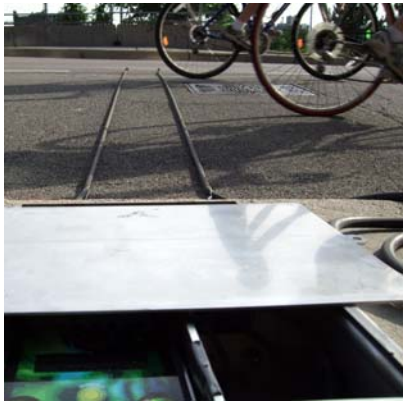
2009 Bike Counts Project

Chicago Department of Transportation
Division of Project Development
Bicycle Program

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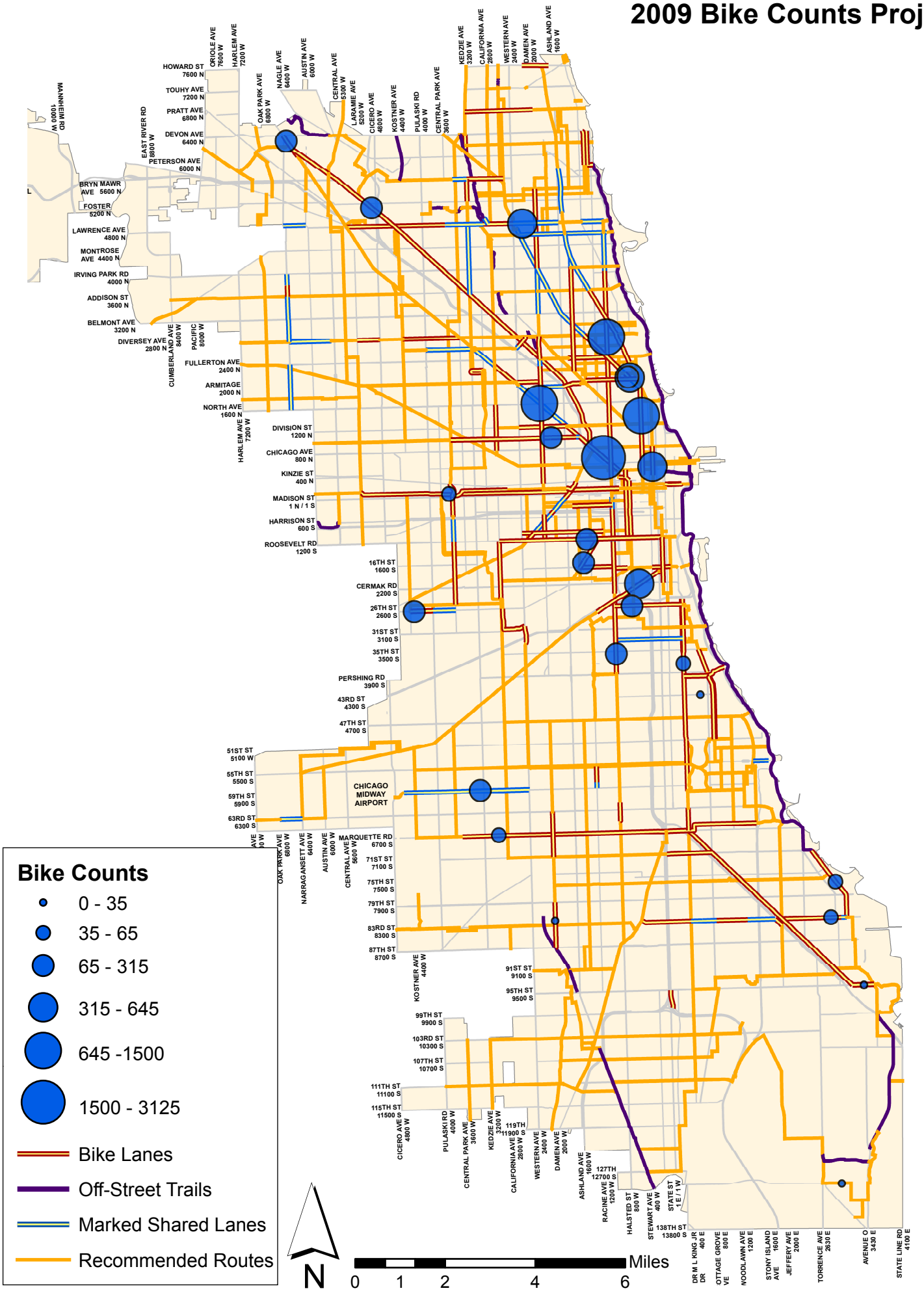

