The Most Livable City in America

2013 City of Saint Paul Bicycle and Pedestrian Count Report

Introduction

In September of 2013 the City of Saint Paul Department of Public Works conducted a bicycle and pedestrian count. With the help of volunteers, bicycle and pedestrian data was manually tabulated at 30 locations throughout the city. The number of participating volunteers determined the number of locations counted. This is a first step towards obtaining a comprehensive understanding of non-motorized transportation throughout Saint Paul. More data is needed to fully understand the distribution of non-motorized traffic throughout the city.

The objectives of the count were:

- To gain a more complete understanding of non-motorized traffic and behavior in Saint Paul.
- To understand where and how bicyclists and pedestrians travel throughout the City.
- To identify how bicycle and pedestrian traffic changes over time and in response to investments in infrastructure.
- To allow the City to make better-informed decisions on future infrastructure and safety investments for non-motorized transportation.

Key Findings

Top 2013 Bicycling Locations
(Location totals reflect tabulated 2-hour peak counts)

1. Marshall Ave Bridge **(330)**
2. Summit Ave east of Fairview Ave S **(268)**
3. U of M Transitway west of Energy Park Dr **(225)**
4. Ford Parkway Bridge **(211)**
5. Summit Ave east of Dale St N **(168)**
6. Mississippi River Blvd south of Jefferson **(132)**
7. E Como Blvd and Gateway Dr **(130)**
8. Summit Ave east of Western **(125)**
9. Lexington Pkwy S South of E Como Lake Dr **(117)**
10. Energy Park Dr south of U of M Transitway **(110)**

Top 2013 Pedestrian Locations
(Location totals reflect tabulated 2-hour peak counts)

1. Lexington Pkwy S South of E Como Lake Dr **(296)**
2. Summit Ave east of Fairview Ave S **(214)**
3. Smith Ave west of Kellogg Blvd W **(210)**
4. Summit Ave east of Western **(158)**
5. Mississippi River Blvd south of Jefferson **(154)**
6. Summit Ave east of Dale St N **(151)**
7. Marshall Ave Bridge **(111)**
8. Fairview Ave S south of Summit Ave **(96)**
9. Lexington Pkwy Bridge over W Pierce Butler **(94)**
10. Robert St north of Cesar Chavez St **(90)**

Contact info

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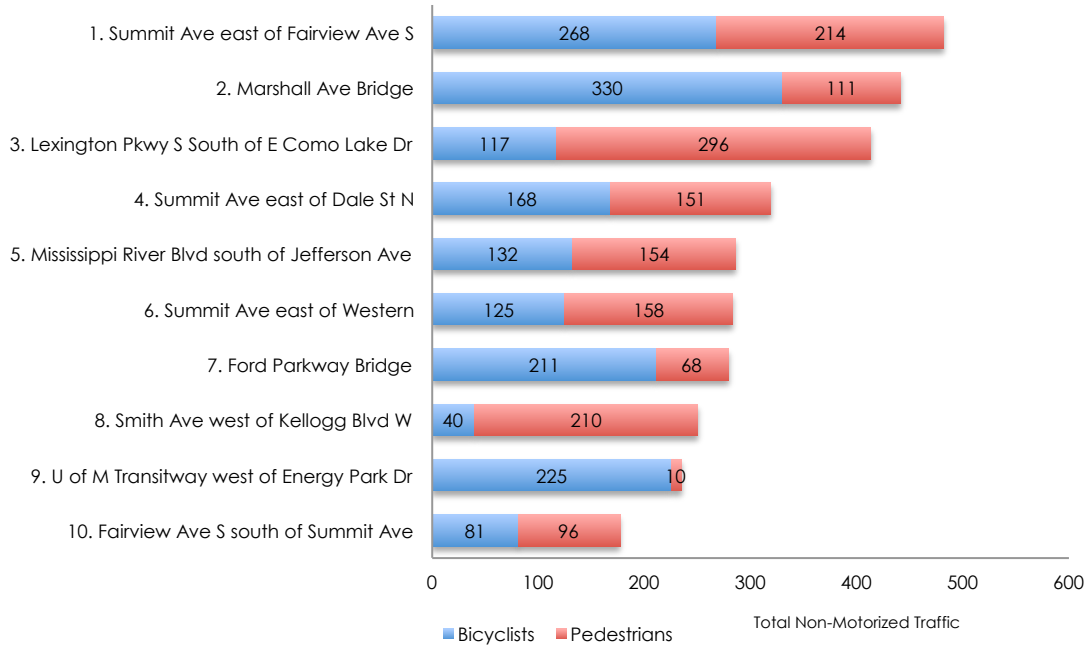
Top 2013 Total Non-Motorized Locations (Bicycle + Pedestrian Counts)
(Location totals reflect tabulated 2-hour peak counts)

