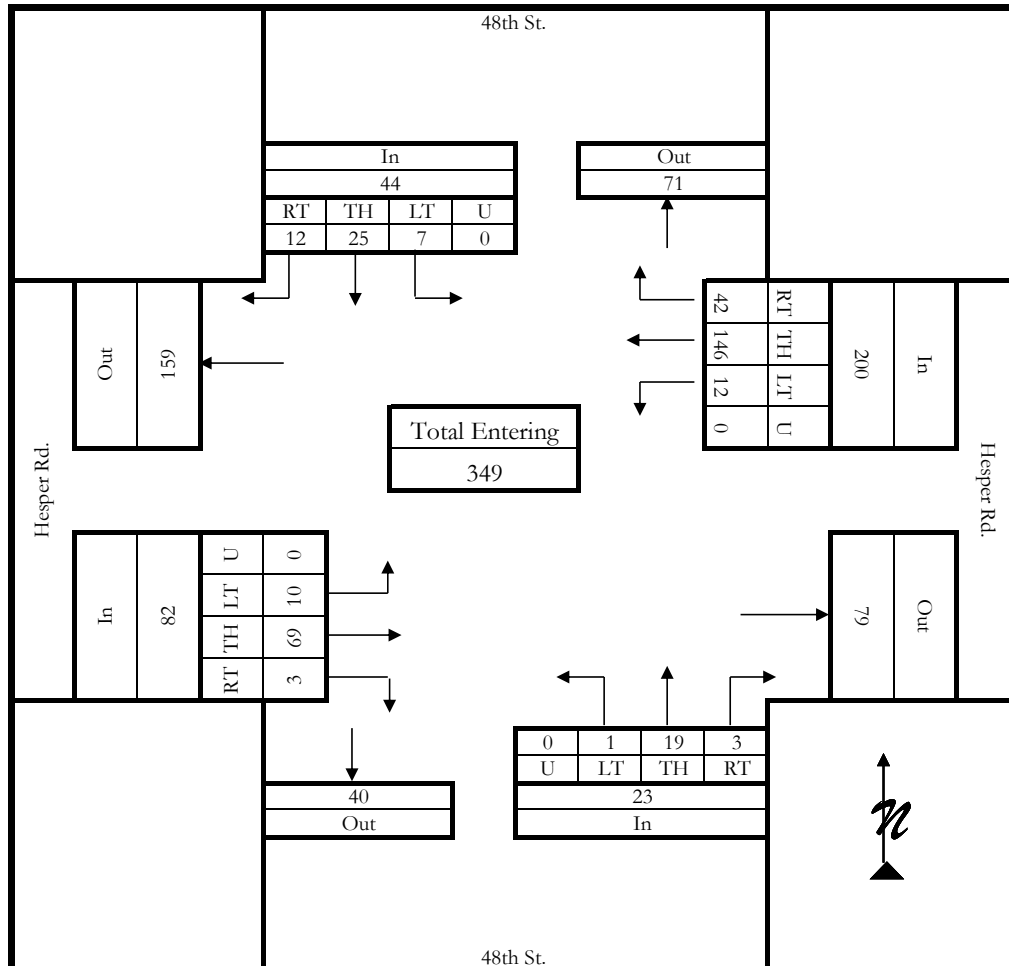
INTERSECTION TURNING MOVEMENT COUNT SUMMARY

General Information

Counted By:	J. Staszczuk	Intersection:	Hesper Rd. & 48th St.
Agency/Company:	Sanderson Stewart	Jurisdiction:	City of Billings / MDT
Date Performed:	Wednesday, January 20, 2016		
Count Time Period:	PM Peak Hour (4:45 - 5:45 PM)		
Project Number:	15053	Project Description:	West End Multi-Modal Traffic Modeling
North/South Street:	48th St.	East/West Street:	Hesper Rd.