Location	Date Installed	Total Bikes	Mode Share	CDOT 2006 Motor Vehicle ADT
2985 E. 130th St	9/17/2009	21	**0.50%**	4256
469 W. 26th St	9/10/2009	220	**2.35%**	9226
4341 W. 26th St	8/17/2009	223	**1.25%**	17312
655 E. 43rd St	9/23/2009	32	**0.40%**	7585
3244 W. 59th St *(Westbound Only)*	8/26/2009	31	**0.25%**	13500
2858 E. 83rd St	8/19/2009	47	**0.60%**	8269
3421 E. 95th St	9/21/2009	31	**0.20%**	16788
2224 S. Archer Ave	8/24/2009	439	**2.80%**	15300
1824 W. Augusta Blvd *(Westbound Only)*	10/7/2009	270	**2.85%**	9200
1623 S. Blue Island Ave	9/8/2009	317	**5.75%**	5210
8216 S. Damen Ave	5/27/2009	10	**0.05%**	23672
430 N. Dearborn St	9/1/2009	510	**3.05%**	16113
3740 S. Dr Martin L King Jr Dr	8/25/2009	40	**0.25%**	15577
5118 N. Elston Ave	8/31/2009	251	**1.55%**	15876
2710 S. Halsted St	9/30/2009	889	**5.75%**	14544
3527 S. Halsted St	9/24/2009	197	**1.25%**	15308
2225 W. Lawrence Ave	5/21/2009	644	**2.35%**	26631
2017 N. Lincoln Ave *(Southbound Only)*	11/9/2009	379	**5.00%**	7200
2040 N. Lincoln Ave *(Southbound Only)*	10/6/2009	270	**3.60%**	7200
2938 W. Marquette Rd	8/20/2009	55	**0.30%**	17600
640 N. Milwaukee Ave	9/15/2009	3121	**21.90%**	11117
640 N. Milwaukee Ave	11/12/2009	2083	**15.80%**	11117
1616 N. Milwaukee Ave	10/1/2009	1065	**7.70%**	12763
6324 N. Milwaukee Ave	9/29/2009	155	**0.60%**	26810
1249 W. Roosevelt Rd	9/9/2009	282	**1.05%**	26802
7750 S. South Shore Dr	9/22/2009	47	**0.30%**	16332
3658 W. Washington Blvd	5/18/2009	63	**0.55%**	11794
1325 N. Wells St	9/14/2009	1501	**7.80%**	17706
1325 N. Wells St	11/10/2009	978	**5.25%**	17706

2009 Bike Counts Project

Introduction

The Chicago Department of Transportation's (CDOT) Bicycle Program performed citywide bicycle counts in summer and fall of 2009. The counts were performed using Eco Counter's Selective Pneumatic Tubes – traffic counting tubes designed to count bicycles in mixed-use traffic without registering motorized vehicles.

Eco-Counter is a French company specializing in non-motorized counting equipment and the City of Chicago is one of the first to use this equipment in the United States. A period of testing in the summer of 2008 proved the ability of the equipment to perform in Chicago traffic.

Why do bike counts?

Obtaining bicycle count data can serve to document the use of existing bicycle facilities as well as justify new, proposed facilities.

The City of Chicago's *Bike 2015 Plan* has a goal to increase bicycle use so that five percent of all trips less than five miles are by bicycle. A way to measure and evaluate the success of this goal is to count how many bicyclists are using on-street bikeways. In the City of Chicago, marked on-street bikeways include bike lanes, marked shared lanes and bike/bus lanes. However, it is important to note that the Eco Counter equipment can be installed on any street. The presence of a bikeway is not necessary to count bicycle traffic on a particular street.

The most important reason for CDOT to regularly conduct bicycle counts comes directly from Chapter 1, Objective 5 of the *Bike 2015 Plan*, which states, "Help current and potential bicyclists choose safe, convenient routes." Strategy 5.2 mandates that the CDOT Bicycle Program "Collect data to identify popular bikeways and the impact of *Bike 2015 Plan* strategies. Data needs include bike counts on roads and trails, counts before and after a bikeway is constructed, and surveys to determine what facilities would have the greatest use." Automated counts using Eco Counter's Selective Pneumatic Tubes are essential in meeting this goal.

Summary

The 2009 Bike Counts Project took place primarily on streets with marked on-street bikeways, but included two locations – 130th Street and 43rd Street – that currently do not have marked on-street bikeways but are being considered for future facilities.

The counts were conducted at a total of 26 unique locations citywide. Of these 26 locations, 19 were dedicated bike lanes. Four count locations were on streets having marked shared lanes; one count took place on a street with a bike/bus lane, and two on streets without marked on-street bikeways. Three locations were counted twice, as weather permitted. All counts were conducted in both directions unless otherwise noted.