1. Summit Ave east of Fairview Ave S, Total Non-Motorized **(482)**
2. Marshall Ave Bridge, Total Non-Motorized **(441)**
3. Lexington Pkwy S South of E Como Lake Dr, Total Non-Motorized **(413)**
4. Summit Ave east of Dale St N, Total Non-Motorized **(319)**
5. Mississippi River Blvd south of Jefferson Ave **(286)**
6. Summit Ave east Western, Total Non-Motorized **(283)**
7. Ford Parkway Bridge, Total Non-Motorized **(279)**
8. Smith Ave west of Kellogg Blvd W, Total Non-Motorized **(250)**
9. U of M Transitway west of Energy Park Dr, Total Non-Motorized **(235)**
10. Fairview Ave S south of Summit Ave, Total Non-Motorized **(177)**

Figure 1 - Top 2013 Non-Motorized Locations (Bicycle + Pedestrian Counts)
(Location totals reflect tabulated 2-hour peak counts)



Source: 2013 City of Saint Paul Count Report

Sidewalk Riding

Bicyclists riding on sidewalks were measured and tabulated at each of the count locations. Locations with off-street trail facilities were recorded separately and not tabulated as sidewalks. The presence of bicycle facilities (bike lanes or shared lane markings) strongly corresponds with a smaller percentage of bicyclists riding on sidewalks.

- Overall, **18.6%** of Saint Paul bicyclists counted in 2013 rode on sidewalks.
- When bike facilities were present[1] on a road, **8%** of bicyclists rode on sidewalks.
- When no bike facilities were present, **38.1%** of bicyclists rode on sidewalks.

