City of San Francisco
2009 Bicycle Count Report

January 2010

SFMTA | Municipal Transportation Agency

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Report Highlights

- The 2009 counts showed an **8.5 percent overall increase** in the number of observed bicyclists compared to the 2008 counts.
- Since the 2006 baseline counts, there has been a **53.5 percent overall increase** in the number of observed bicyclists.
- **11th St. at Market St.** was the location with the highest number of observed bicyclists, totaling **808 bicyclists**. This was a **48.3 percent increase** from 2006.
- **Women represented 29 percent of bicyclists**, up from 27 percent in 2008, and 24 percent in 2007.
- The level of helmet use increased slightly from 67 percent in 2008 to **69 percent in 2009.**
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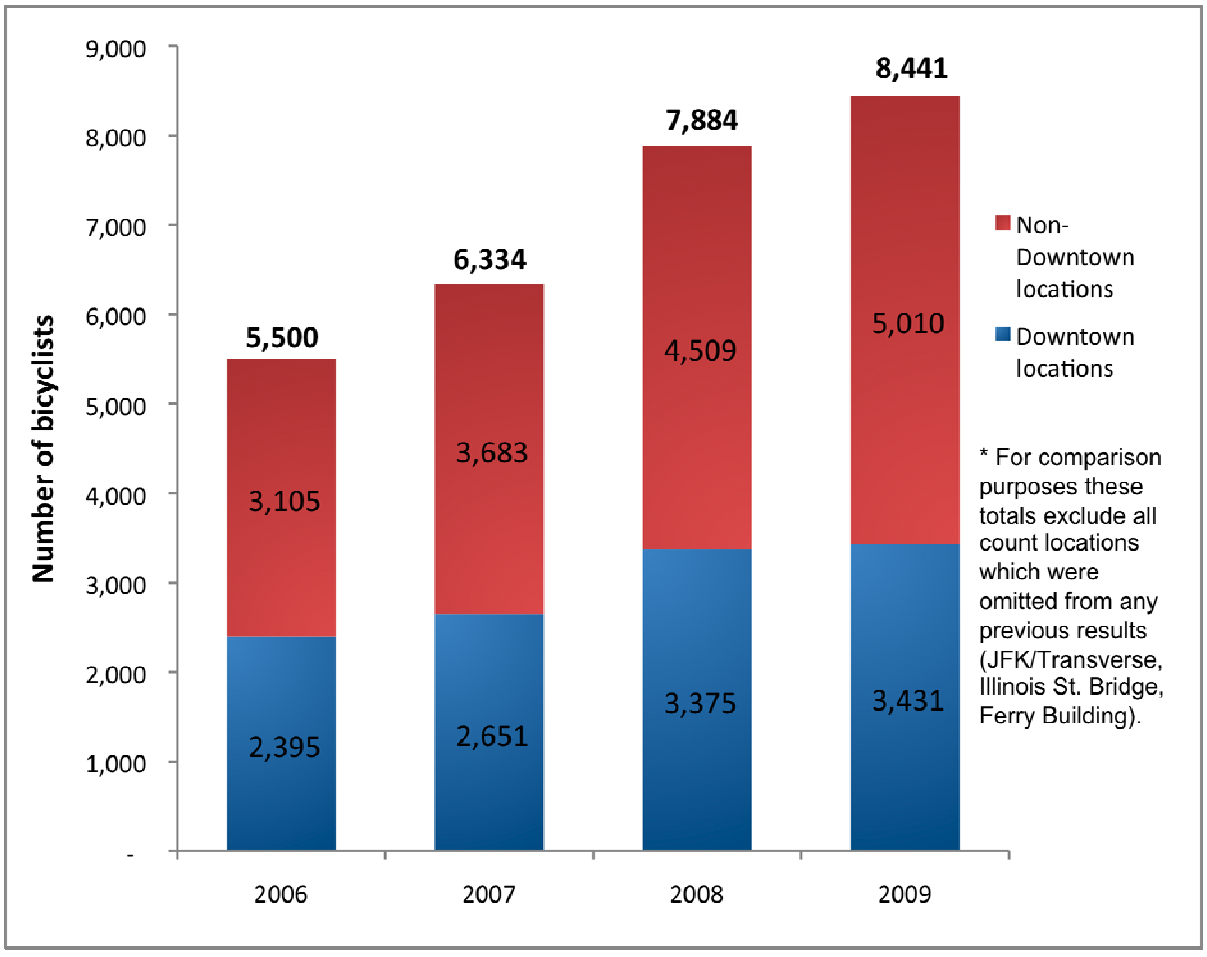
Figure 1: San Francisco Citywide Bicycle Counts (2006-09)*



Introduction

In August 2006, the SFMTA Bicycle Program conducted its first citywide bicycle count, with the goal of establishing a baseline of bicycling use around the City. Over the past three years, the SFMTA has continued with bicycle counts in the first three weeks of August. The data gathered from the last four years have enabled the SFMTA to identify and measure some basic trends in bicyclist ridership throughout San Francisco. Furthermore, the bicycle counts will inform the City's ongoing bicycle planning efforts, providing the data needed to evaluate the efficacy and efficiency of the City's bicycle network, as well as identifying locations where additional infrastructure improvements are needed.

It is important to note, however, that the SFMTA bicycle counts are not meant to measure the exact number of people who bicycle in San Francisco, nor are they intended to determine travel mode splits. Instead, these counts are designed to help identify basic trends in bicycle use over time. Identifying the exact level of bicycle ridership in San Francisco is better accomplished through a combination of U.S. Census results, a representative survey of the City's residents, and automatic bicycle counters[1]. As shown in Table 1, the work mode split for bicycling has increased since 2000 from 2.1 percent to 2.9 percent in 2008. The increase since 2003, however, has occurred at an even faster rate. Figure 2 also shows that bicycling has, relative to 2000, increased at a much faster rate than all other modes.

