

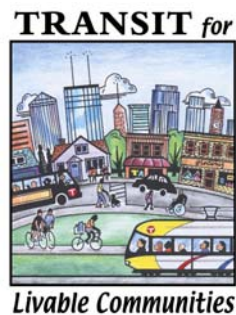
Pedestrian and Bicycle Count Results Bike Walk Twin Cities Fall 2008

Prepared by

Transit for Livable Communities

As part of the Bike Walk Twin Cities initiative

February 10, 2009



In September, 2008, Transit for Livable Communities (TLC) and the City of Minneapolis Department of Public Works (DPW) conducted a count of bicycle and pedestrian travel activity. This count is part of continued data collection of bicycle and pedestrian behavior in the Minneapolis area. It also provides vital measurement of the impacts of bicycle and pedestrian investments during the federal Non-Motorized Transportation Pilot (NTP) Program.

Bike Walk Twin Cities

The NTP Program, known locally as Bike Walk Twin Cities, is a federally funded demonstration program in four U.S. communities: Marin County, California; Sheboygan, Wisconsin; Columbia, Missouri; and Minneapolis, Minnesota. TLC is administering the program in Minneapolis. Each of the four programs will determine whether increased investments in planning, education, and infrastructure result in more people walking and bicycling for transportation. Approximately \$21 million is available to each community over a four-year period.

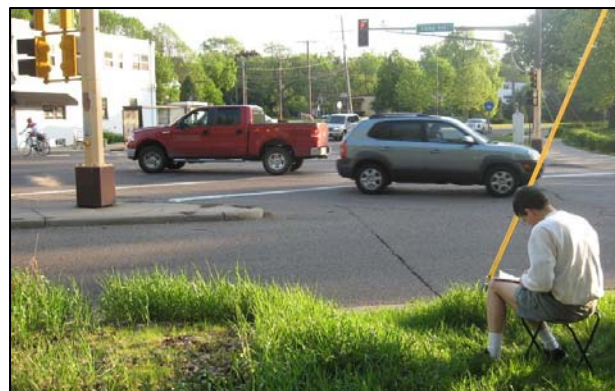
In September 2008, counts were conducted at 89 locations within the City of Minneapolis and along corridors in municipalities that adjoin the City of Minneapolis. TLC was responsible for 35 count locations and the City of Minneapolis responsible for 54.

2008 Counts by the Numbers¹
5 pedestrians counted at Fillmore Ave NE, south of Broadway Ave (<u>lowest pedestrian count location</u>)
6 percent <u>increase in pedestrians</u> observed*
10 bicyclists counted at 26th Ave N & Penn Ave N (<u>Lowest bicycle count location</u>)
29 percent <u>increase in bicyclists</u> observed*
31 <u>TLC volunteer counters dedicated to this important endeavor!</u>
89 count locations, including 35 counted by <u>TLC volunteers</u> and 54 by <u>Minneapolis DPW</u> and its volunteers and partner agencies
598 bicyclists counted at 15th Ave NE between 4 th St. NE & University Ave (<u>highest bike count location</u>)
2,000 pedestrians counted at Washington Ave SE, west of Union Street (<u>highest pedestrian count location</u>)
12,212 <u>total bicyclists</u> counted
14,657 <u>total pedestrians</u> counted
26,869 <u>TOTAL BICYCLISTS AND PEDESTRIANS COUNTED</u> during the two-hour count period (4:00 pm to 6:00 pm)

¹ Figures reported reflect totals for the locations that were counted in both 2007 and 2008.

This report summarizes the results of the TLC 2008 counts and includes totals from the City of Minneapolis for the two-hour count period (4:00 – 6:00 p.m.) on the following dates:

- Tuesday, September 9, 2008 - Weather: Sunny, Temperature: High 71, Low 48
- Wednesday, September 10, 2008 - Weather: Sunny, Temperature: High 70, Low 56
- Wednesday, September 17, 2008 (Make-up date for site 35 Como Avenue at Raymond) - Weather: Sunny, Temperature: High 74, Low 55



A volunteer counting bicyclists and pedestrians on Como Avenue

Staffing and Volunteers

The task of conducting counts at so many locations at consistent times requires a strong, systematic approach. TLC enlisted the help of 31 volunteers to conduct the 35 counts in 2008, many of whom also worked on the 2007 data collection. To maintain data integrity, TLC established forms and protocol, provided training sessions, and provided staffing to check each location during the counts.

TLC counters were each given a map of a specific count location, which identified the count screen line and suggested observation location. The counters were instructed to record each bicyclist and pedestrian who crossed the screen line during the count period and also to distinguish each cyclist or pedestrian as male, female, or child. Additionally, counters tallied bicyclists who were riding on sidewalks (where applicable) and identified pedestrians using assistive devices (strollers, skateboards, in-line skates, walkers, wheel chairs, etc.). A copy of the TLC count form is included in the appendix of this document.