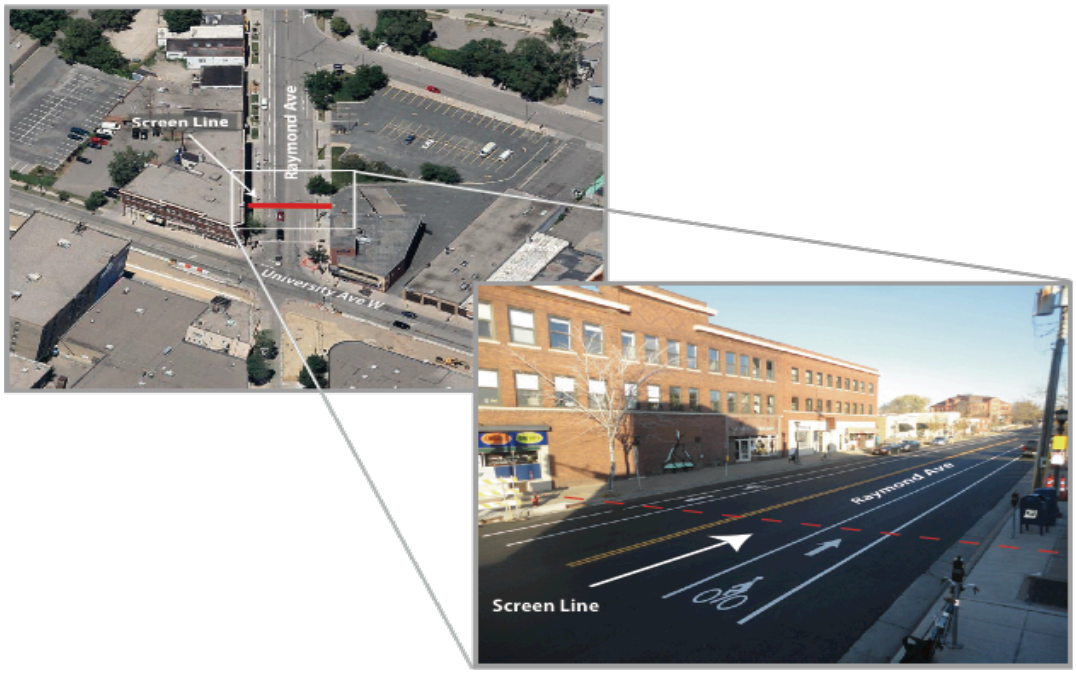
Measuring and Methodology

Manual Field Counts

To measure and record non-motorized traffic, Public Works utilized manual field counts conducted by volunteers at designated locations throughout the city. These counts were conducted from 4 – 6:00 pm to capture 'peak hour' traffic and were administered mid-week during the second week in September. Manual field counts utilize an imaginary screen line drawn across the street and abutting sidewalks or paths. Bicyclists and pedestrians crossing the screen line are recorded. Emphasis is placed on recording individuals rather than the number of actual bicycles. Individuals using assistive devices, such as a stroller or skateboard, are also tabulated and are recorded as pedestrians.

This model is consistent with other bicycle and pedestrian counts and reflects the methodology promoted by the National Bicycle & Pedestrian Documentation Project[2]. While an adjustment factor is sometimes utilized to extrapolate peak count data to estimate daily traffic counts, this report reflects only raw two-hour peak counts.

Figure 4 – Screen Line Example - Raymond Ave north of University Ave W



Source: Isometric aerial photo courtesy of Google Maps

[2] The National Bicycle & Pedestrian Documentation Project, co-sponsored by Alta Planning & Design and the Institute of Transportation Engineers Pedestrian and Bicycle council, aims to provide a consistent model of data collection and ongoing data for planners, governments, and bicycle and pedestrian professionals

Count Locations

Public Works identified count locations representing a diversity of walking and bicycling environments throughout Saint Paul. With the aim of better understanding where and how bicyclists and pedestrians travel throughout the city, care was taken to select locations near existing bicycle and pedestrian infrastructure to measure utilization and guide future non-motorized infrastructure investments.

Volunteers captured screen line data at 31 locations, recording information for multiple screen lines at most sites. The number of participating volunteers determined the number of locations counted. In most cases, volunteers were asked to collect data at locations that were predetermined by Public works. However, volunteers were also afforded deference in choosing their own locations to count. Many volunteers expressed an interest in counting locations near their home or work locations, resulting in geographic disparity in the data collection sites.

Also reflected in this report are bicycle and pedestrian counts performed by Transit for Livable Communities[3] (TLC). Since 2007, TLC has conducted annual bicycle and pedestrian counts throughout the Twin Cities, including six locations in Saint Paul. The data from these counts are included in the attached appendix.