Vehicle Volumes and Adjustments

	48th St. Southbound					48th St. Northbound					Hesper Rd. Eastbound					Hesper Rd. Westbound					Int. Total
Start Time	Right	Thru	Left	U-turn	Total	Right	Thru	Left	U-turn	Total	Right	Thru	Left	U-turn	Total	Right	Thru	Left	U-turn	Total	
Factor	1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00		
4:45 PM	2	6	1	0	9	1	5	0	0	6	2	17	2	0	21	5	34	1	0	40	76
5:00 PM	4	6	1	0	11	2	8	1	0	11	0	18	2	0	20	16	44	4	0	64	106
5:15 PM	4	5	3	0	12	0	2	0	0	2	1	17	0	0	18	8	39	4	0	51	83
5:30 PM	2	8	2	0	12	0	4	0	0	4	0	17	6	0	23	13	29	3	0	45	84
Grand Total	12	25	7	0	44	3	19	1	0	23	3	69	10	0	82	42	146	12	0	200	349
Medium Truck %	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Heavy Truck %	0.0	4.0	0.0	0.0	2.3	0.0	0.0	0.0	0.0	0.0	33.3	1.4	0.0	0.0	2.4	0.0	0.0	0.0	0.0	0.0	
Total Truck %	0.0	4.0	0.0	0.0	2.3	0.0	0.0	0.0	0.0	0.0	33.3	1.4	0.0	0.0	2.4	0.0	0.0	0.0	0.0	0.0	
Total %	3.4	7.2	2.0	0.0	12.6	0.9	5.4	0.3	0.0	6.6	0.9	19.8	2.9	0.0	23.5	12.0	41.8	3.4	0.0	57.3	100.0
PHF	0.92	0.92	0.92			0.52	0.52	0.52			0.89	0.89	0.89			0.78	0.78	0.78			0.82



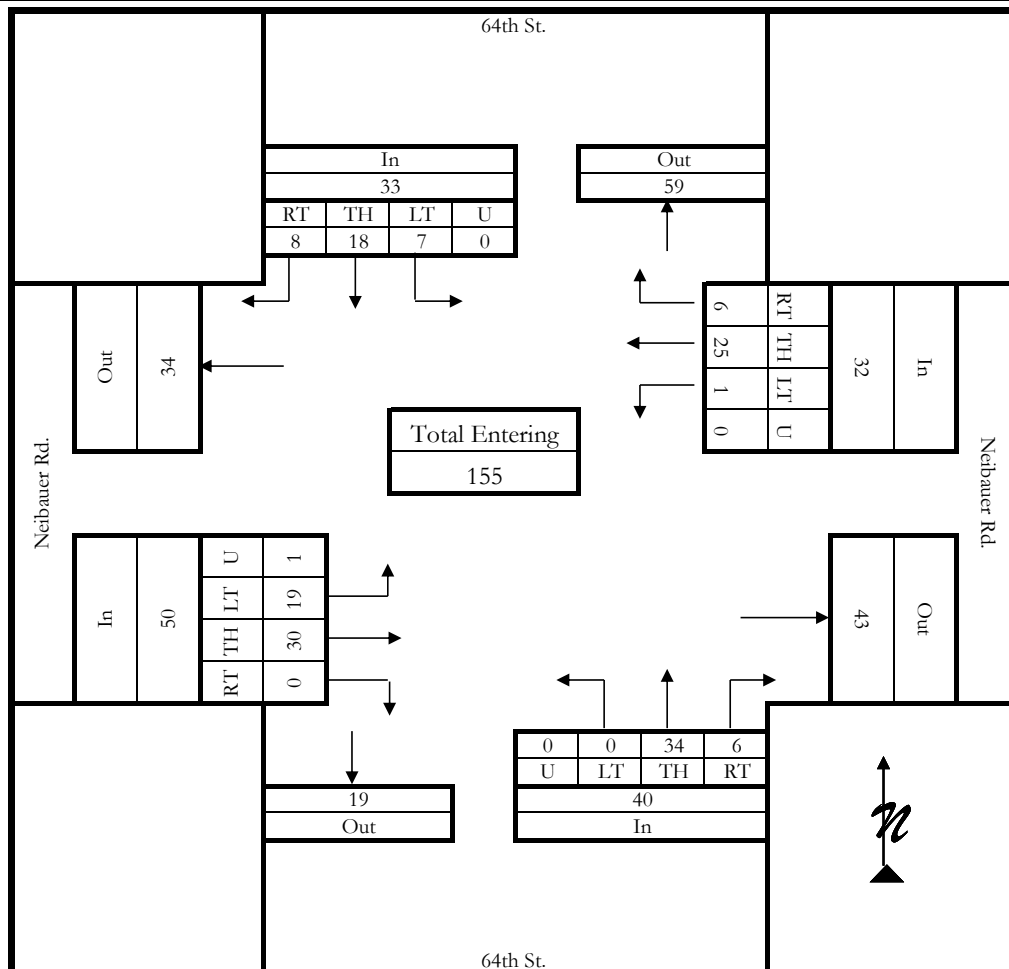
INTERSECTION TURNING MOVEMENT COUNT SUMMARY

General Information

Counted By:	J. Staszczuk	Intersection:	Neibauer Rd. & 64th St.
Agency/Company:	Sanderson Stewart	Jurisdiction:	City of Billings / MDT
Date Performed:	Wednesday, January 20, 2016		
Count Time Period:	AM Peak Hour (7:15 - 8:15 AM)		
Project Number:	15053	Project Description:	West End Multi-Modal Traffic Modeling
North/South Street:	64th St.	East/West Street:	Neibauer Rd.