Count Results

The two hour count results for fall 2008 suggest that bicycling and walking are increasing in the Twin Cities. At locations where counts were performed in both 2007 and 2008, walking increased six percent and bicycling increased 29 percent. These numbers support the trends demonstrated in the American Commuter Survey (ACS) from 2005 to 2007, which also shows increases in walking and bicycling, with walking at 6.4 percent (up from 5.8 percent) and bicycling at 3.7 percent (up from 2.4 percent).²

Figure 1: Comparison of 2 hour counts at locations counted both years

	Locations	Fall 2007	Fall 2008	Increase	% Increase
Bicycle Counts	17	2,650	3,422	772	29.2%
Pedestrian Counts	16	2,706	2,864	157	5.8%

² Numbers reflect share of work commute for the city of Minneapolis.

The combined average travel behavior from 2007 and 2008 will establish a baseline for walking and bicycling behavior for the Bike Walk Twin Cities initiative. At the conclusion of this initiative, we will use this baseline to measure the impact of the completed Bike Walk Twin Cities projects in 2010.

The following tables provide the numbers for each of the locations that were counted in both 2007 and 2008 by TLC. These counts include 16 locations with bicycle and pedestrian counts and one additional bicycle count location (University Ave W at Prior Ave N only counted bicycles in 2007). Future counts will emphasize these locations as part of a consistent measurement for the Bike Walk Twin Cities initiative that includes several key project locations.

Figure 2: Bike counts at locations observed in both 2007 and 2008

Count Location	Fall 2007	Fall 2008	Change	Percent Change
Midtown Greenway, West of Hennepin Avenue	306	597	291	95.1%
Hiawatha Trail (So of Ilth)	230	333	103	44.8%
*15th Ave SE north of University Ave SE	514	598	84	16.3%
Franklin Ave Bridge	203	287	84	41.1%
Cedar Lake Trail west of I-394	201	244	43	21.4%
Hennepin Ave, north of 28th St.	71	104	33	46.5%
*Lyndale Ave S, north of Franklin Ave S	113	142	29	26.0%
*42nd St, east of Minnehaha Ave. S	14	36	23	166.7%
20th Ave over I-94	200	221	21	10.5%
*2nd St S, south of Plymouth Ave	45	65	20	43.3%
Riverside Ave over I-94	60	77	17	28.3%
*Central Ave NE, north of Lowry Ave	40	55	15	36.5%
Plymouth Ave Bridge	57	69	12	21.1%
University Ave, west of Prior Ave	58	70	12	19.8%
Lake/Marshall St Bridge	280	290	10	3.6%
7th St N over I-94	21	23	3	12.2%
Greenway crossing Hwy 55 (at-grade)	237	212	-25	-10.5%
Totals	2,650	3,422	772	29.2%

**Locations counted as intersections in 2007; an adjustment factor was used to estimate screen line total*

As stated above, bicycling is increasing at the comparison locations. The only count location where a comparison between 2007 and 2008, showed a decrease was the Midtown Greenway crossing at Hiawatha Avenue. The decrease at this location is not surprising, given the opening of the new Sabo Bridge, which provides an additional crossing opportunity at this location. When the 212 bicyclists at the Hiawatha Avenue location are added to the 559 bicyclists using the new Sabo bicycle/pedestrian bridge, the result is 771 bicyclists at this location for 2008, and an increase of 534 or 225 percent (see table below).

Figure 3: Two-hour Bicycle Counts on Midtown Greenway at Hiawatha Avenue – Both Sabo Bridge and At-Grade Crossing

Count Location	Fall 2007	Fall 2008	Change	Percent Change
Greenway crossing Hwy 55 (at-grade)	237	212	-25	-10.5%
Sabo Bridge	N/A	534	N/A	
Combined total	237	771	534	225.3%

It's worthy to note that a significant number of bicyclists still use the at-grade crossing, an indication that some bicyclists prefer the direct route—even with a possible signal delay—over the extra distance and climb associated with using the Sabo Bridge.