Weather

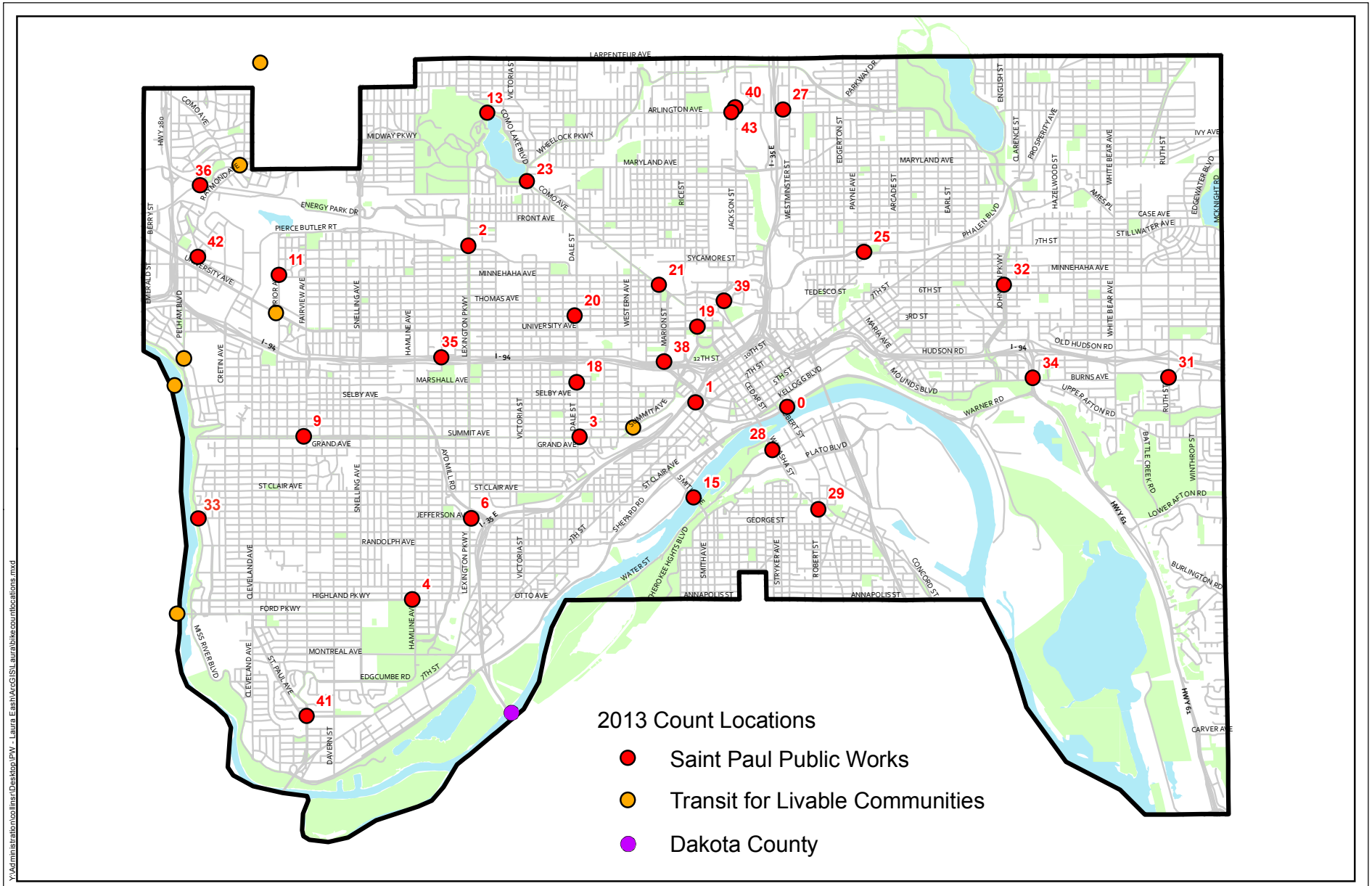
Weather conditions are an important consideration when measuring non-motorized transportation. While the direct relationship between weather and rates of walking and bicycling remains inconclusive, weather conditions unquestionably influence non-motorized traffic volume.

Nearly all of the 2013 counts were conducted on Tuesday September 10th from 4:00 – 6:00 pm, when the temperature remained constant at 80 degrees, conditions transitioned from overcast to clear, and the wind remained light, with occasional gusts up to 7 mph.

Future Counting Efforts

As an inaugural counting effort, the 2013 bicycle and pedestrian count is an important step in establishing a benchmark from which future analysis may be performed. Future counts will allow for a longitudinal analysis of the data collected, helping to identify how bicycle and pedestrian traffic changes over time and in response to investments in infrastructure. As future counting efforts are supplemented with additional counting locations and methods of data collection, we will gain a more complete understanding of non-motorized traffic and behavior in Saint Paul, allowing the City to make better-informed decisions on future infrastructure and safety investments for non-motorized transportation.

[3] Transit for Livable Communities (TLC) and Bike Walk Twin Cities administered the federal Non-Motorized Transportation Pilot Program in the Twin Cities beginning in 2007.