Specific locations on these streets were chosen based on existing CDOT average daily traffic (ADT) count locations, last performed in 2006 as a joint project between CDOT and the City of Chicago's Office of Emergency Management & Communications (OEMC). The 2009 Bike Counts Project mimics the 2006 motor vehicle count project. Counting equipment was placed as close to 2006 motor vehicle ADT addresses as possible to allow for mode share calculations at each location. Mode share was calculated by dividing the total number of bicyclists by the total number of bicyclists plus motor vehicles.

As with a standard ADT count, the bike counts were conducted on Tuesdays, Wednesdays and Thursdays in ideal weather conditions. While the Eco Counter can function in all types of weather, the tubes lie across lanes of traffic and can be negatively affected by snow plows and street sweepers.

Because the 2009 Bike Counts Project is intended to be a yearly benchmark project, the goal is to track trends over time, not simply count bicyclists in the City of Chicago. While the project certainly will indicate the amount of bicyclists daily in Chicago, the summer/fall period was chosen as the ideal time to ride. Comparing differences in amounts of bicyclists from year to year on the same routes will provide an indication of the utilization of and need for bike facilities to the City of Chicago.

Location

The 26 unique locations were spread through the City of Chicago, located in twenty-three of the City's fifty wards. Locations were chosen to be representative of the variety of bike facilities found in Chicago.

Anomalies

A few anomalies are called out and accounted for in each location's individual summary section. 59th Street, Augusta Boulevard, and Lincoln Avenue showed signs of tube failure or unaccountable spikes in numbers. For these counts, mode share is available only for the direction of travel that shows reliable numbers.

East/West Streets

130th Street

21 total bicyclists were counted on the recommended route at 2985 E. 130th Street, a **0.50% mode share.** The 24-hour count was conducted on September 17, 2009, beginning at 10:00 AM. No precipitation was recorded and the mean temperature was 61˚F. The location was selected based on its status as a recommended route, as well as a proposed location for a new bikeway facility.

26th Street

220 total bicyclists were counted at 469 W. 26th Street, a **2.35% mode share.** The 24-hour count was conducted on September 10, 2009, beginning at 1:00 PM. No precipitation was recorded and the mean temperature was 73˚F. The location was selected based on its status as a bike lane.

26th Street

223 total bicyclists were counted at 4341 W. 26th Street, a **1.25% mode share.** The 24-hour count was conducted on August 17, 2009, beginning at 1:00 PM. Precipitation (.93" of rainfall) was recorded and the mean temperature was 77˚F. The location was selected based on its status as a bike lane.

43rd Street

32 total bicyclists were counted on the shared roadway at 655 E. 43rd Street, a **0.40% mode share.** The 24-hour count was conducted on September 23, 2009, beginning at 12:00 PM. No precipitation was recorded and the mean temperature was 69˚F. The location was selected based on its status as a proposed location for a new bikeway facility.

59th Street

189 total bicyclists were counted at 3244 W. 59th Street, a **0.80% mode share.** The 24-hour count was conducted on August 26, 2009, beginning at 12:00 PM. Precipitation (.35" of rainfall) was recorded and the mean temperature was 68˚F. The location was selected based on its status as a marked shared lane.

It was noted that upon removal of the count equipment the count tubes in the eastbound lane had become slightly loose. It is possible that this may have contributed to particularly high counts between 1:00 PM and 2:00 PM, and between 7:00 PM and 9:00 PM on August 26. Mode share was recalculated using data from the westbound count box only, as well as motor vehicle ADT from the westbound lanes only. 31 total westbound bikes were counted, resulting in a 0.25% westbound mode share.

83rd Street

47 total bicyclists were counted at 2858 E. 83rd Street, a **0.60% mode share.** The 24-hour count was conducted on August 21, 2009, beginning at 12:00 PM. No precipitation was recorded and the mean temperature was 71˚F. The location was selected based on its status as a bike lane.

95th Street

31 total bicyclists were counted at 3421 E. 95th Street, a **0.20% mode share.** The 24-hour count was conducted on August 19, 2009, beginning at 10:00 AM. No precipitation was recorded and the mean temperature was 64˚F. The location was selected based on its status as a bike lane.

Augusta Boulevard

270 total bicyclists were counted at 1824 W. Augusta Boulevard, a **1.40% mode share.** The 24-hour count was conducted on October 7, 2009, beginning at 11:00 AM. No precipitation was recorded and the mean temperature was 53˚F. The location was selected based on its status as a popular east-west connecter with a bike lane.