Figure 4: Pedestrian counts at locations observed in both 2007 and 2008

Count Location	Fall 2007	Fall 2008	Change	Percent Change
*15th Ave SE north of University Ave SE	1,114	1,290	176	15.8%
*Central Ave NE, north of Lowry Ave	155	261	106	68.3%
Lake/Marshall St Bridge	76	141	65	85.5%
*42nd St, east of Minnehaha Ave. S	10	42	32	309.4%
Franklin Ave Bridge	124	143	19	14.9%
Riverside Ave over I-94	39	57	18	46.2%
Cedar Lake Trail west of I-394	30	46	16	53.3%
Greenway crossing Hwy 55 (at-grade)	11	26	15	136.4%
20th Ave over I-94	149	162	13	8.7%
*2nd St S, south of Plymouth Ave	13	21	8	62.0%
Midtown Greenway, West of Hennepin Avenue	71	76	5	7.0%
Hiawatha Trail (So of 11th)	18	13	-5	-27.8%
7th St N over I-94	21	15	-6	-28.6%
Plymouth Ave Bridge	113	88	-25	-22.1%
Hennepin Ave, north of 28th St.	409	297	-112	-27.3%
*Lyndale Ave S, north of Franklin Ave S	353	186	-167	-47.4%
Totals	2,706	2,864	157	5.8%

**Locations counted as intersections in 2007; an adjustment factor was used to estimate screen line total*

Pedestrian counts at these locations had some variable results, including significant declines (112/27 percent and 167/47 percent on Hennepin at 28th and Lyndale at Franklin, respectively). There were also some notable increases: 176, or 16 percent on 15th at 4th St. NE; 106, or 68 percent on Central Ave NE at Lowry; and 32, or 309 percent on 42nd at Minnehaha, respectively. These strong variations in count results may indicate that pedestrian behavior is less predictable than bicycling. TLC is exploring additional efforts to improve our ability to measure and predict pedestrian travel, including conducting seasonal counts and exploring automated data collection technology.

Walking and Bicycling Demographics

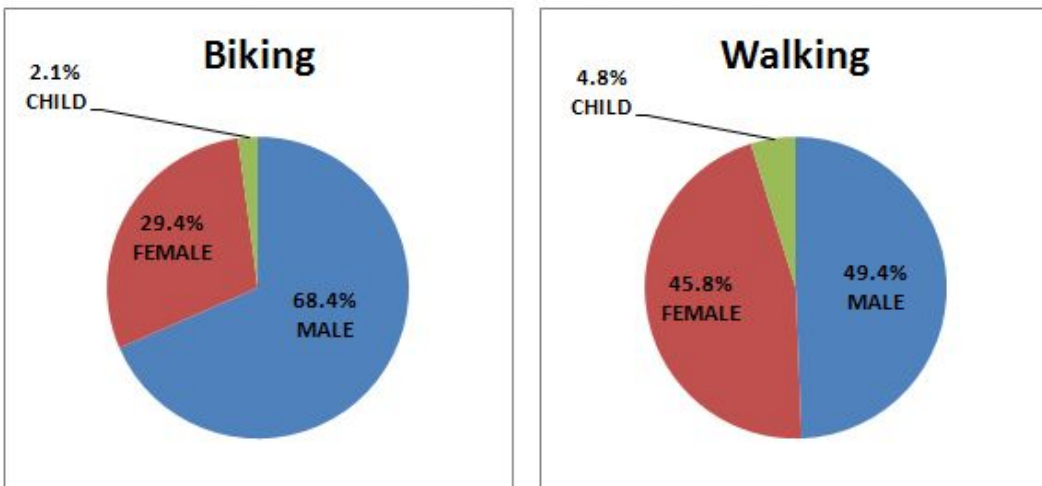
The TLC counts included an observation of the likely gender of pedestrians and bicyclists as well as noting children (children were identified without regard to gender at the discretion of the count volunteer).

These counts show a significant gender disparity for bicyclists with men outnumbering women about 3 to 1, which reflects the national trend for bicycling.³ Walking is more evenly distributed along gender lines, with men slightly outnumbering women.

The observations of children walking or biking are strikingly low, with two percent bicycling and five percent walking. There is a growing concern about decreased walking and bicycling among our nation's children. In 2004, only about 14 percent of children were walking to school, compared to 50 percent in 1969.⁴ It should be noted that TLC's count numbers may be under-representative of actual child walking and biking behavior. This may be due to the time period of counts (4:00 p.m. to 6:00 p.m., which is after many school walk trips), the urban nature of the locations selected, and the difficulty distinguishing children from adults accurately in field observation (counters were instructed to record individuals who appear younger than 16 years old as children).

Figure 5: Bicycling and walking by gender

	MALE	FEMALE	CHILD*
Biking	68.4%	29.4%	2.1%
Walking	49.4%	45.8%	4.8%



*Gender not documented for children

³ Thunderhead Alliance, "Bicycling and Walking in the U.S. Thunderhead Alliance Benchmarking Report", 2007, status of bicycling p 8.

⁴ Michelle Ernst, MEAN STREETS 2004 How Far Have We Come?, Surface Transportation Policy Project (STPP), 2004, p 9

Travel Behavior and Safety

Bicyclists and pedestrians are exposed to a number of risks associated with the roadside environment. The speed and prevalence of automobile traffic requires constant vigilance and attention. Improving roadway design, targeting enforcement of risky behavior, and educating the public are important strategies to reduce the likelihood of bicycle and pedestrian collisions. Observing bicycles and pedestrians during the count periods allows counters to examine more than travel volumes: counters are able to note additional factors related to travel behavior.