Table 1: Additional measures of bicycle ridership in San Francisco

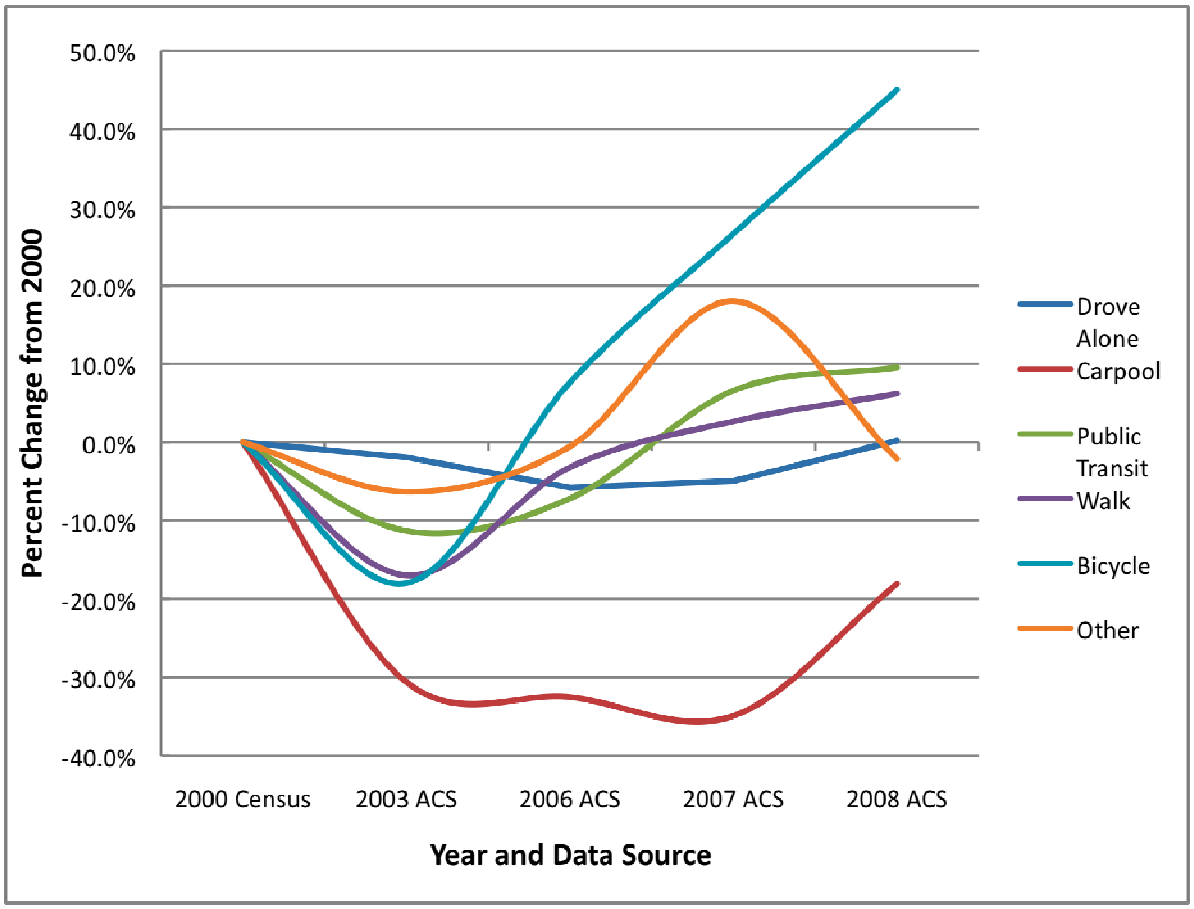
	S.F.	CA	U.S.
Percentage of trips to work by bicycle (2000 U.S. Census)*	2.1%	0.8%	0.4%
Percentage of trips to work by bicycle (2003 ACS)*	1.9%	0.7%	0.4%
Percentage of trips to work by bicycle (2006 ACS)*	2.5%	0.8%	0.5%
Percentage of trips to work by bicycle (2007 ACS)*	2.7%	0.9%	0.5%
Percentage of trips to work by bicycle (2008 ACS)*	2.9%	1.0%	0.6%
Estimated percentage of all trips by bicycle (2008)**	6.0%		
Estimated daily number of bicycle trips (2008)**	128,000		

* Does not include workers who worked at home. Source: 2000 U.S. Census, P30; 2006-08 American Community Survey, B08301

** Source: http://www.sfmta.com/cms/rbikes/documents/2008SFStateofCyclingReport.pdf

[1] Please see discussion of automatic bicycle counters in the "Recommendations" section.

Figure 2: Change in Mode Split Relative to 2000



In short, the SFMTA Bicycle Counts seek to complement "official" mode split data by offering a more detailed profile of bicyclist activity at key intersections throughout the City. While only a "snapshot," the counts provide useful insights into bicycle use and remain a key metric for the SFMTA.

Methodology

Since 2006 all of San Francisco's bicycle counts have been conducted in August due to the typically dry weather and longer days that generally encourage bicycling, as well as the availability of SFMTA summer interns to assist with the counts. More on the August count dates and the transition to September counts can be found in the "recommendations" section.

All of the counts were performed manually by SFMTA staff. All observers attended an hour-long training session prior to field observation. A total of 35 counts were conducted. The counts were conducted at 33 locations, with 31 counts occurring during the evening peak period, from 5:00-6:30 p.m. Three counts took place in the morning peak period, from 8:00-9:00 a.m., and one during the midday period, from 1:00-2:00

p.m. Bicyclists at 5th and Market Streets were counted during all three periods. Counts were only conducted during fair weather. A detailed weather report for the 2006-09 counts can be found in Appendix K.

Counts were focused around the downtown core in order to capture the volume of bicycle commuters on some of the City's most heavily used bicycle routes. Twelve of the thirty-three locations were counted simultaneously on August 13th as part of the downtown cordon count in order to capture travel in and out of the downtown core. A secondary cordon, established approximately midway across the City along key bicycle routes, was used to count cross-town riders. These counts were not conducted simultaneously, but were spaced out over a three week period. Lastly, some count locations were in outlying neighborhoods. Most count locations were at the intersection of two bicycle routes in order to maximize coverage of the City's bicycle route network. A map of the count locations is shown in Appendix A.

At each count location, bicyclists on all legs of an intersection were counted manually, with each movement noted – left turn, right turn, and straight through the intersection. Bicyclists riding on sidewalks were counted and grouped separately from bicyclists riding on the street (Appendix G). Wrong-way riders were also counted (Appendix H). At locations where the volume was not so high as to demand all the attention of the observer[2], helmet use and cyclist gender were also recorded (Appendices E&F, respectively). Locations for which portions of the data were not collected are noted in the appendices.

[2] Please see discussion of "high volume" locations in the "Recommendations" section.

Results

Table 2: 2008-09 San Francisco Bicycle Count Data

Intersection	Time	2008 Total	2009 Total	% Change (08-09)
11th & Howard	5:00 p.m. - 6:30 p.m.	333	332	-0.3%
11th & Market	5:00 p.m. - 6:30 p.m.	726	808	11.3%
14th & Folsom	8:00 a.m. - 9:00 a.m.	214	258	20.6%
17th & Valencia	5:00 p.m. - 6:30 p.m.	690	606	-12.2%
23rd & Potrero	5:00 p.m. - 6:30 p.m.	73	74	1.4%
2nd & Townsend	5:00 p.m. - 6:30 p.m.	140	133	-5.0%
3rd St. Bridge / Illinois St. Bridge	5:00 p.m. - 6:30 p.m.	16	13	-18.8%
5th & Market	1:00 p.m. - 2:00 p.m.	163	192	17.8%
5th & Market	5:00 p.m. - 6:30 p.m.	615	745	21.1%
5th & Market	8:00 a.m. - 9:00 a.m.	409	470	14.9%
5th & Townsend	5:00 p.m. - 6:30 p.m.	306	325	6.2%
7th & 16th	5:00 p.m. - 6:30 p.m.	144	202	40.3%
7th & Kirkham	5:00 p.m. - 6:30 p.m.	47	54	14.9%
8th & Townsend	5:00 p.m. - 6:30 p.m.	264	276	4.5%
Alemany & Geneva	5:00 p.m. - 6:30 p.m.	28	29	3.6%
Arguello & Lake	5:00 p.m. - 6:30 p.m.	175	233	33.1%
Broadway & Columbus	5:00 p.m. - 6:30 p.m.	94	63	-33.0%
Broadway & Embarcadero	5:00 p.m. - 6:30 p.m.	594	554	-6.7%
Cervantes & Marina	5:00 p.m. - 6:30 p.m.	490	518	5.7%
Cesar Chavez & Harrison	5:00 p.m. - 6:30 p.m.	54	57	5.6%
Embarcadero & Townsend	5:00 p.m. - 6:30 p.m.	319	315	-1.3%
Ferry Building Terminals	5:00 p.m. - 6:30 p.m.	350	171	-51.1%
Fell & Scott	5:00 p.m. - 6:30 p.m.	302	373	23.5%
Golden Gate & Masonic	5:00 p.m. - 6:30 p.m.	47	43	-8.5%
Great Highway & Sloat	5:00 p.m. - 6:30 p.m.	39	82	110.3%
Illinois & Mariposa/Terry Francois	5:00 p.m. - 6:30 p.m.	56	78	39.3%
JFK & Transverse	5:00 p.m. - 6:30 p.m.	270	410	51.9%
Lake Merced & Winston	5:00 p.m. - 6:30 p.m.	47	57	21.3%
Masonic & Panhandle	8:00 a.m. - 9:00 a.m.	212	228	7.5%
McAllister & Polk	5:00 p.m. - 6:30 p.m.	295	309	4.7%
O'Shaughnessy & Portola	5:00 p.m. - 6:30 p.m.	29	28	-3.4%
Page & Scott	5:00 p.m. - 6:30 p.m.	578	613	6.1%
Polk & Sutter	5:00 p.m. - 6:30 p.m.	209	203	-2.9%
Randall & San Jose	5:00 p.m. - 6:30 p.m.	97	70	-27.8%
Stockton & Sutter	5:00 p.m. - 6:30 p.m.	95	113	18.9%
	1. TOTALS	**8520**	**9035**	
	2. TOTALS*	**8170**	**8864**	**8.5%**