An anomaly was noted in the data recorded from this count location. The eastbound box recorded no bikes for the 24-hour count. All 270 bicyclists recorded at this location were traveling westbound, resulting in an adjusted 2.85% westbound mode share (utilizing only westbound motor vehicle ADT). The inaccurate results likely stemmed from installation failure, movement of the tubes, or tampering with the equipment.

Lawrence Avenue

644 total bicyclists were counted at 2225 W. Lawrence Avenue, a **2.35% mode share**. The 24-hour count was conducted on May 21, 2009, beginning at 9:40 AM. No precipitation was recorded and the mean temperature was 72˚F. The location was selected based on its status as a marked shared lane.

Marquette Road

55 total bicyclists were counted at 2938 W. Marquette Road, a **0.30% mode share.** The 24-hour count was conducted on August 20, 2009, beginning at 1:00 PM. Precipitation (.07" of rainfall) was recorded and the mean temperature was 71˚F. The location was selected based on its status as a bike lane.

Roosevelt Road

282 total bicyclists were counted at 1249 W. Roosevelt Road, a **1.05% mode share.** The 24-hour count was conducted on September 9, 2009, beginning at 12:00 PM. No precipitation was recorded and the mean temperature was 72˚F. The location was selected based on its status as a bike lane.

Washington Boulevard

63 total bicyclists were counted at 3658 W. Washington Boulevard, a **0.55% mode share.** The 24-hour count was conducted on May 18, 2009, beginning at 10:50 AM. Precipitation (.33" of rainfall) was recorded and the mean temperature was 53˚F. The location was selected based on its status as a curbside bike lane.

North/South Streets

Damen Avenue

10 total bicyclists were counted at 8216 S. Damen Avenue, a **0.05% mode share.** The 24-hour count was conducted on May 27, 2009, beginning at 11:50 AM. Precipitation (.02" of rainfall) was recorded and the mean temperature was 64˚F. The location was selected due to its status as a bike lane.

Dearborn Street

510 total bicyclists were counted at 430 N. Dearborn Street, a **3.05% mode share.** This stretch of Dearborn Street, between the Chicago River and Chicago Avenue, is one-way northbound with the bike lane located on the left side, a unique facility in Chicago. The equipment was placed on both sides of the street to count bicyclists utilizing the bike lane as well as those who chose to ride in the right lane. The 24-hour count was conducted on 1, 2009, beginning at 11:00 AM. No precipitation was recorded and the mean temperature was 60˚F. The location was selected due to its unique status as a left side bike lane on a one-way street.

Dr. Martin Luther King Jr. Drive

40 total bicyclists were counted at 3740 S. Dr. Martin Luther King Jr. Drive, a **0.25% mode share.** The 24-hour count was conducted on August 25, 2009, beginning at 11:00 AM. No precipitation was recorded and the mean temperature was 71˚F. The location was selected based on its status as a north/south curbside bike lane.

Halsted Street

889 total bicyclists were counted at 2710 N. Halsted Street, a **5.75% mode share.** The 24-hour count was conducted on September 30, 2009, beginning at 11:00 AM. No precipitation was recorded and the mean temperature was 55˚F. The location was selected based on its status as a north/south bike lane.

Halsted Street

197 total bicyclists were counted at 3527 S. Halsted Street, a **1.25% mode share.** The 24-hour count was conducted on September 24, 2009, beginning at 1:00 PM. No precipitation was recorded and the mean temperature was 69˚F. The location was selected based on its status as a north/south bike lane.

Wells Street *(Two Counts)*

1501 total bicyclists were counted at 1325 N. Wells Street, a **7.80% mode share.** The 24-hour count was conducted on September 14, 2009, beginning at 10:00 AM. No precipitation was recorded and the mean temperature was 71˚F. The location was selected based on its status as a bike lane.

978 total bicyclists were counted at 1325 N. Wells Street, a **5.25% mode share.** The 24-hour count was conducted on November 10, 2009, beginning at 10:00 AM. No precipitation was recorded and the mean temperature was 47˚F. The location was selected based on its status as a bike lane.

Diagonal Streets

Archer Avenue

439 total bicyclists were counted at 2224 S. Archer Avenue, a **2.80% mode share.** The 24-hour count was conducted on August 24, 2009, beginning at 10:00 AM. No precipitation was recorded and the mean temperature was 67˚F. The location was selected based on its status as a curbside bike lane.

Blue Island Avenue

317 total bicyclists were counted at 1623 S. Blue Island Avenue, a **5.75% mode share.** The 24-hour count was conducted on September 8, 2009, beginning at 10:00 AM. No precipitation was recorded and the mean temperature was 69˚F. The location was selected based on its status as a bike lane.