TLC and the City of Minneapolis have placed special focus on observing bicyclists on sidewalks. This data is easily collected in conjunction with the counts and provides an opportunity to measure how program investments impact behavior change at project locations.

TLC highlights sidewalk riding for several reasons related to the safety of bicyclists and pedestrians:

- Locations with a large percentage of bicyclists riding on the sidewalk can indicate that the roadway does not provide a comfortable or appealing environment for bicycling, and measures (wider shoulder, lower vehicle speeds, bike lanes, etc.) may be needed to encourage bicyclists to use the street.
- While bicycling on the sidewalk is legal in most locations, with a few exceptions (including downtown Minneapolis), it can be far more dangerous for bicyclists. One study finds that it is 5.3 times more dangerous to cycle on a sidewalk.⁵ Research has concluded that motorists at intersections and driveways do not anticipate bicyclists, who are often traveling across driveways or through crosswalks at an unexpected rate of speed.
- The speed differential between a bicycle and a pedestrian on a sidewalk increases the likelihood of a serious bicyclist/pedestrian collision.
- NOTE: Under some conditions bicyclists--especially children--may be appropriate on sidewalks *at low speeds*.

Both TLC and the City of Minneapolis recorded observations of sidewalk bicycling where applicable. The table below shows some examples of sidewalk bicycling figures for locations with different levels of bicycle accommodation. While it is difficult to make a direct comparison of these locations without understanding more detailed environmental factors, there is a good indication that bike lanes will reduce the likelihood of bicyclists using the sidewalk.

⁵ William E. Moritz, University of Washington "Survey of North American Bicycle Commuters Design and Aggregate Results", Transportation Research Record 1578, Paper No. 970979 p 101

Figure 6: Example locations with prevalence of bicycling on sidewalks

ID	COUNT LOCATION	STREET DESCRIPTION	BIKE	BIKE on SW	PCT BIKE on SW
2	20th Ave over I-94	Bridge with 4 lanes of traffic and <u>bike lanes</u>	221	16	7.2%
30	Portland Ave S north of 28th St	3 lanes of traffic (1-way)with on-street parking and a <u>left side bike lane</u> (1-way)	143	12	8.4%
106	15th Ave SE, North of 5th St SE	3 lanes of traffic (two-way center turn lane) with <u>bike lanes</u>	587	53	9.0%
6	Riverside Ave over I-94	Bridge with 4 lanes of traffic	77	20	26.0%
36	University Ave west of Prior Ave	4 lanes of traffic with on-street parking and wide outside travel lane	70	26	36.7%
21	Central Ave NE north of Lowry Ave	4 lanes of traffic with on-street parking	55	41	74.5%

TLC will measure the impact at count locations where bicycle improvements are made to determine the extent to which the improvements reduce bicycling on sidewalks. Additionally, the locations with bike facilities appear to attract greater numbers of bicyclists, consistent with findings from a Portland, OR study that utilized portable Global Positioning System (GPS) devices to estimate that bike facilities were handling 53 percent of non-recreational bicycle trips, despite accounting for only eight percent of the transportation system.⁶

TLC is paying close attention to these trends to evaluate the impact of new facilities funded through the Bike Walk Twin Cities initiative on encouraging behavior change that improves safety for both bicyclists and pedestrians.

Looking Ahead

TLC and the City of Minneapolis will continue to work with volunteers and partner agencies to conduct annual counts in conjunction with the Bike Walk Twin Cities initiative and as part of a broader effort to increase awareness about the important role bicycling and walking have in providing transportation and improving the quality of life in the Twin Cities. Additionally, TLC will expand the program to a monthly two-hour count at five key locations to measure the impact of seasonal change on bicycling and walking behavior. As September 2009 approaches, TLC will organize counts and recruit more volunteer counters in conjunction with the City of Minneapolis. Any questions about the count program, data presented in this report, or an interest in volunteering to count should be directed to TLC via the Bike Walk Twin Cities website: www.bikewalktwincities.org.