* Due to the high variability in tourists and ferry schedules between years, these totals exclude the Ferry Terminal counts.

A map showing the relative distribution of bicyclists counted can be found in Appendix B.

Table 3: 2006-09 San Francisco Bicycle Count Data

Intersection	Time	2006 Total	2009 Total	% Change (06-09)
11th & Howard	5:00 p.m. - 6:30 p.m.	227	332	46.3%
11th & Market	5:00 p.m. - 6:30 p.m.	545	808	48.3%
14th & Folsom	8:00 a.m. - 9:00 a.m.	163	258	58.3%
17th & Valencia	5:00 p.m. - 6:30 p.m.	441	606	37.4%
23rd & Potrero	5:00 p.m. - 6:30 p.m.	35	74	111.4%
2nd & Townsend	5:00 p.m. - 6:30 p.m.	101	133	31.7%
3rd St. Bridge / Illinois St. Bridge	5:00 p.m. - 6:30 p.m.	42	13	-69.0%
5th & Market	1:00 p.m. - 2:00 p.m.	156	192	23.1%
5th & Market	5:00 p.m. - 6:30 p.m.	468	745	59.2%
5th & Market	8:00 a.m. - 9:00 a.m.	378	470	24.3%
5th & Townsend	5:00 p.m. - 6:30 p.m.	254	325	28.0%
7th & 16th	5:00 p.m. - 6:30 p.m.	67	202	201.5%
7th & Kirkham	5:00 p.m. - 6:30 p.m.	35	54	54.3%
8th & Townsend	5:00 p.m. - 6:30 p.m.	167	276	65.3%
Alemany & Geneva	5:00 p.m. - 6:30 p.m.	9	29	222.2%
Arguello & Lake	5:00 p.m. - 6:30 p.m.	136	233	71.3%
Broadway & Columbus	5:00 p.m. - 6:30 p.m.	95	63	-33.7%
Broadway & Embarcadero	5:00 p.m. - 6:30 p.m.	393	554	41.0%
Cervantes & Marina	5:00 p.m. - 6:30 p.m.	240	518	115.8%
Cesar Chavez & Harrison	5:00 p.m. - 6:30 p.m.	39	57	46.2%
Embarcadero & Townsend	5:00 p.m. - 6:30 p.m.	195	315	61.5%
Embarcadero to/from Ferry Building	5:00 p.m. - 6:30 p.m.	84	171	103.6%
Fell & Scott	5:00 p.m. - 6:30 p.m.	202	373	84.7%
Golden Gate & Masonic	5:00 p.m. - 6:30 p.m.	42	43	2.4%
Great Highway & Sloat	5:00 p.m. - 6:30 p.m.	50	82	64.0%
Illinois & Mariposa/Terry Francois	5:00 p.m. - 6:30 p.m.	36	78	116.7%
JFK & Transverse	5:00 p.m. - 6:30 p.m.	300	410	36.7%
Lake Merced & Winston	5:00 p.m. - 6:30 p.m.	29	57	96.6%
Masonic & Panhandle	8:00 a.m. - 9:00 a.m.	152	228	50.0%
McAllister & Polk	5:00 p.m. - 6:30 p.m.	223	309	38.6%
O'Shaughnessy & Portola	5:00 p.m. - 6:30 p.m.	23	28	21.7%
Page & Scott	5:00 p.m. - 6:30 p.m.	376	613	63.0%
Polk & Sutter	5:00 p.m. - 6:30 p.m.	158	203	28.5%
Randall & San Jose	5:00 p.m. - 6:30 p.m.	28	70	150.0%
Stockton & Sutter	5:00 p.m. - 6:30 p.m.	37	113	205.4%
	1. TOTALS	**5926**	**9035**	
	2. TOTALS*	**5500**	**8441**	**53.5%**

*For comparison purposes, these totals exclude all count locations which were omitted from any previous annual count results (JFK & Transverse, Illinois St. Bridge, and Ferry Building).

Citywide Results

The 2009 counts showed an 8.5 percent increase in the number of observed bicyclists compared[3] to the 2008 counts, and an overall 53.5 percent increase from the 2006 baseline counts. In comparison, the increase from 2007 to 2008 was 25.1 percent and 14.0 percent from 2006 to 2007[4].

The observed increases in bicycle ridership are especially significant when viewed in light of the court injunction against the City's Bicycle Plan. The injunction, which began in June of 2006, has prevented the City from installing any new bicycle facilities[5], such as bicycle lanes, shared roadway pavement markings, or "sharrows," and bicycle racks. Despite a lack of improvements or additions to the City's bicycle route network, bicycling in San Francisco is increasing. Given the myriad of factors that contribute to bicycle use, it is difficult to estimate if there would have been a larger increase in bicyclists over this time period if the injunction had not been in place.

Although the percent increase from 2008 to 2009 is lower than that from 2007 to 2008, it is clear that an increasing number of San Franciscans are choosing to travel by bicycle, and this growth trend continues to emphasize the need for adequate and safe bicycling facilities.

Downtown vs. Non-downtown Results

The downtown count locations showed a 1.7 percent increase in bicycle volumes from 2008 to 2009. The non-downtown locations showed an 11.1 percent increase in bicycle volumes from 2008 to 2009.

These numbers show a variation in the growth rate from last year, but continue to show bicycling increases in both the downtown cordon and outlying neighborhood routes. Whether the lack of bicycling infrastructure improvements citywide is affecting this growth has yet to be determined, and the SFMTA will continue to monitor downtown versus non-downtown bicycle ridership, especially as new facilities are installed in the coming months and years.

Rider Gender and Helmet Use

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[3] All longitudinal comparisons omit the JFK/Transverse, Ferry Building, and 3rd/Illinois Street Bridge counts.

[4] A table comparison of the 2006 to 2007 and 2007 to 2008 counts can be found in Appendices C&D.

[5] There are approximately 208 miles of streets or paths in San Francisco that have bicycling facilities - Class I (bike path), II (bike lane), or III (shared roadway pavement markings or "sharrows"). The number of miles has not changed since May of 2006.