Vehicle Volumes and Adjustments

	64th St. Southbound					64th St. Northbound					Neibauer Rd. Eastbound					Neibauer Rd. Westbound					Int. Total
Start Time	Right	Thru	Left	U-turn	Total	Right	Thru	Left	U-turn	Total	Right	Thru	Left	U-turn	Total	Right	Thru	Left	U-turn	Total	
Factor	1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00		1.12	1.12	1.12	1.12		1.12	1.12	1.12	1.12		
7:15 AM	1	1	1	0	3	3	4	0	0	7	0	13	0	0	13	0	6	0	0	6	29
7:30 AM	0	3	1	0	4	2	12	0	0	14	0	7	1	0	8	2	7	1	0	10	36
7:45 AM	2	9	3	0	14	0	12	0	0	12	0	8	17	1	26	4	10	0	0	14	66
8:00 AM	5	5	2	0	12	1	6	0	0	7	0	2	1	0	3	0	2	0	0	2	24
Grand Total	8	18	7	0	33	6	34	0	0	40	0	30	19	1	50	6	25	1	0	32	155
Medium Truck %	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.3	0.0	2.0	0.0	4.0	0.0	0.0	3.1	
Heavy Truck %	0.0	0.0	0.0	0.0	0.0	0.0	2.9	0.0	0.0	2.5	0.0	6.7	0.0	0.0	4.0	0.0	8.0	0.0	0.0	6.3	
Total Truck %	0.0	0.0	0.0	0.0	0.0	0.0	2.9	0.0	0.0	2.5	0.0	6.7	5.3	0.0	6.0	0.0	12.0	0.0	0.0	9.4	
Total %	5.2	11.6	4.5	0.0	21.3	3.9	21.9	0.0	0.0	25.8	0.0	19.4	12.3	0.6	32.3	3.9	16.1	0.6	0.0	20.6	100.0
PHF	0.59	0.59	0.59			0.71	0.71	0.71			0.48	0.48	0.48			0.57	0.57	0.57			0.59