2013 Bicycle and Pedestrian Count Report

Bicycle and Pedestrian Count Locations

Appendix

ID#	Location	Agency	Year	Date	Count Type	Bicyclists	Pedestrians	Sidewalk %	Total Non-Motorized
0	Shepard Rd west of Jackson St	PW	2013	9/10/13	2 hr peak	69	89	0.0%	158
0	Jackson St north of Shephard Rd	PW	2013	9/10/13	2 hr peak	19	17	57.9%	36
1	Smith Ave west of Kellogg Blvd W	PW	2013	9/10/13	2 hr peak	40	210	72.5%	250
1	Kellogg Blvd W north of Smith Ave	PW	2013	9/10/13	2 hr peak	19	89	21.1%	108
2	Lexington Pkwy Bridge over W Pierce Butler	PW	2013	9/10/13	2 hr peak	51	94	9.8%	145
2	W Pierce Butler under Lexington Pkwy Bridge	PW	2013	9/10/13	2 hr peak	3	18	0.0%	21
3	Summit Ave east of Dale St N	PW	2013	9/10/13	2 hr peak	168	151	2.4%	319
3	Dale St N north of Summit Ave	PW	2013	9/10/13	2 hr peak	9	78	22.2%	87
4	Hamline Ave S south of W Highland Pkwy	PW	2013	9/10/13	2 hr peak	11	26	9.1%	37
4	W Highland Pkwy west of Hamline Ave S	PW	2013	9/10/13	2 hr peak	5	19	0.0%	24
6	W Jefferson Ave west of Lexington Pkwy S	PW	2013	9/10/13	2 hr peak	21	8	19.0%	29
6	Lexington Pkwy S north of W Jefferson Ave	PW	2013	9/10/13	2 hr peak	11	14	63.6%	25
9	Summit Ave east of Fairview Ave S	PW	2013	9/10/13	2 hr peak	268	214	4.1%	482
9	Fairview Ave S south of Summit Ave	PW	2013	9/10/13	2 hr peak	81	96	32.1%	177
11	N Prior Ave south of W Minnehaha Ave	PW	2013	9/10/13	2 hr peak	30	7	0.0%	37
11	W Minnehaha Ave east of N Prior Ave	PW	2013	9/10/13	2 hr peak	26	4	0.0%	30
13	Lexington Pkwy S South of E Como Lake Dr	PW	2013	9/10/13	2 hr peak	117	296	4.3%	413
15	Smith Ave Bridge north of S Cherokee Ave	PW	2013	9/10/13	2 hr peak	37	32	10.8%	69
15	S Cherokee Ave east of Smith Ave	PW	2013	9/10/13	2 hr peak	18	33	61.1%	51
18	Marshall Ave east of Dale St N	PW	2013	9/10/13	2 hr peak	20	32	15.0%	52
18	Dale St N north of Marshall Ave	PW	2013	9/10/13	2 hr peak	9	16	66.7%	25
19	Park St north of University Ave W	PW	2013	9/10/13	2 hr peak	57	41	3.5%	98
19	University Ave W west of Park St	PW	2013	9/10/13	2 hr peak	4	25	25.0%	29
20	Dale St N north of W Charles Ave	PW	2013	9/10/13	2 hr peak	13	78	84.6%	91
20	W Charles Ave west of N Dale St	PW	2013	9/10/13	2 hr peak	6	45	33.3%	51
21	Como Ave east of Galtier St	PW	2013	9/10/13	2 hr peak	69	24	15.9%	93
21	Galtier St south of Como Ave	PW	2013	9/10/13	2 hr peak	6	9	16.7%	15
23	E Como Blvd and Gateway Dr	PW	2013	9/10/13	2 hr peak	130	41	45.4%	171
25	Phalen Blvd east of Payne Ave	PW	2013	9/10/13	2 hr peak	24	22	12.5%	46
25	Payne Ave south of Phalen Blvd	PW	2013	9/10/13	2 hr peak	12	15	58.3%	27
27	Gateway State Trl north of Arlington Ave E	PW	2013	9/10/13	2 hr peak	19	25	0.0%	44
27	Arlington Ave E east of Gateway State Trl	PW	2013	9/10/13	2 hr peak	14	28	78.6%	42
28	Wabasha St S north of E Fillmore Ave	PW	2013	9/10/13	2 hr peak	55	88	27.3%	143
28	E Fillmore Ave east of Wabasha St S	PW	2013	9/10/13	2 hr peak	7	3	14.3%	10
29	Robert St north of Cesar Chavez St	PW	2013	9/10/13	2 hr peak	18	90	83.3%	108
29	Cesar Chavez St west of Robert St	PW	2013	9/10/13	2 hr peak	16	26	12.5%	42