Rider gender and helmet usage were not measured at all count locations from 2006-09. This inconsistency is due to the challenges presented by high volume locations (see discussion of "high volume" locations below). Despite the challenges of capturing rider characteristics at high volume locations, generally consistent trends in the data have been established over the past four years of counts.

The observed male and female bicyclist split (percentage comparison) continues to suggest that the majority of bicyclists in San Francisco are male, at 71 percent. The counts in 2009, however, reinforced the trend that the number of female riders is increasing, albeit at a slow rate. Since 2006, the female share of bicyclists has increased from 25 to 29 percent.

Tables 4 & 5: Rider Gender (2006-09) and Helmet Use (2006-09)[6]

Male / Female Ridership (2006-09)

	2006	2007	2008	2009
% Male	75	76	73	71
% Female	25	24	27	29

Helmet / No Helmet (2006-09)

	2006	2007	2008	2009
% Helmet	65	72	67	69
% No Helmet	35	28	33	31

The level of observed helmet usage increased slightly from 2008 to 2009 (67 percent to 69 percent), and showed an overall increase of four percent from the base line counts in 2006 (65 percent to 69 percent).

Please see Appendices E and F for more detailed numbers on rider gender and helmet use. SFMTA will continue to monitor trends in bicyclist demographics and helmet usage. More detailed information on bicyclist demographics can be found in the 2008 State of Cycling Report.

Sidewalk & Wrong-way Riding

As San Francisco continues to move forward with planning and constructing a world class network of bicycle facilities, the bicycle counts reinforce the need to pay close attention to both sidewalk and wrong-way riding. At almost every count location one of these bicyclist behaviors was observed.
Locations with the highest percentages of sidewalk riding and the respective bicycle facility types present at each location are listed below:

[6] Percentages are based on total reported total male/female riders and helmet/no helmet riders, not on the total number of bicyclists counted citywide.

- Alemany at Geneva, 24% with shared roadway markings and signed routes.
- Golden Gate at Masonic, 30% with signed routes and a bike lane.
- Portola at O'Shaughnessy, 46% with signed routes.

The percentage of bicyclists riding the wrong-way was much lower overall, with the highest share being 15.7% percent at Randall and San Jose streets. See Appendices G and H for more detailed data on sidewalk and wrong-way riding.

The SFMTA does not condone sidewalk and wrong-way riding because they are illegal and they endanger bicyclists, pedestrians, and motorists. At the same time, the observation of such behavior can highlight segments of the bicycle network where bicyclists perceive unsafe conditions or where certain facilities may be lacking. The SFMTA will continue to monitor sidewalk and wrong-way riding, as well as work to implement additional bicycle safety and education campaigns on these two behaviors.

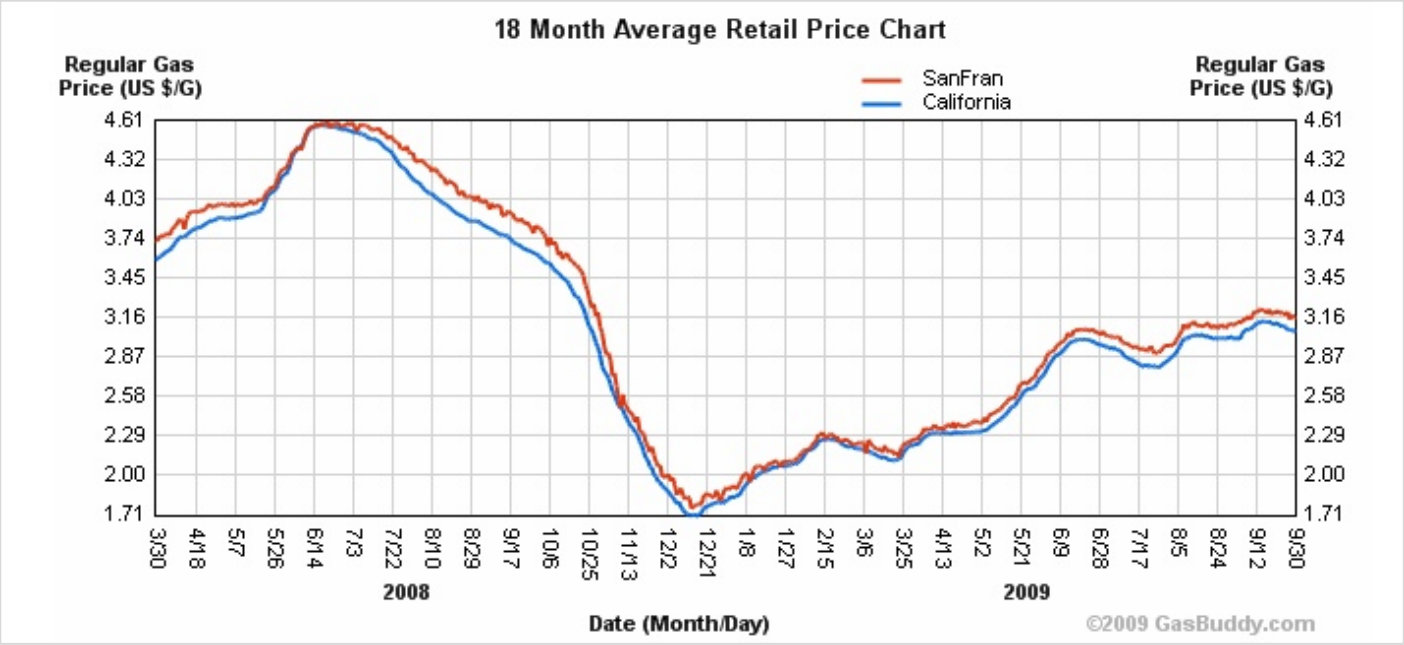
Further discussion of noteworthy count locations

- Ferry Terminals: In 2008, the count at Embarcadero and Market was moved to the two ferry terminals located behind the Ferry Building in order to better capture the number of bicyclists commuting into the City via ferries. It was observed that a large percentage of the 350 counted bicyclists at the ferry terminals had rental bikes, indicating that this is also a popular route for tourists. This location continues to serve as an important indication of bicycle tourist volumes as well as ferry commuter volumes. However, given the fluctuation of tourist volumes and changes to the ferry schedules, this location has been omitted from the 2008 to 2009 comparison figures. Prior to the 2010 count, it is recommended that staff identify a proper counting location and allocate enough counters to accurately capture the bicyclist volumes.

A note on gas prices

The summer of 2008 saw gas prices in the Bay Area and across the United States rise to historic levels. As Figure 3 indicates, by the summer of 2009, gas prices in San Francisco were roughly a dollar less than they were in 2008. While it is difficult to isolate the effect of gas prices on bicycle ridership, it is reasonable to assume that the lower gas prices in 2009 might be part of the explanation for why the bicycle counts showed smaller ridership gains in 2009 than in 2008. Nevertheless, the 8.5 percent increase in observed bicyclists between 2008 and 2009 also indicates that a continued increase of gas prices over the next few years will likely continue to have a fundamental impact on travel behavior.