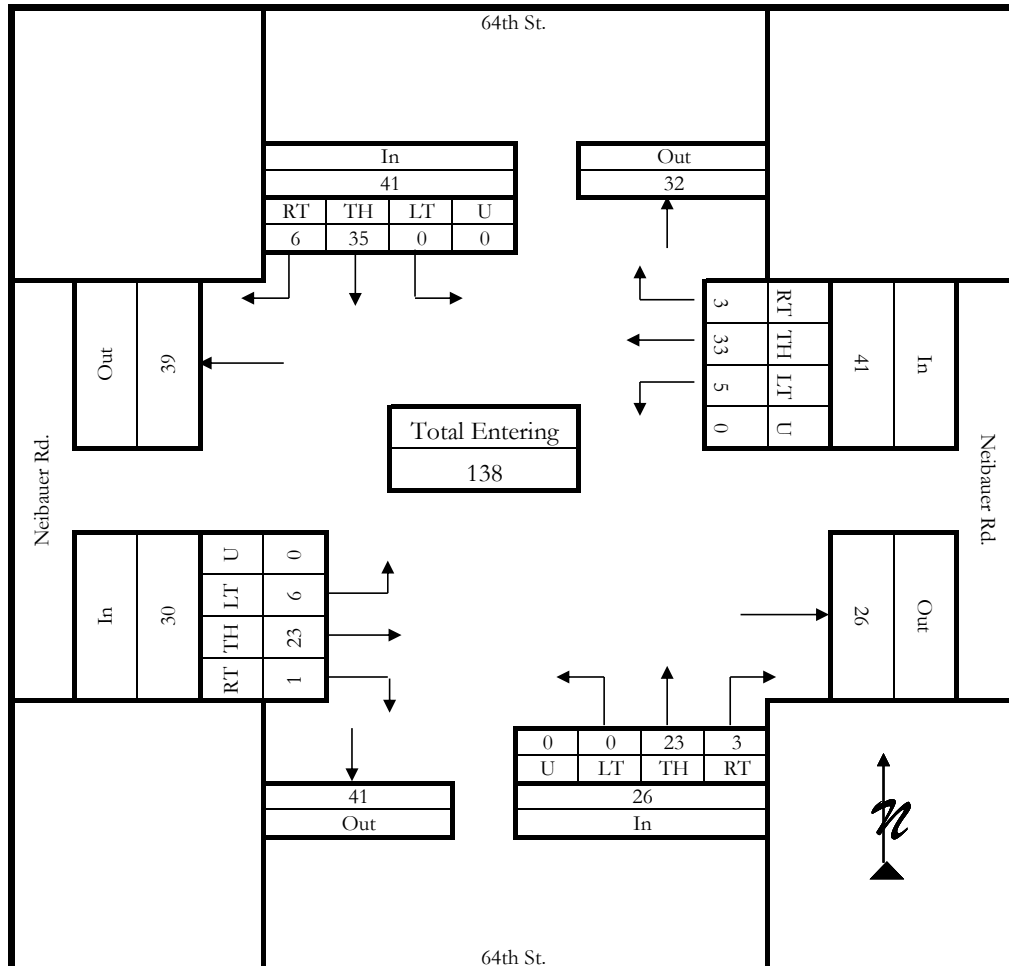
INTERSECTION TURNING MOVEMENT COUNT SUMMARY

General Information

Counted By:	J. Staszczuk	Intersection:	Neibauer Rd. & 64th St.
Agency/Company:	Sanderson Stewart	Jurisdiction:	City of Billings / MDT
Date Performed:	Wednesday, January 20, 2016		
Count Time Period:	PM Peak Hour (4:45 - 5:45 PM)		
Project Number:	15053	Project Description:	West End Multi-Modal Traffic Modeling
North/South Street:	64th St.	East/West Street:	Neibauer Rd.

Vehicle Volumes and Adjustments

	64th St. Southbound					64th St. Northbound					Neibauer Rd. Eastbound					Neibauer Rd. Westbound					Int. Total
Start Time	Right	Thru	Left	U-turn	Total	Right	Thru	Left	U-turn	Total	Right	Thru	Left	U-turn	Total	Right	Thru	Left	U-turn	Total	
Factor	1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00		1.12	1.12	1.12	1.12		1.12	1.12	1.12	1.12		
4:45 PM	2	4	0	0	6	0	4	0	0	4	0	6	2	0	8	1	7	2	0	10	28
5:00 PM	2	9	0	0	11	2	6	0	0	8	1	7	2	0	10	2	10	0	0	12	41
5:15 PM	1	13	0	0	14	0	4	0	0	4	0	6	2	0	8	0	9	2	0	11	37
5:30 PM	1	9	0	0	10	1	9	0	0	10	0	4	0	0	4	0	7	1	0	8	32
Grand Total	6	35	0	0	41	3	23	0	0	26	1	23	6	0	30	3	33	5	0	41	138
Medium Truck %	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Heavy Truck %	16.7	0.0	0.0	0.0	2.4	0.0	0.0	0.0	0.0	0.0	0.0	8.7	0.0	0.0	6.7	0.0	6.1	0.0	0.0	4.9	
Total Truck %	16.7	0.0	0.0	0.0	2.4	0.0	0.0	0.0	0.0	0.0	0.0	8.7	0.0	0.0	6.7	0.0	6.1	0.0	0.0	4.9	
Total %	4.3	25.4	0.0	0.0	29.7	2.2	16.7	0.0	0.0	18.8	0.7	16.7	4.3	0.0	21.7	2.2	23.9	3.6	0.0	29.7	100.0
PHF	0.73	0.73	0.73			0.65	0.65	0.65			0.75	0.75	0.75			0.85	0.85	0.85			0.84