⁶ Jennifer Dill, Portland State University, "Where Do People Bicycle? The Role of Infrastructure in Determining Bicycle Behavior", CTS Seminar presentation, May 16, 2008

APPENDIX A: Fall 2008 Bicycle Counts

ID #	LOCATION	CT DATE	BIKE	AGENCY
1	15th Ave SE north of University Ave SE	9/9/2008	598	TLC
42	Midtown Greenway, West of Hennepin Ave	9/9/2008	597	MPLS
106	15th Ave SE, North of 5th St SE	9/17/2008	587	MPLS
27	Sabo Bridge	9/9/2008	559	TLC
85	Washington Ave SE, West of Union St	9/10/2008	437	MPLS
71	Hiawatha LRT Trail, North of 24th St E	9/9/2008	422	MPLS
31	SW LR Trail east of Belt Line Blvd	9/9/2008	382	TLC
89	East River Pkwy, North of Franklin Ave SE	9/10/2008	333	MPLS
11	Hiawatha Trail southeast of 11th Ave S	9/10/2008	333	TLC
9	Hennepin Ave Bridge	9/9/2008	327	MPLS
32	Lake/Marshall St Bridge	9/10/2008	290	TLC
26	Franklin Ave Bridge	9/9 & 9/10/2008*	287	TLC
104	15th Ave SE, South of Como Ave SE	9/10/2008	254	MPLS
39	Cedar Lake Trail west of I - 394	9/10/2008	244	TLC
34	Ford Parkway Bridge	9/9/2008	234	TLC
70	Cedar Lake Trail, East of Royalston Ave	9/9/2008	234	MPLS
75	Lyndale Ave, North of Loring Bikeway Bridge	9/10/2008	233	MPLS
7	10th Ave SE bridge	9/9/2008	232	TLC
105	Como Ave SE, East of 15th Ave SE	9/10/2008	227	MPLS
2	20th Ave over I-94	9/9/2008	221	TLC
28	Greenway crossing Hwy 55 (at-grade)	9/9/2008	212	TLC
5	U of M Transitway, East of 25th Ave SE	9/9/2008	195	MPLS
91	5th St SE, West of 10th Ave	9/10/2008	194	MPLS
59	Portland Ave North of Franklin Ave	9/9/2008	194	MPLS
62	Portland Ave South of Franklin Ave	9/9/2008	189	MPLS
52	East River Pkwy, South of Franklin Ave SE	9/10/2008	179	MPLS
13	Washington Ave S, Over I-35W	9/10/2008	178	MPLS
60	Franklin Ave West of Portland Ave	9/9/2008	151	MPLS
30	Portland Ave S north of 28th St	9/10/2008	143	TLC
29	Lyndale Ave north of Franklin	9/10/2008	142	TLC
41	Summit Ave east of Western	9/9/2008	121	TLC
61	Franklin Ave East of Portland Ave	9/9/2008	120	MPLS
68	4th St S, East of 3rd Ave S	9/9/2008	118	MPLS
63	3rd Ave S, North of 1st St	9/9/2008	116	MPLS

72	24th St E, East of Hiawatha LRT Trail	9/9/2008	110	MPLS
82	Riverside Ave, East of Cedar Ave	9/9/2008	108	MPLS
37	Hennepin Ave north of 28th St.	9/9/2008	104	TLC
79	Hennepin Ave, East of University Ave	9/9/2008	100	MPLS
74	Loring Bikeway Bridge, Over Lyndale Ave	9/10/2008	99	MPLS
ID #	LOCATION	CT DATE	BIKE	AGENCY
88	Franklin Ave SE, East of E River Pkwy	9/10/2008	94	MPLS
24	Franklin Ave west of Nicollet	9/9/2008	88	TLC
3	Bridge #9	9/10/2008	87	TLC
55	Lake St West of 47th Ave	9/10/2008	84	MPLS
87	Stinson Blvd, South of New Brighton Blvd	9/10/2008	81	MPLS
58	Lake St East of Chicago Ave	9/9/2008	79	MPLS
6	Riverside Ave over I-94	9/9/2008	77	TLC
80	University Ave, South of Hennepin Ave	9/9/2008	77	MPLS
95	Minnehaha Ave S, North of 46th St E	9/9/2008	72	MPLS
36	University Ave west of Prior Ave	9/9 & 9/10/2008*	70	TLC
19	Plymouth Ave Bridge over Mississippi River	9/9/2008	69	TLC
81	Cedar Ave, South of Riverside Ave	9/9/2008	69	MPLS
83	Washington Ave S, East of 5th Ave S	9/10/2008	68	MPLS
16	2nd St N south of Plymouth Ave	9/9/2008	65	TLC
22	Bloomington Ave over Hwy 62	9/9/2008	61	TLC
94	Hiawatha Ave, North of 38th St E	9/9/2008	58	MPLS
21	Central Ave NE north of Lowry Ave	9/9/2008	55	TLC
35	Como Ave west of Raymond Ave	9/17/2008	55	TLC
97	Hennepin Ave S, North of Lake St	9/9/2008	53	MPLS
84	5th Ave S, North of Washington Ave S	9/10/2008	52	MPLS
86	New Brighton Blvd, Northeast of Stinson Blvd	9/10/2008	52	MPLS
93	38th St E, East of Hiawatha Ave	9/9/2008	51	MPLS
90	27th Ave SE, North of Franklin Ave SE	9/10/2008	50	MPLS
78	31st St E, Under I-35W	9/9 & 9/10/2008*	49	MPLS
96	46th St E, West of Minnehaha Ave S	9/9/2008	48	MPLS
20	Fillmore Ave NE south of Broadway	9/10/2008	48	TLC
69	3rd Ave S, South of 4th St S	9/9/2008	48	MPLS
64	1st St S, West of 3rd Ave S	9/9/2008	46	MPLS
38	Glenwood Ave west of Royalston Ave	9/9/2008	41	MPLS
57	Chicago Ave North of Lake St	9/9/2008	38	MPLS
76	Upton Ave S, South of 43rd St	9/10/2008	38	MPLS