Figure 3: Average Retail Gas Prices in San Francisco & California (2008-09)*



** In nominal dollars*

Recommendations

Make the transition to September bicycle counts

The National Bicycle and Pedestrian Documentation Project (NBPD) is an annual bicycle and pedestrian count and survey effort sponsored by the Institute of Transportation Engineers Pedestrian and Bicycle Council. It seeks to establish a standardized bicycle and pedestrian count methodology and disseminate this methodology to cities across the country. The ultimate goal is to develop a national database of count information that will provide bicycle and pedestrian planners with crucial data to support their work. The NBPD has established September as the ideal month for conducting bicycle and pedestrian counts given the mild weather conditions and less variability due to summer vacations. Conducting bicycle counts in September, however, has been a great challenge for the SFMTA. The bicycle counts require a mobilization of a tremendous amount of staff resources – roughly 20 part-time counters and one full-time staff member to coordinate the counts, compile the data, and write the report. As a result, the SFMTA has relied heavily on its summer intern program to support the bicycle counts, and, unfortunately, most of the summer interns have returned to school by September.

While the 2006-08 bicycle counts, conducted thus far in August, have been extremely valuable, it is recommended that SFMTA make the transition to September bicycle counts in order to maximize the benefits of the NBPD. This transition will be made easier with SFMTA's pilot program to install automatic bicycle counters in 2008-09 (see discussion below). Only about 15 of the 33 count locations, however, will be covered by the initial automatic bicycle counters project. Therefore, manual counts will still be required for at least the next year or two. One potential solution to the staffing issue in September is for the SFMTA to hire temporary workers to supplement the gaps left by departing interns. The SFMTA is currently assessing the costs of hiring temporary counters in September. This investment will not only strengthen the SFMTA's bicycle count effort, but also enable San Francisco to incorporate its data into the NBPD database.

Prioritize installation of automatic bicycle counters

While the manual citywide bicycle counts have allowed the SFMTA to identify various bicycling trends, they only produce a "snapshot" view of bicycling in the San Francisco. In order to address many of the limitations of the manual counts, and to provide continuous data on bicycle ridership throughout the City, the SFMTA is currently working to install automatic bicycle counters at the 33 locations. Automatic bicycle counters are a proven technology that provides a continuous stream of ridership data in a fast, cost-effective, and safe manner.

San Francisco's first automatic counter was installed in 2009 on Fell Street between Scott and Divisadero Streets. This pilot project has enabled the SFMTA to test ZELT Inductive Loop Counters.[7] Inductive loop counters are installed 1 to 3 inches below the road surface, and each time a bicycle goes over the loop, the system detects the bicycle's electromagnetic signature and registers a count. These counters are invisible to the public and are designed to be able to distinguish between bicyclists and other users of the street, such as automobiles or pedestrians. Furthermore, they require minimal maintenance, as their batteries last for roughly ten years.
Figures 4, 4a and 4c offer a brief summary of the automatic count data collected on Fell Street thus far by the SFMTA. As one can see, this type of robust data set will enable the SFMTA to much more accurately track changes in bicycle ridership.

[7] See www.eco-compteur.com for more information.

Figure 4. Weekly Ridership Variation on Fell St.