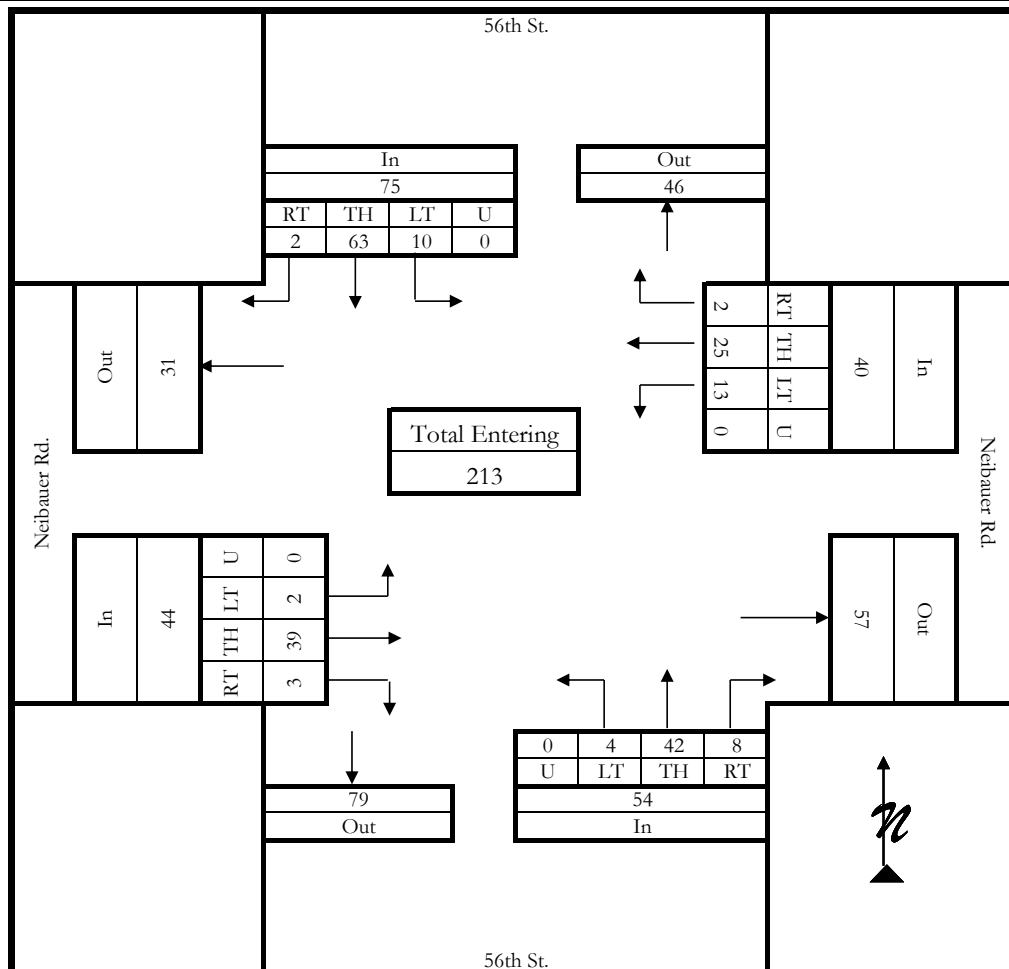
INTERSECTION TURNING MOVEMENT COUNT SUMMARY

General Information

Counted By:	J. Staszczuk	Intersection:	Neibauer Rd. & 56th St.
Agency/Company:	Sanderson Stewart	Jurisdiction:	City of Billings / MDT
Date Performed:	Wednesday, January 20, 2016		
Count Time Period:	AM Peak Hour (7:15 - 8:15 AM)		
Project Number:	15053	Project Description:	West End Multi-Modal Traffic Modeling
North/South Street:	56th St.	East/West Street:	Neibauer Rd.

Vehicle Volumes and Adjustments

	56th St. Southbound					56th St. Northbound					Neibauer Rd. Eastbound					Neibauer Rd. Westbound					Int. Total
Start Time	Right	Thru	Left	U-turn	Total	Right	Thru	Left	U-turn	Total	Right	Thru	Left	U-turn	Total	Right	Thru	Left	U-turn	Total	
Factor	1.12	1.12	1.12	1.12		1.12	1.12	1.12	1.12		1.12	1.12	1.12	1.12		1.12	1.12	1.12	1.12		
7:15 AM	0	13	2	0	15	1	3	2	0	6	0	13	0	0	13	1	2	2	0	5	39
7:30 AM	1	21	3	0	25	0	9	1	0	10	1	9	2	0	12	0	11	3	0	14	61
7:45 AM	1	17	4	0	22	3	12	1	0	16	2	11	0	0	13	0	9	6	0	15	66
8:00 AM	0	12	1	0	13	4	18	0	0	22	0	6	0	0	6	1	3	2	0	6	47
Grand Total	2	63	10	0	75	8	42	4	0	54	3	39	2	0	44	2	25	13	0	40	213
Medium Truck %	0.0	0.0	0.0	0.0	0.0	12.5	2.4	0.0	0.0	3.7	0.0	0.0	0.0	0.0	0.0	0.0	4.0	7.7	0.0	5.0	
Heavy Truck %	0.0	0.0	0.0	0.0	0.0	0.0	2.4	0.0	0.0	1.9	0.0	5.1	0.0	0.0	4.5	0.0	8.0	0.0	0.0	5.0	
Total Truck %	0.0	0.0	0.0	0.0	0.0	12.5	4.8	0.0	0.0	5.6	0.0	5.1	0.0	0.0	4.5	0.0	12.0	7.7	0.0	10.0	
Total %	0.9	29.6	4.7	0.0	35.2	3.8	19.7	1.9	0.0	25.4	1.4	18.3	0.9	0.0	20.7	0.9	11.7	6.1	0.0	18.8	100.0
PHF	0.75	0.75	0.75			0.61	0.61	0.61			0.85	0.85	0.85			0.67	0.67	0.67			0.81