25	42nd St east of Minnehaha Ave. S	9/9/2008	36	TLC
23	Portland Ave over Hwy 62	9/9/2008	34	TLC
101	Wooddale @ 50th	9/9/2008	28	TLC
33	Larpenteur Ave east of Cleveland	9/9/2008	27	TLC
98	Lake St W, West of Hennepin Ave S	9/9/2008	26	MPLS
40	44th St. & Brookside Ave (Edina)	9/9/2008	25	TLC
99	Chicago Ave, North of 48th St E	9/9/2008	24	MPLS
73	24th St Pedestrian Bridge, Over Hiawatha Ave	9/9/2008	24	MPLS
17	7th St N over I-94 bridge	9/10/2008	23	TLC
103	70th & Cahill Rd (Edina)	9/9/2008	22	TLC
ID #	LOCATION	CT DATE	BIKE	AGENCY
77	43rd St W, West of Upton Ave S	9/10/2008	21	MPLS
56	47th Ave South of Lake St	9/10/2008	17	MPLS
100	48th St E, East of Chicago Ave	9/9/2008	16	MPLS
102	50th @ Wooddale	9/9/2008	15	TLC
65	22nd Ave NE, West of Johnson St	9/9/2008	14	MPLS
67	Johnson St NE, North of 22nd Ave	9/9/2008	13	MPLS
15	26th Ave N east of Penn Ave N	9/10/2008	10	TLC

**Results represent two-day average at these locations*

APPENDIX B: Fall 2008 Pedestrian Counts

ID #	LOCATION	CT DATE	WALK	AGENCY
1	15th Ave SE north of University Ave SE	9/9/2008	1290	TLC
42	Midtown Greenway, West of Hennepin Ave	9/9/2008	76	MPLS
106	15th Ave SE, North of 5th St SE	9/17/2008	619	MPLS
27	Sabo Bridge	9/9/2008	34	TLC
85	Washington Ave SE, West of Union St	9/10/2008	2000	MPLS
71	Hiawatha LRT Trail, North of 24th St E	9/9/2008	19	MPLS
31	SW LR Trail east of Belt Line Blvd	9/9/2008	67	TLC
89	East River Pkwy, North of Franklin Ave SE	9/10/2008	163	MPLS
11	Hiawatha Trail southeast of 11th Ave S	9/10/2008	13	TLC
9	Hennepin Ave Bridge	9/9/2008	319	MPLS
32	Lake/Marshall St Bridge	9/10/2008	141	TLC
26	Franklin Ave Bridge	9/9 & 9/10/2008*	143	TLC
104	15th Ave SE, South of Como Ave SE	9/10/2008	170	MPLS
39	Cedar Lake Trail west of I - 394	9/10/2008	46	TLC
34	Ford Parkway Bridge	9/9/2008	134	TLC
70	Cedar Lake Trail, East of Royalston Ave	9/9/2008	10	MPLS
75	Lyndale Ave, North of Loring Bikeway Bridge	9/10/2008	109	MPLS
7	10th Ave SE bridge	9/9/2008	154	TLC
105	Como Ave SE, East of 15th Ave SE	9/10/2008	215	MPLS
2	20th Ave over I-94	9/9/2008	162	TLC
28	Greenway crossing Hwy 55 (at-grade)	9/9/2008	26	TLC
5	U of M Transitway, East of 25th Ave SE	9/9/2008	19	MPLS
91	5th St SE, West of 10th Ave	9/10/2008	187	MPLS
59	Portland Ave North of Franklin Ave	9/9/2008	67	MPLS
62	Portland Ave South of Franklin Ave	9/9/2008	176	MPLS
52	East River Pkwy, South of Franklin Ave SE	9/10/2008	118	MPLS
13	Washington Ave S, Over I-35W	9/10/2008	207	MPLS
60	Franklin Ave West of Portland Ave	9/9/2008	196	MPLS
30	Portland Ave S north of 28th St	9/10/2008	55	TLC
29	Lyndale Ave north of Franklin	9/10/2008	186	TLC
41	Summit Ave east of Western	9/9/2008	153	TLC
61	Franklin Ave East of Portland Ave	9/9/2008	169	MPLS
68	4th St S, East of 3rd Ave S	9/9/2008	630	MPLS