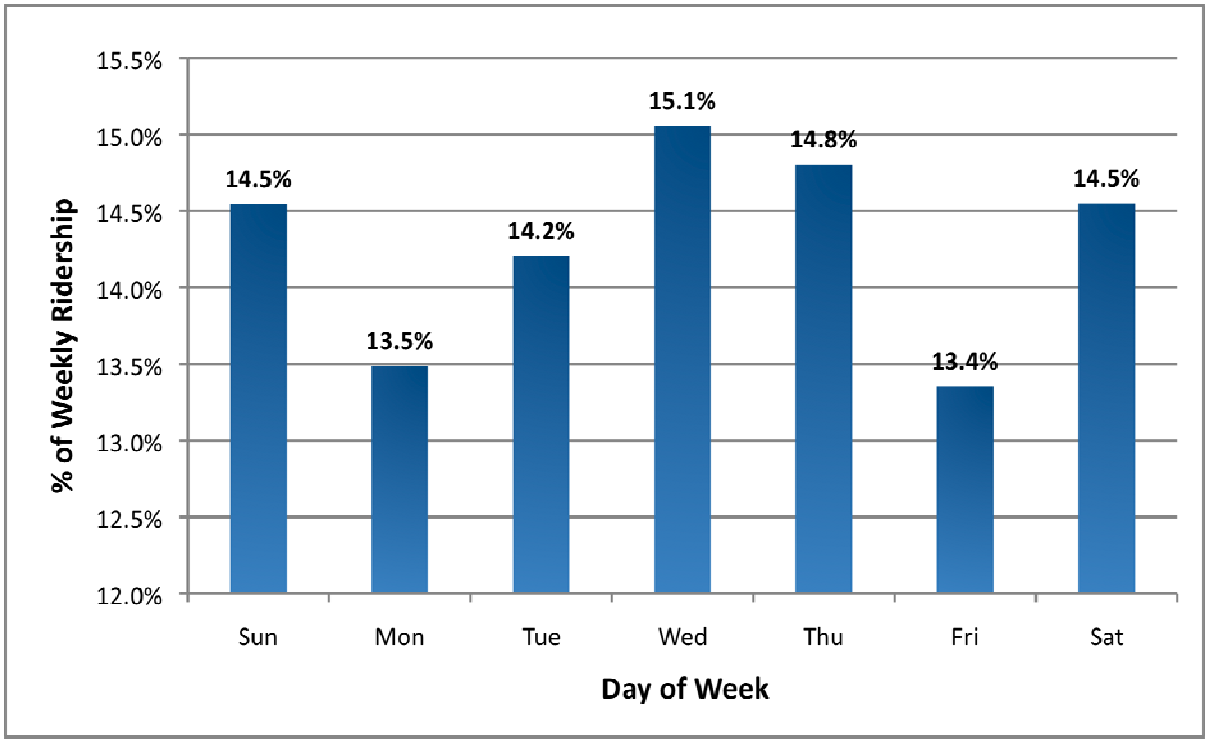


Figure 4a. Daily Ridership Variation on Westbound Fell Street

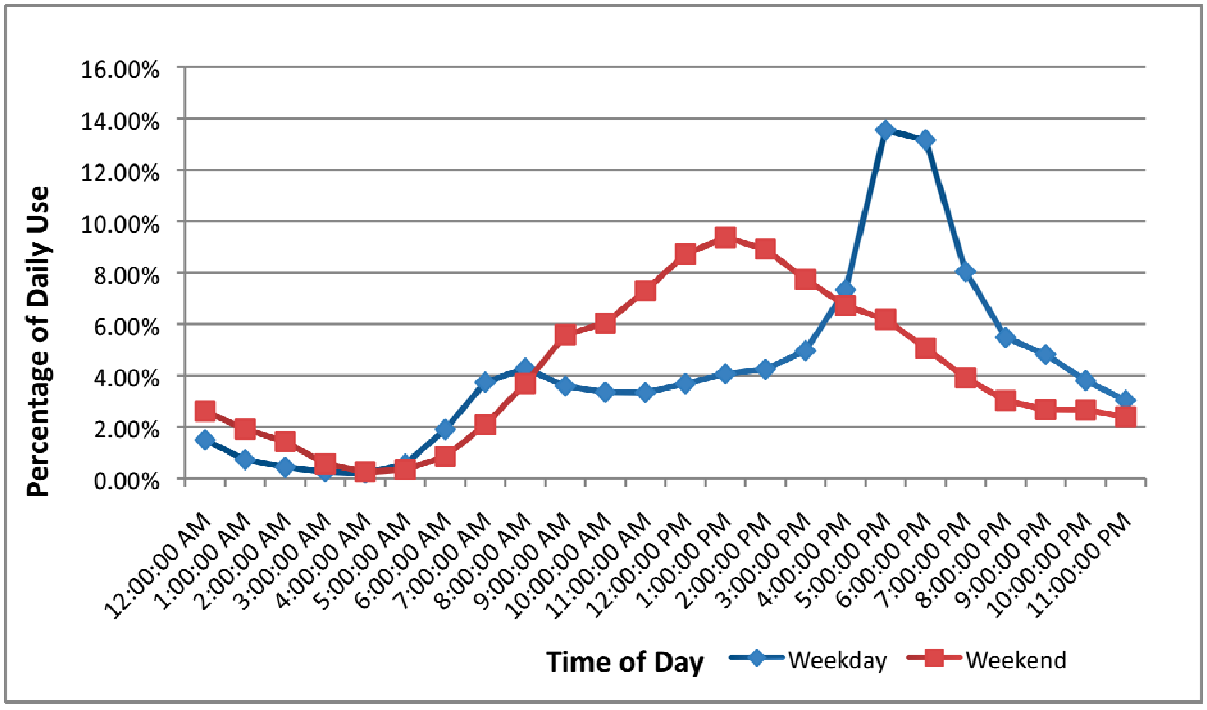
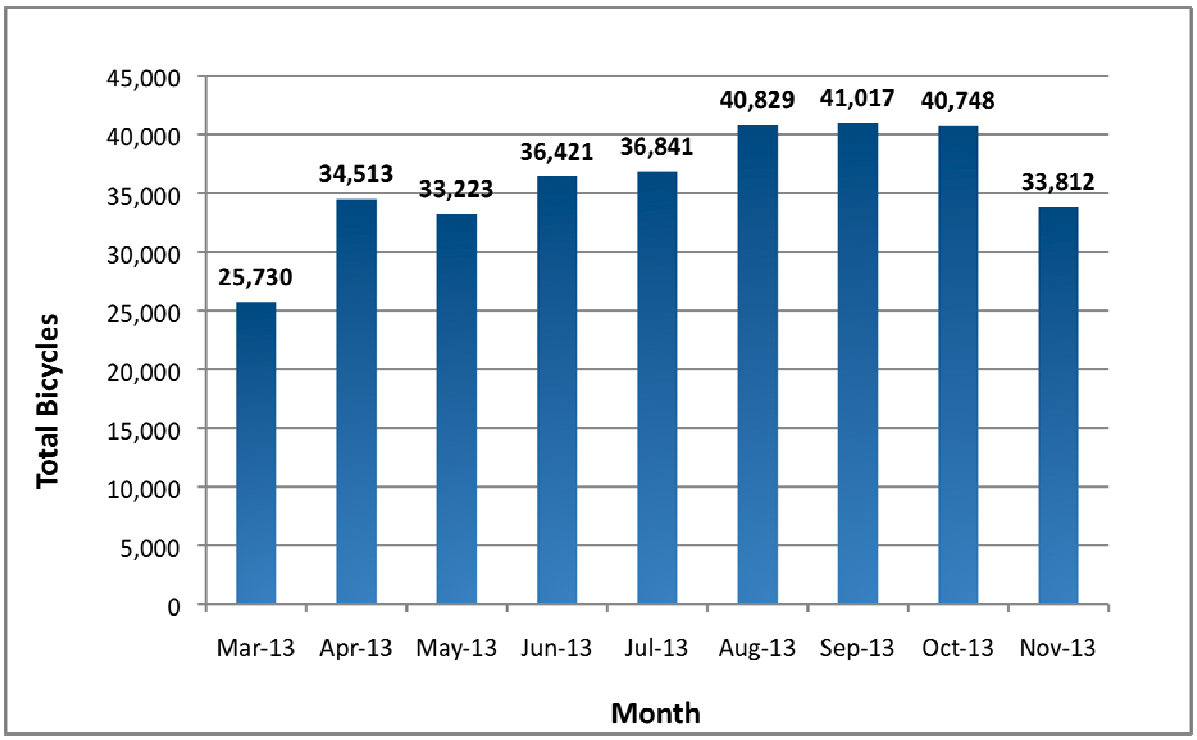


Figure 4c. Monthly Ridership Totals for Westbound Fell Street



As shown in Table 6, the SFMTA will be installing a first phase of 22 counters at 13 locations throughout the City within the next year. It is the goal of the SFMTA to eventually install automatic counters at all 33 count locations throughout the City.

Table 6. Proposed 1st Phase of Automatic Counter Locations

On	Approaching	# of counters
Panhandle Path	Masonic Avenue	1
Market Street	11th Street/Van Ness Avenue	2
7th Avenue and Kirkham Street		4
Potrero Avenue	23rd Street	2
North Point Street	Polk Street	2
Polk Street	Grove Street	1
Grove Street	Polk Street	1
Valencia Street	14th Street	2
14th Street	Julian Avenue (east of Valencia)	1
Arguello Boulevard and Lake		3

Street		
Clipper Street	High Street and Clipper Terrace	1
Golden Gate Avenue	west of Baker Street	1
Baker Street	south of Golden Gate Avenue	1
TOTAL		**22**

The primary drawback of the automatic bicycle counters is their inability to detect rider gender, helmet usage, or to document other forms of bicyclist behavior. The SFMTA will continue with its annual bicycle counts until all of the automatic counters have been installed. It is recommended that the SFMTA continue to utilize manual counts on a systematic basis to not only monitor rider gender, helmet usage, and ground conditions at the locations, but also to validate the automatic counts.

Closely monitor count locations

Special attention should continue to be paid to downtown locations, as they can be more difficult to count than periphery locations given their high volumes. Furthermore, due to close proximity to AT&T Park, bicycle counts can be distorted if they are conducted on days when a ballgame or other major event is scheduled. For consistency, counts should continue to be taken on days when events are not scheduled.

Properly account for high volume locations

While the observed increase in bicycling is a trend to be celebrated, the sheer volume at many of the count locations presents another set of challenges for the bicycle counts. As Table 7 shows, in 2009 there were 13 locations where more than 300 bicyclists were counted during the 1 to 1.5 hour observation period.

Table 7. Number of High Volume Locations by Year

# of Bicyclists	2006	2007	2008
300+	6*	6	12
500+	1	3	5
600+	0	0	3

* Total excludes inaccurate JFK/Transverse count

As part of the SFMTA count methodology, locations with more than 300 bicyclists all require the use of "click-counters." The high volumes at these locations, however, may be greater than the observational capacity of even the best counter. Furthermore, at these locations it is all but impossible for the observer(s) to gather much of the “auxiliary” rider data (gender, helmet use, etc.) that provides another useful dimension to the data. As the number of 300+ locations continues to rise, the chance for counting error increases, while the amount of “auxiliary” data that is gathered decreases. One solution to this problem is to increase the number of counters per location, but with limited staffing, that is not necessarily practical. Another potential solution is automatic bicycle counters, but automatic counters will never be able to capture rider gender or helmet use. Future organizers of the citywide bicycle count should continue to consult past volumes to determine where to deploy click-counters, and/or additional counters.

Maintain high training standards manual counting staff

It is recommended that the citywide bicycle count continue to be officially incorporated into the SFMTA Intern Program. All supervisors and interns should be aware of the count, and interns should continue to have it assigned as one of their required tasks for the summer and in September should the counts be transitioned to the fall. Thorough training of staff and interns should continue to ensure that each counter understands the proper methodology for counting bicycles.