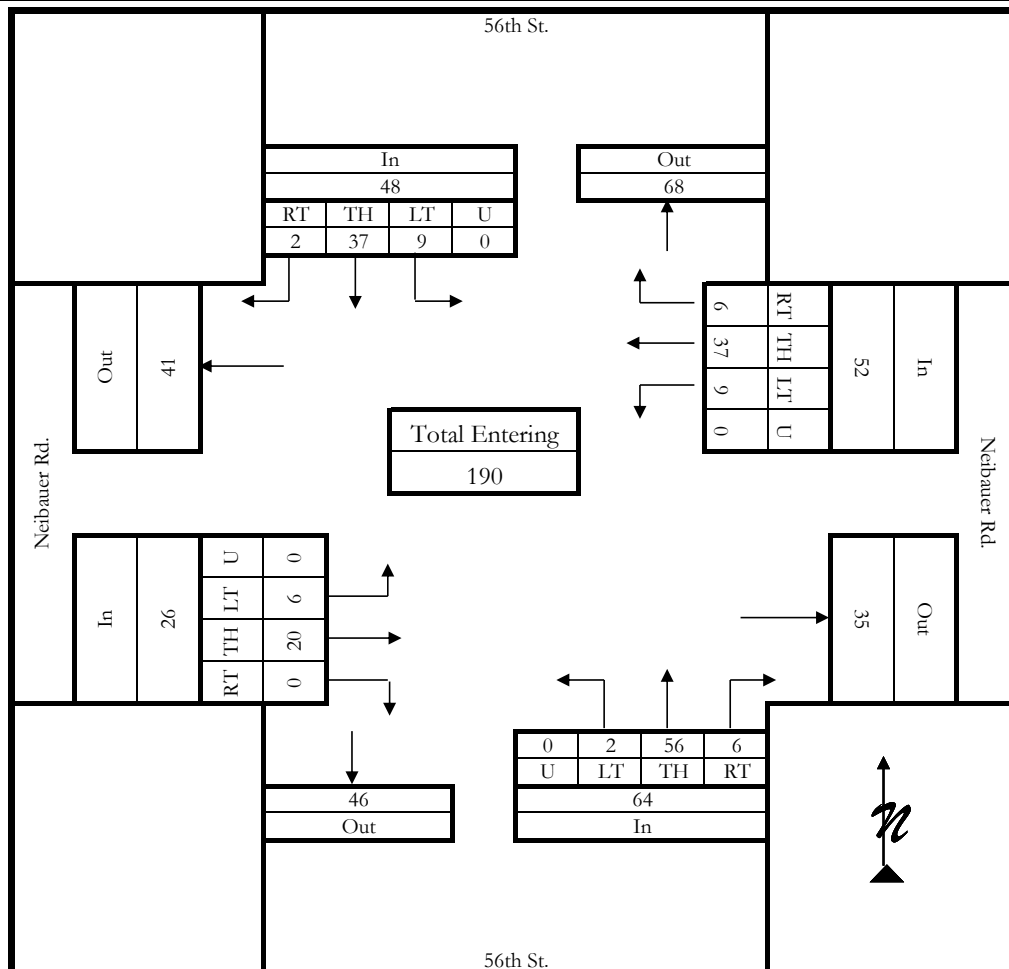
INTERSECTION TURNING MOVEMENT COUNT SUMMARY

General Information

Counted By:	J. Staszczuk	Intersection:	Neibauer Rd. & 56th St.
Agency/Company:	Sanderson Stewart	Jurisdiction:	City of Billings / MDT
Date Performed:	Wednesday, January 20, 2016		
Count Time Period:	PM Peak Hour (4:45 - 5:45 PM)		
Project Number:	15053	Project Description:	West End Multi-Modal Traffic Modeling
North/South Street:	56th St.	East/West Street:	Neibauer Rd.