63	3rd Ave S, North of 1st St	9/9/2008	147	MPLS
72	24th St E, East of Hiawatha LRT Trail	9/9/2008	32	MPLS
82	Riverside Ave, East of Cedar Ave	9/9/2008	274	MPLS
37	Hennepin Ave north of 28th St.	9/9/2008	297	TLC
79	Hennepin Ave, East of University Ave	9/9/2008	165	MPLS
74	Loring Bikeway Bridge, Over Lyndale Ave	9/10/2008	6	MPLS
ID #	LOCATION	CT DATE	WALK	AGENCY
92	10th Ave SE, North of 5th St	9/10/2008	89	MPLS
24	Franklin Ave west of Nicollet	9/9/2008	212	TLC
3	Bridge #9	9/10/2008	56	TLC
55	Lake St West of 47th Ave	9/10/2008	112	MPLS
87	Stinson Blvd, South of New Brighton Blvd	9/10/2008	13	MPLS
58	Lake St East of Chicago Ave	9/9/2008	306	MPLS
6	Riverside Ave over I-94	9/9/2008	57	TLC
80	University Ave, South of Hennepin Ave	9/9/2008	190	MPLS
95	Minnehaha Ave S, North of 46th St E	9/9/2008	27	MPLS
36	University Ave west of Prior Ave	9/9 & 9/10/2008*	22	TLC
19	Plymouth Ave Bridge over Mississippi River	9/9/2008	88	TLC
81	Cedar Ave, South of Riverside Ave	9/9/2008	285	MPLS
83	Washington Ave S, East of 5th Ave S	9/10/2008	217	MPLS
16	2nd St N south of Plymouth Ave	9/9/2008	21	TLC
22	Bloomington Ave over Hwy 62	9/9/2008	22	TLC
94	Hiawatha Ave, North of 38th St E	9/9/2008	11	MPLS
21	Central Ave NE north of Lowry Ave	9/9/2008	261	TLC
35	Como Ave west of Raymond Ave	9/17/2008	94	TLC
97	Hennepin Ave S, North of Lake St	9/9/2008	711	MPLS
84	5th Ave S, North of Washington Ave S	9/10/2008	170	MPLS
86	New Brighton Blvd, Northeast of Stinson Blvd	9/10/2008	10	MPLS
93	38th St E, East of Hiawatha Ave	9/9/2008	129	MPLS
90	27th Ave SE, North of Franklin Ave SE	9/10/2008	33	MPLS
78	31st St E, Under I-35W	9/9 & 9/10/2008*	76	MPLS
96	46th St E, West of Minnehaha Ave S	9/9/2008	75	MPLS
20	Fillmore Ave NE south of Broadway	9/10/2008	5	TLC
69	3rd Ave S, South of 4th St S	9/9/2008	439	MPLS
64	1st St S, West of 3rd Ave S	9/9/2008	83	MPLS

38	Glenwood Ave west of Royalston Ave	9/9/2008	76	MPLS
57	Chicago Ave North of Lake St	9/9/2008	257	MPLS
76	Upton Ave S, South of 43rd St	9/10/2008	207	MPLS
25	42nd St east of Minnehaha Ave. S	9/9/2008	42	TLC
23	Portland Ave over Hwy 62	9/9/2008	18	TLC
101	Wooddale @ 50th	9/9/2008	13	TLC
33	Larpenteur Ave east of Cleveland	9/9/2008	26	TLC
98	Lake St W, West of Hennepin Ave S	9/9/2008	488	MPLS
40	44th St. & Brookside Ave (Edina)	9/9/2008	17	TLC
99	Chicago Ave, North of 48th St E	9/9/2008	116	MPLS
73	24th St Pedestrian Bridge, Over Hiawatha Ave	9/9/2008	20	MPLS
17	7th St N over I-94 bridge	9/10/2008	15	TLC
103	70th & Cahill Rd (Edina)	9/9/2008	9	TLC
ID #	LOCATION	CT DATE	WALK	AGENCY
18	Lyndale Ave N south of Broadway Ave	9/10/2008	115	TLC
56	47th Ave South of Lake St	9/10/2008	19	MPLS
100	48th St E, East of Chicago Ave	9/9/2008	65	MPLS
102	50th @ Wooddale	9/9/2008	41	TLC
65	22nd Ave NE, West of Johnson St	9/9/2008	6	MPLS
67	Johnson St NE, North of 22nd Ave	9/9/2008	75	MPLS
15	26th Ave N east of Penn Ave N	9/10/2008	28	TLC

**Results represent two-day average at these locations*

APPENDIX C: Count Methodology

The count data reported here conform to two established methodologies and rationales.