Elston Avenue

251 total bicyclists were counted on the bike lane at 5118 N. Elston Avenue, a **1.55% mode share.** The 24-hour count was conducted on August 31, 2009, beginning at 10:00 AM. No precipitation was recorded and the mean temperature was 59˚F. The location was selected based on its status as a bike lane.

***Lincoln Avenue** (Two Counts)*

279 total bicyclists were counted at 2040 N. Lincoln Avenue, a **1.90% mode share.** The 24-hour count was conducted on October 6, 2009, beginning at 10:00 AM. Precipitation (.03" of rainfall) was recorded and the mean temperature was 55˚F. The location was selected based on its status as a marked shared lane.

387 total bicyclists were counted at 2017 N. Lincoln Avenue, a **2.60% mode share.** The 24-hour count was conducted on November 9, 2009, beginning at 10:00 AM. No precipitation was recorded and the mean temperature was 57˚F.

For both counts conducted on Lincoln Avenue (at approximately the same location, between 2040 and 2017 N Lincoln Avenue), the northbound count equipment registered only 9 bicyclists for the October count, and 8 bicyclists for the November count, indicating likely box failure or tampering. Although the second count was conducted partially to adjust for the first count's northbound failure, it failed in the same way.

This leaves 270 bicyclists recorded at this location traveling southbound during the October count, resulting in an adjusted 3.60% southbound mode share, utilizing only southbound motor vehicle ADT. Likewise, 379 bicyclists recorded at this location traveled southbound during the November count, resulting in an adjusted 5.00% southbound mode share, utilizing only southbound motor vehicle ADT.

Milwaukee Avenue

Milwaukee Avenue runs from the northwest corner of the City into Chicago's Loop, making it an attractive route for Chicago bicyclists. The three locations were selected due to the popularity of the street as a northwest route as well as the presence of a variety of marked, on-street bikeways, including a bus/bike lane, a bike lane, and a marked-shared lane.

***Milwaukee Avenue** (Two Counts)*

3121 total bicyclists were counted on the bus/bike lane at 640 N. Milwaukee Avenue, a **21.90% mode share.** The 24-hour count was conducted on September 15, 2009, beginning at 11:00 AM. No precipitation was recorded and the mean temperature was 73˚F. This was the highest count recorded in the 2009 Counts Project, both in terms of mode share percentage and total number of bicyclists.

2083 total bicyclists were counted on the bus/bike lane at 640 N. Milwaukee Avenue, a **15.80% mode share.** The 24-hour count was conducted on November 12, 2009, beginning at 10:00 AM. No precipitation was recorded and the mean temperature was 42˚F.

Milwaukee Avenue

1065 total bicyclists were counted on the marked shared lane at 1616 N. Milwaukee Avenue, a **7.70% mode share.** The 24-hour count was conducted on October 1, 2009, beginning at 11:00 AM. Precipitation (.89" of rainfall) was recorded and the mean temperature was 50˚F.

Milwaukee Avenue

155 total bicyclists were counted on the bike lane at 6324 N. Milwaukee Avenue, a **0.60% mode share.** The 24-hour count was conducted on September 29, 2009, beginning at 10:00 AM. No precipitation was recorded and the mean temperature was 54˚F.

South Shore Drive

47 total bicyclists were counted on the bike lane at 7750 S. South Shore Drive, a **0.30% mode share.** The 24-hour count was conducted on September 22, 2009, beginning at 11:00 AM. No precipitation was recorded and the mean temperature was 68˚F. The location was selected based on its status a bike lane connector to the Lakefront Trail.

Analysis

Mode share was highest on streets known to be well-utilized by bicyclists, notably Wells Street and Milwaukee Avenue. Significant numbers of bicyclists were also seen on Blue Island Avenue. The mode share doesn't always tell the whole story, however. Roosevelt Road is worth noting for its incredibly high motor vehicle ADT – 26,802 cars. The September bike count on the Roosevelt Road bike lane showed 282 bicyclists, barely over a 1% mode share, but a significant number for such a high-trafficked roadway.

Resources

Bike 2015 Plan. City of Chicago Department of Transportation, 21 Sep. 2005. Web. Accessed May 2010. <http://bike2015plan.org/>.

All weather data obtained via *Weather Underground History & Data.* Weather Underground. Web. Accessed 10 Dec. 2009. <http://www.wunderground.com/history/>.

All Chicago 2006 average daily traffic data obtained via the Chicago Traffic website. Accessed November – December 2009, May 2010. http://webapps.cityofchicago.org/traffic/about.jsp