Vehicle Volumes and Adjustments

	56th St. Southbound					56th St. Northbound					Neibauer Rd. Eastbound					Neibauer Rd. Westbound					Int. Total
Start Time	Right	Thru	Left	U-turn	Total	Right	Thru	Left	U-turn	Total	Right	Thru	Left	U-turn	Total	Right	Thru	Left	U-turn	Total	
Factor	1.12	1.12	1.12	1.12		1.12	1.12	1.12	1.12		1.12	1.12	1.12	1.12		1.12	1.12	1.12	1.12		
4:45 PM	0	13	4	0	17	2	17	0	0	19	0	3	0	0	3	4	11	2	0	17	56
5:00 PM	1	9	2	0	12	3	17	1	0	21	0	9	1	0	10	1	11	2	0	14	57
5:15 PM	0	7	2	0	9	1	13	1	0	15	0	6	1	0	7	1	9	4	0	14	45
5:30 PM	1	8	1	0	10	0	9	0	0	9	0	2	4	0	6	0	6	1	0	7	32
Grand Total	2	37	9	0	48	6	56	2	0	64	0	20	6	0	26	6	37	9	0	52	190
Medium Truck %	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Heavy Truck %	0.0	2.7	11.1	0.0	4.2	0.0	1.8	0.0	0.0	1.6	0.0	5.0	0.0	0.0	3.8	0.0	8.1	0.0	0.0	5.8	
Total Truck %	0.0	2.7	11.1	0.0	4.2	0.0	1.8	0.0	0.0	1.6	0.0	5.0	0.0	0.0	3.8	0.0	8.1	0.0	0.0	5.8	
Total %	1.1	19.5	4.7	0.0	25.3	3.2	29.5	1.1	0.0	33.7	0.0	10.5	3.2	0.0	13.7	3.2	19.5	4.7	0.0	27.4	100.0
PHF	0.71	0.71	0.71			0.76	0.76	0.76			0.65	0.65	0.65			0.76	0.76	0.76			0.83



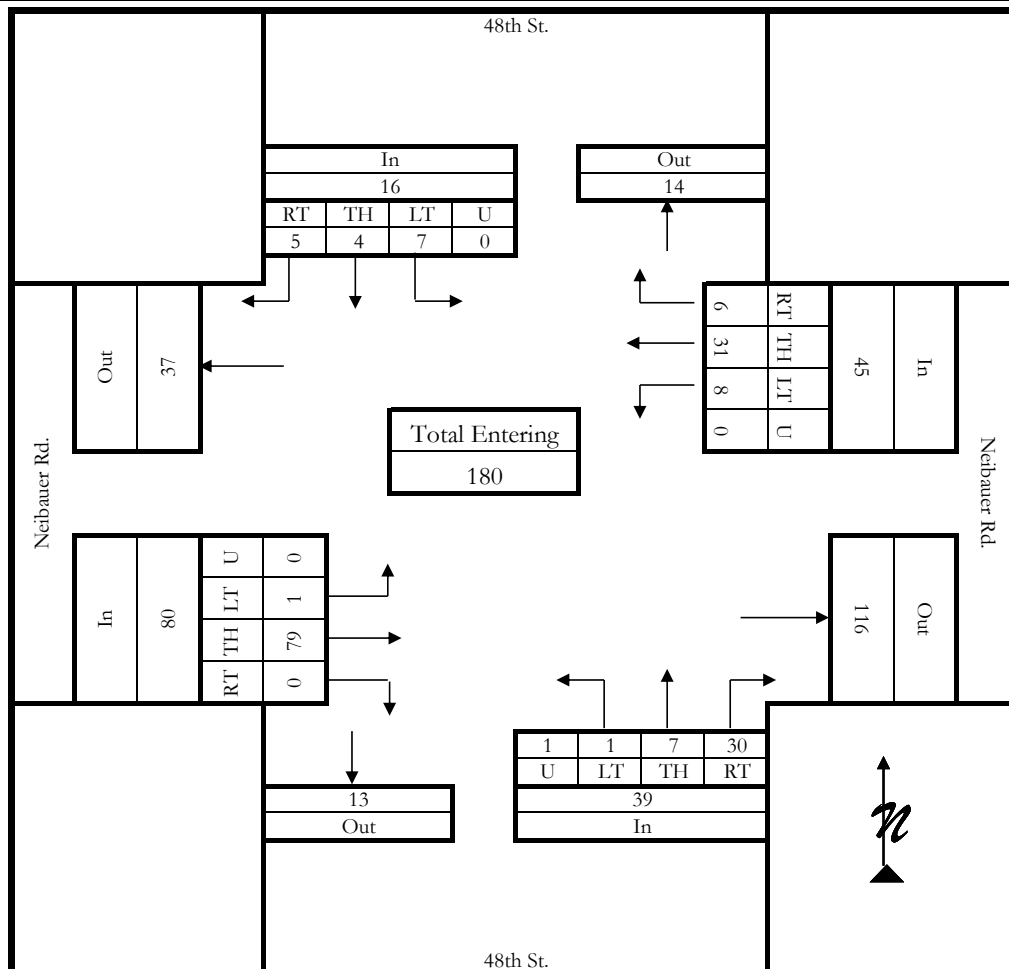
INTERSECTION TURNING MOVEMENT COUNT SUMMARY

General Information

Counted By:	J. Staszczuk	Intersection:	Neibauer Rd. & 48th St.
Agency/Company:	Sanderson Stewart	Jurisdiction:	City of Billings / MDT
Date Performed:	Wednesday, January 20, 2016		
Count Time Period:	AM Peak Hour (7:15 - 8:15 AM)		
Project Number:	15053	Project Description:	West End Multi-Modal Traffic Modeling
North/South Street:	48th St.	East/West Street:	Neibauer Rd.