Ensure SFMTA methodology is consistent with national bicycle count efforts

The National Bicycle and Pedestrian Documentation Project (NBPD) is an annual bicycle and pedestrian count and survey effort sponsored by the Institute of Transportation Engineers Pedestrian and Bicycle Council. NBPD seeks to establish a standardized bicycle and pedestrian count methodology and to disseminate this methodology to cities across the country. The ultimate goal is to develop a national database of count information that will provide bicycle and pedestrian planners with crucial data to support their work.

The SFMTA has been careful to ensure that its bicycle counts follow bicycle count best practices and a consistent methodology. Nevertheless, as the NBPD refines its own sample count forms, surveys, and tabulation methodologies, the SFMTA should continually integrate these best practices to ensure consistency with national standards.

Supplement bicycle counts with additional data

The "2008 State of Cycling" report, authored by *Alta Planning + Design*, reviewed SFMTA's bicycle count program; one of the report's primary recommendations was that the SFMTA collect additional data to better understand how bicycling interacts with and is influenced by other modes of travel, as well as to identify how particular groups of bicyclists (e.g. messengers and tourists) affect the counts. SFMTA staff continues to work to gather the information outlined below:

- **Collect vehicular traffic data at all bicycle count locations.** One of the key long-term goals of the SFMTA bicycle counts is to assess the effectiveness of bicycle infrastructure and program improvements in encouraging greater levels of cycling. In order to understand the true cause of an increase in bicycle volumes, it is critical to identify whether or not an increase in bicycle volumes is an artifact of overall increases in transportation use or whether it is due to some other external factor controlled or influenced by SFMTA. Percent changes in motor vehicle traffic counts are used as one proxy for comparing changes in overall transportation use to changes in bicycle use.

- **SFMTA should work with BART, AC Transit, and Golden Gate Transit to collect bicycle use data at adjacent ferry terminals and transit stations.** Transit stations are a key destination for cyclists linking trips for the purpose of regional travel. While the count effort is concerned primarily with local bicycle travel within San Francisco, it is important to understand the role bike-to-transit plays in bicycle volumes.

- **SFMTA should work with bicycle messenger companies or the San Francisco Bicycle Messenger Association (SFBMA) to maintain data about numbers of messengers operating and typical routes.** While commuters make a trip choice based on a variety of possible modes, bicycle messengers are professional riders whose mode does not vary. For this reason, volumes of bicycle messengers are likely to change based on other socio-economic factors rather than external factors controlled by SFMTA. Understanding the number of bicycle courier trips in downtown San Francisco could lead to a more accurate understanding of changes in bicycle volumes in that area.

- **SFMTA should work with bicycle rental companies to maintain data about numbers of rentals and routes selected by users.** This data would allow a more specific analysis of the impact of bicycle rentals on the bicycle volumes at select locations, such as the ferry terminals.

Conclusion

The 2009 Citywide Bicycle Count was successful in its goal of capturing a sample of bicycle use across the City. While it is difficult to make specific conclusions about bicycle use or patterns from the bicycle counts, it is possible to make general observations. The recorded increase in volume of 8.5 percent over the 2008 count, and 53.5 percent over the 2006 count, indicates that bicycling in San Francisco is still on the rise.

As future counts are done, and additional data from automatic bicycle counters becomes available, it will be possible to remark more conclusively on specific trends at certain locations and throughout San Francisco. More specifically, the 2010 bicycle counts should help explain the impacts of new infrastructure on bicycle ridership. The four years that San Francisco has been monitoring bicycle ridership without the installation of any new bicycle facilities provides us with a robust data set by which to analyze the effects of the variety of network improvements to be made in the near future. As the court injunction against the bike plan is lifted and new bicycling infrastructure is implemented, future counts offer a unique opportunity for the SFMTA to document the impacts of that new bicycle infrastructure on ridership.

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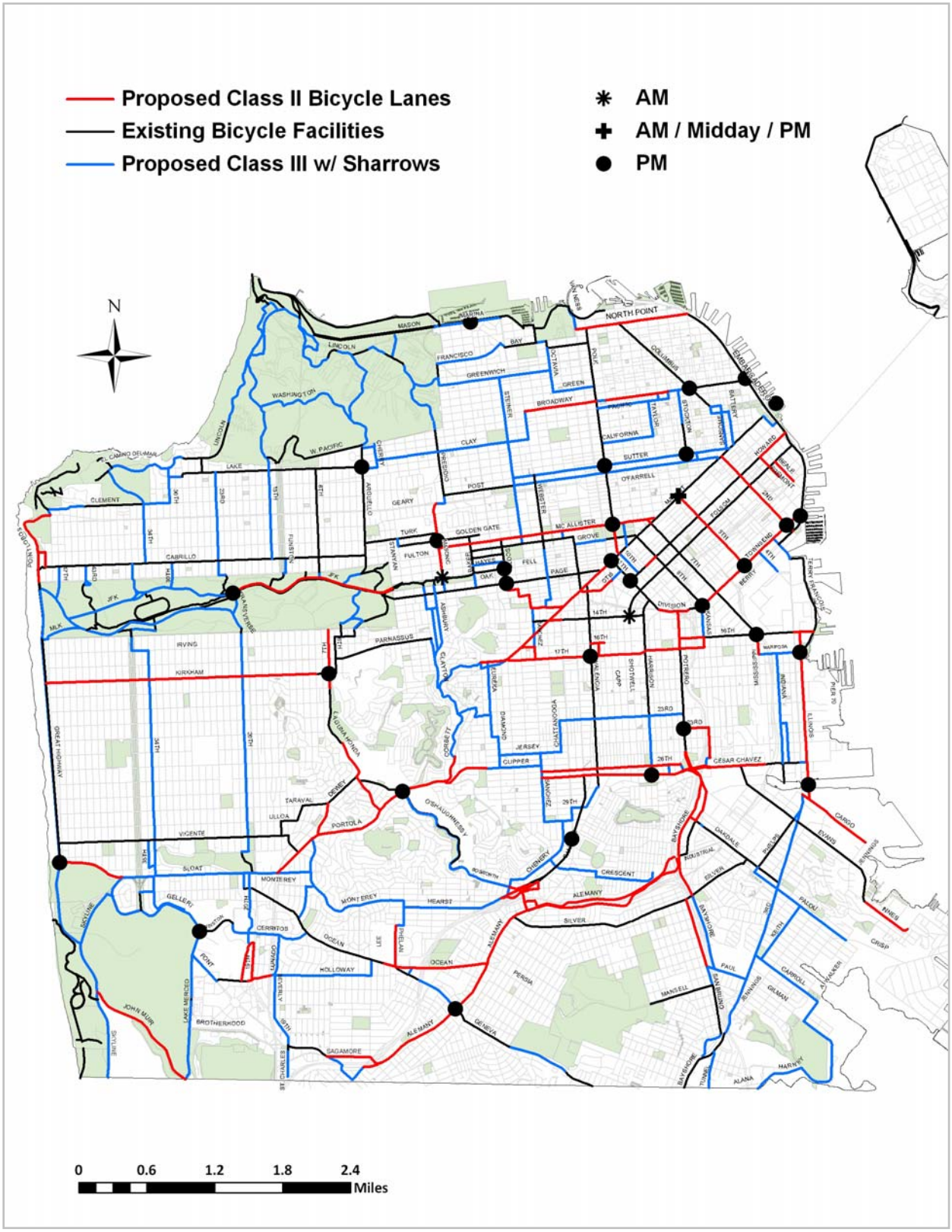
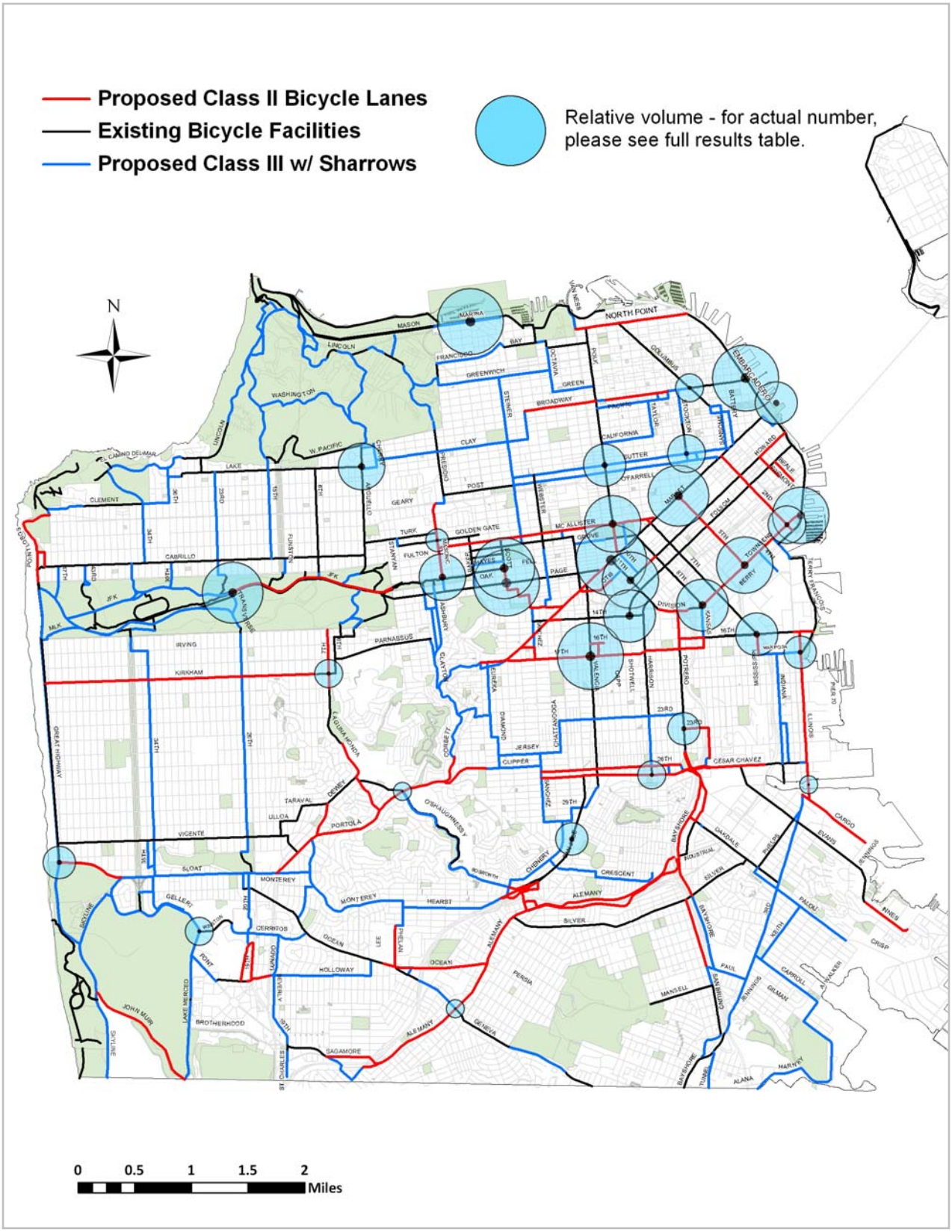
Appendix A: 2009 Bicycle Count Locations