- I. Under the advisement of the Volpe Center at the U.S. Department of Transportation, the Bike Walk Twin Cities initiative uses a number of strategies to evaluate how the pilot influences rates of walking and bicycling in the four communities. Those strategies include:
 - a. A pre-pilot and post-pilot phone/mail survey conducted by the Center for Transportation Studies at the University of Minnesota
 - b. Annual counts of bicyclists and pedestrians at selected locations from 2007 to 2010,
 - c. Intercept surveys of bicyclists and pedestrians in 2007 and 2010
 - d. An analysis of policy changes at the state, regional, and local level influenced by the program
2. The counts are part of the National Bicycle & Pedestrian Documentation Project, which aims to establish a consistent methodology for counting and surveying bicyclists and pedestrians and develop a national database of bicycle and pedestrian activity. The Institute of Transportation Engineers (ITE) and transportation professionals nationwide have helped to develop the methodology, which requires the following features:
 - a. Consistent days and times
 - b. Consistent methods and materials
 - c. Centralized data collection and analysis
 - d. Open access to information to all research professionals and public agencies

All counts by both agencies were done mid-block and a screen line was established. When a bicyclist or pedestrian passed the screen line, they were counted.

TLC counts were developed consistent with the methodology developed by Alta Planning for the four NTP pilot communities based on the following criteria:

- a. Representative locations throughout the city
- b. Bicycle and pedestrian activity areas or corridors (downtowns, near schools, parks, etc)
- c. Locations near proposed major bicycle or pedestrian improvements
- d. Key corridors that can be used to gauge the impacts of future improvements
- e. Places where counts have been conducted historically
- f. Locations where collisions between motor vehicles and bicycles and pedestrians are more prevalent

Minneapolis DPW performs their counts based upon one or more of the following criteria:

- Availability of historical bicycle and/or pedestrian count data
- Presence of a funded or anticipated NTP project
- Perceived high levels of bicycle and/or pedestrian traffic
- Geographic distribution

APPENDIX D: TLC Count Form

STANDARDIZED BIKE/PED COUNT FORM – TWIN CITIES, FALL 2008

Name: _____ Location: _____ Site# _____

Date: _____ Time Period: _____ Weather: _____

Instructions:

- Please fill in your name, count location, date, time period, and weather (approx. temp and conditions: sunny, rainy, foggy, snow, etc.)
- Use single lines in groups of five to indicate each pedestrian or cyclist (4 = ||||, 5 = |||||).
- Count all adult cyclist and pedestrians crossing your screen line (both sides of street or trail) under the male or female categories. Count children (under 16) separately under "Child".
- Do not count more than one street or trail. THIS IS NOT AN INTERSECTION COUNT.
- If you have time, record number of cyclists that are riding on sidewalk instead of street.

Period (minutes)	Adult Bicyclist		Child	Sidewalk	Pedestrian*		
	Male	Female			Male	Female	Child
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							
Total							

*Record skaters, roller-bladers, boarders and skiers using an "s" in the Pedestrian column.

Comments/observations: close calls, conflicts, unlawful behavior, and/or describe any factors that may have affected your count (car accident at site, road construction, tour group, band practice, etc.)

APPENDIX E: Minneapolis DPW Count Form

STANDARDIZED BIKE/PED COUNT FORM – MINNEAPOLIS PUBLIC WORKS, SEPT. 2008

Name: _____ Location: _____

Date: _____ Time Period: See First Column Below.

Instructions:

- Please fill in your name, count location, date, and time period. If you arrive late, please write down the exact time you began counting
- Use tally marks in groups of five to indicate each pedestrian or cyclist (4 = ||||, 5 = |||||). Or if you are using a counter, write the total in each box.
- Count all of the cyclists and pedestrians crossing your screen line (both sides of street or trail, and both directions).
- Only count more than one street or trail if you have received instructions to do so. Refer to the map on the back of this sheet.
- This last instruction does not apply to trail counts: If you have time, record the number of cyclists that are riding on the sidewalk instead of the street. This will help us determine crash rates for bicyclists riding on the sidewalk versus the street. If you are not able to consistently count sidewalk riders, please mark out this column for the sake of accuracy.

Period (30 minutes)	Bicyclists*	Sidewalk Riding	Pedestrians**	Other***
:00 - :30				
:30 - :00				
:00 - :30				
:30 - :00				
Total				

*Count the number of people, rather than the number of bicycles (Tandem = 2, Burley w/ two children = 3).
 **Those using wheelchairs and electric scooters should be counted as pedestrians. Children being carried or pushed should also be counted as pedestrians.
 ***Other includes skaters, roller-bladers, boarders, skiers, and people on segways.

Comments/observations: (close calls, conflicts, unlawful behavior, and/or describe any factors that may have affected your count - car accident at site, road construction, tour group, band practice, other large event, etc.):