Vehicle Volumes and Adjustments

	48th St. Southbound					48th St. Northbound					Neibauer Rd. Eastbound					Neibauer Rd. Westbound					Int. Total
Start Time	Right	Thru	Left	U-turn	Total	Right	Thru	Left	U-turn	Total	Right	Thru	Left	U-turn	Total	Right	Thru	Left	U-turn	Total	
Factor	1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00		1.12	1.12	1.12	1.12		1.12	1.12	1.12	1.12		
7:15 AM	1	0	2	0	3	10	1	0	0	11	0	19	0	0	19	2	6	2	0	10	43
7:30 AM	3	1	2	0	6	9	4	0	0	13	0	26	0	0	26	1	9	0	0	10	55
7:45 AM	1	1	1	0	3	5	0	1	0	6	0	24	0	0	24	1	6	3	0	10	43
8:00 AM	0	2	2	0	4	6	2	0	1	9	0	10	1	0	11	2	10	3	0	15	39
Grand Total	5	4	7	0	16	30	7	1	1	39	0	79	1	0	80	6	31	8	0	45	180
Medium Truck %	0.0	25.0	0.0	0.0	6.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.2	0.0	0.0	2.2	
Heavy Truck %	0.0	0.0	14.3	0.0	6.3	3.3	0.0	0.0	0.0	2.6	0.0	2.5	0.0	0.0	2.5	0.0	9.7	0.0	0.0	6.7	
Total Truck %	0.0	25.0	14.3	0.0	12.5	3.3	0.0	0.0	0.0	2.6	0.0	2.5	0.0	0.0	2.5	0.0	12.9	0.0	0.0	8.9	
Total %	2.8	2.2	3.9	0.0	8.9	16.7	3.9	0.6	0.6	21.7	0.0	43.9	0.6	0.0	44.4	3.3	17.2	4.4	0.0	25.0	100.0
PHF	0.67	0.67	0.67			0.75	0.75	0.75			0.77	0.77	0.77			0.75	0.75	0.75			0.82



INTERSECTION TURNING MOVEMENT COUNT SUMMARY

General Information

Counted By:	J. Staszczuk	Intersection:	Neibauer Rd. & 48th St.
Agency/Company:	Sanderson Stewart	Jurisdiction:	City of Billings / MDT
Date Performed:	Wednesday, January 20, 2016		
Count Time Period:	PM Peak Hour (4:45 - 5:45 PM)		
Project Number:	15053	Project Description:	West End Multi-Modal Traffic Modeling
North/South Street:	48th St.	East/West Street:	Neibauer Rd.

Vehicle Volumes and Adjustments

	48th St. Southbound					48th St. Northbound					Neibauer Rd. Eastbound					Neibauer Rd. Westbound					Int. Total
Start Time	Right	Thru	Left	U-turn	Total	Right	Thru	Left	U-turn	Total	Right	Thru	Left	U-turn	Total	Right	Thru	Left	U-turn	Total	
Factor	1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00		1.12	1.12	1.12	1.12		1.12	1.12	1.12	1.12		
4:45 PM	1	5	3	0	9	1	4	0	0	5	0	7	1	0	8	0	21	15	0	36	58
5:00 PM	0	1	3	0	4	9	6	0	0	15	0	19	0	0	19	3	16	6	0	25	63
5:15 PM	1	7	1	0	9	1	0	0	0	1	0	7	0	0	7	6	17	7	0	30	47
5:30 PM	1	5	1	0	7	2	2	0	0	4	0	9	0	0	9	3	10	9	0	22	42
Grand Total	3	18	8	0	29	13	12	0	0	25	0	42	1	0	43	12	64	37	0	113	210
Medium Truck %	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Heavy Truck %	0.0	0.0	25.0	0.0	6.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.7	0.0	0.0	2.7	
Total Truck %	0.0	0.0	25.0	0.0	6.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.7	0.0	0.0	2.7	
Total %	1.4	8.6	3.8	0.0	13.8	6.2	5.7	0.0	0.0	11.9	0.0	20.0	0.5	0.0	20.5	5.7	30.5	17.6	0.0	53.8	100.0
PHF	0.81	0.81	0.81			0.42	0.42	0.42			0.57	0.57	0.57			0.78	0.78	0.78			0.83