PW = Saint Paul Department of Public Works
TLC = Transit for Livable Communities

ID#	Location	Agency	Year	Date	Count Type	Bicyclists	Pedestrians	Sidewalk %	Total Non-Motorized
31	Burns Ave east of Ruth St N	PW	2013	9/10/13	2 hr peak	8	18	0.0%	26
31	Ruth St N north of Burns Ave	PW	2013	9/10/13	2 hr peak	1	10	0.0%	11
32	E Margaret St east of Johnson Pkwy	PW	2013	9/10/13	2 hr peak	22	15	0.0%	37
32	Johnson Pkwy north of E Margaret St	PW	2013	9/10/13	2 hr peak	2	2	0.0%	4
33	Mississippi River Blvd south of Jefferson Ave	PW	2013	9/10/13	2 hr peak	132	154	0.0%	286
33	Jefferson Ave east of Mississippi River Blvd	PW	2013	9/10/13	2 hr peak	6	22	0.0%	28
34	US 10/61 south of Bruns Ave	PW	2013	9/10/13	2 hr peak	9	7	77.8%	16
34	Burns Ave west of US 10/61	PW	2013	9/10/13	2 hr peak	1	1	100.0%	2
35	Concordia Ave east of Griggs St Bridge	PW	2013	9/10/13	2 hr peak	2	27	0.0%	29
35	Griggs St Bridge over I-94	PW	2013	9/10/13	2 hr peak	40	17	50.0%	57
36	U of M Transitway west of Energy Park Dr	PW	2013	9/10/13	2 hr peak	225	10	6.7%	235
36	Energy Park Dr south of U of M Transitway	PW	2013	9/10/13	2 hr peak	110	11	23.6%	121
38	Marion St Bridge south of Saint Anthony Ave	PW	2013	9/10/13	2 hr peak	6	62	83.3%	68
38	Saint Anthony Ave west of Marion St	PW	2013	9/10/13	2 hr peak	5	11	60.0%	16
39	Jackson St south of E Mt Airy St	PW	2013	9/10/13	2 hr peak	11	24	9.1%	35
39	E Mt Airy St east of Jackson St	PW	2013	9/10/13	2 hr peak	6	6	16.7%	12
40	Timberlake Rd east of Jackson St	PW	2013	9/11/13	2 hr peak	12	27	100.0%	39
40	Jackson St south of Timberlake Rd	PW	2013	9/11/13	2 hr peak	6	22	83.3%	28
41	Edgcumbe Rd north of St Paul Ave	PW	2013	9/10/13	2 hr peak	19	12	5.3%	31
41	St Paul Ave east of Edgcumbe Rd	PW	2013	9/10/13	2 hr peak	11	25	36.4%	36
42	Raymond Ave south of W Territorial Rd	PW	2013	9/10/13	2 hr peak	50	75	14.0%	125
42	W Territorial Rd west of Raymond Ave	PW	2013	9/10/13	2 hr peak	32	29	15.6%	61
43	Arlington Ave E south of Trout Creek Trail	PW	2013	9/11/13	2 hr peak	33	37	69.7%	70
43	Trout Creek Trail north of Arlington Ave E	PW	2013	9/11/13	2 hr peak	7	7	0.0%	14
-	Pelham Rd north of Otis	TLC	2013	9/10/13	2 hr peak	50	20		70
_	Como Ave west of Raymond Ave	TLC	2007		2 hr peak	38	84		122
		TLC	2008		2 hr peak	55	94		149
		TLC	2009		2 hr peak	51	100		151
		TLC	2010		2 hr peak	40	77		117
		TLC	2011		2 hr peak	67	65		132
		TLC	2012		2 hr peak	42	47		89
		TLC	2013	9/10/13	2 hr peak	53	50		103
_	University Ave west of Prior	TLC	2007		2 hr peak	58	23		81
		TLC	2008		2 hr peak	84	26		110
		TLC	2009		2 hr peak	62	26		88
		TLC	2010		2 hr peak	62	28		90
		TLC	2011		2 hr peak	69	27		96
		TLC	2012		2 hr peak	41	37		78
		TLC	2013	9/10/13	2 hr peak	49	26		75

PW = Saint Paul Department of Public Works
TLC = Transit for Livable Communities

ID#	Location	Agency	Year	Date	Count Type	Bicyclists	Pedestrians	Sidewalk %	Total Non-Motorized
_	Summit Ave east of Western	TLC	2007		2 hr peak	79	136		215
		TLC	2008		2 hr peak	121	153		274
		TLC	2009		2 hr peak	103	128		231
		TLC	2010		2 hr peak	102	82		184
		TLC	2011		2 hr peak	122	168		290
		TLC	2012		2 hr peak	84	73		157
		TLC	2013	9/10/13	2 hr peak	125	158		283
_	Larpenteur east of Cleveland	TLC	2007		2 hr peak	18	23		41
		TLC	2008		2 hr peak	27	26		53
		TLC	2009		2 hr peak	27	20		47
		TLC	2010		2 hr peak	24	21		45
		TLC	2011		2 hr peak	24	16		40
		TLC	2012		2 hr peak	26	13		39
		TLC	2013	9/10/13	2 hr peak	27	13		40
_	Marshall Ave Bridge	TLC	2007		2 hr peak	280	76		356
		TLC	2008		2 hr peak	290	141		431
		TLC	2009		2 hr peak	311	100		411
		TLC	2010		2 hr peak	311	129		440
		TLC	2011		2 hr peak	372	116		488
		TLC	2012		2 hr peak	381	165		546
		TLC	2013	9/10/13	2 hr peak	330	111		441
_	Ford Parkway Bridge	TLC	2007		2 hr peak	153	119		272
		TLC	2008		2 hr peak	234	134		368
		TLC	2009		2 hr peak	204	62		266
		TLC	2010		2 hr peak	114	66		180
		TLC	2011		2 hr peak	206	77		283
		TLC	2012		2 hr peak	204	116		320
		TLC	2013	9/10/13	2 hr peak	211	68		279
-	I-35 Bridge over the Mississippi River	DK CO	2012	9/11/12	2 hr peak	33	3		36
-	I-35 Bridge over the Mississippi River	DK CO	2013	9/12/13	2 hr peak	61	5		66

PW = Saint Paul Department of Public Works
TLC = Transit for Livable Communities
DK CO = Dakota County

Count Location:
Counter Name:
Date:

City of St. Paul Public Works
Bicycle and Pedestrian Count Form

- *Complete all of the fields of this form as accurately and completely as possible.*
- *Count all bicyclists and pedestrians crossing the screen line using tally marks in the table.*
- *Count the number of people riding bicycles, not the number of bicycles (e.g. tandem is two).*
- *A person traveling using a wheelchair, skates or other assistance is a pedestrian.*
- *If issues arise (distractions, traffic) and you lose track, make a note on the back of this sheet.*

Start time:

Stop time:

Weather (temperature/conditions):

Time	Bicyclists			Pedestrians
	Trail	Street	Sidewalk	
4:00 - 4:15				
4:15 - 4:30				
4:30 - 4:45				
4:45 - 5:00				
5:00 – 5:15				
5:15 – 5:30				
5:30 – 5:45				
5:45 - 6:00				

Adapted from the 2012 Mn/DOT Standard Manual Bicycle and Pedestrian Screenline Count Form.