Appendix B: Relative Bicycle Volumes at Count Locations



Appendix C: 2006-07 San Francisco Bicycle Count Data

Intersection	Time	2006 Total	2007 Total	% Change (06-07)
11th & Howard	5:00 p.m. - 6:30 p.m.	227	250	10.1%
11th & Market	5:00 p.m. - 6:30 p.m.	545	585	7.3%
14th & Folsom	8:00 a.m. - 9:00 a.m.	163	200	22.7%
17th & Valencia	5:00 p.m. - 6:30 p.m.	441	541	22.7%
23rd & Potrero	5:00 p.m. - 6:30 p.m.	35	34	-2.9%
2nd & Townsend	5:00 p.m. - 6:30 p.m.	101	107	5.9%
3rd St. Bridge	5:00 p.m. - 6:30 p.m.	42	26	-38.1%
5th & Market	1:00 p.m. - 2:00 p.m.	156	152	-2.6%
5th & Market	5:00 p.m. - 6:30 p.m.	468	519	10.9%
5th & Market	8:00 a.m. - 9:00 a.m.	378	397	5.0%
5th & Townsend	5:00 p.m. - 6:30 p.m.	254	266	4.7%
7th & 16th	5:00 p.m. - 6:30 p.m.	67	122	82.1%
7th & Kirkham	5:00 p.m. - 6:30 p.m.	35	45	28.6%
8th & Townsend	5:00 p.m. - 6:30 p.m.	167	214	28.1%
Alemany & Geneva	5:00 p.m. - 6:30 p.m.	9	28	211.1%
Arguello & Lake	5:00 p.m. - 6:30 p.m.	136	165	21.3%
Broadway & Columbus	5:00 p.m. - 6:30 p.m.	95	80	-15.8%
Broadway & Embarcadero	5:00 p.m. - 6:30 p.m.	393	369	-6.1%
Cervantes & Marina	5:00 p.m. - 6:30 p.m.	240	292	21.7%
Cesar Chavez & Harrison	5:00 p.m. - 6:30 p.m.	39	48	23.1%
Embarcadero & Townsend	5:00 p.m. - 6:30 p.m.	195	259	32.8%
Embarcadero to/from Ferry Building	5:00 p.m. - 6:30 p.m.	84	55	-34.5%
Fell & Scott	5:00 p.m. - 6:30 p.m.	202	250	23.8%
Golden Gate & Masonic	5:00 p.m. - 6:30 p.m.	42	38	-9.5%
Great Highway & Sloat	5:00 p.m. - 6:30 p.m.	50	53	6.0%
Illinois & Mariposa/Terry Francois	5:00 p.m. - 6:30 p.m.	36	62	72.2%
JFK & Transverse*	5:00 p.m. - 6:30 p.m.	300	186	-38.0%
Lake Merced & Winston	5:00 p.m. - 6:30 p.m.	29	44	51.7%
Masonic & Panhandle	8:00 a.m. - 9:00 a.m.	152	172	13.2%
McAllister & Polk	5:00 p.m. - 6:30 p.m.	223	266	19.3%
O'Shaughnessy & Portola	5:00 p.m. - 6:30 p.m.	23	29	26.1%
Page & Scott	5:00 p.m. - 6:30 p.m.	376	420	11.7%
Polk & Sutter	5:00 p.m. - 6:30 p.m.	158	181	14.6%
Randall & San Jose	5:00 p.m. - 6:30 p.m.	28	72	157.1%
Stockton & Sutter	5:00 p.m. - 6:30 p.m.	37	74	100.0%
	1. TOTALS	**5926**	**6601**	
	2. TOTALS*	**5626**	**6415**	**14.0%**

*2006 count for JFK/Transverse was found to be inaccurate. For comparison purposes, JFK/Transverse was omitted from these totals.

Appendix D: 2007-08 San Francisco Bicycle Count Data

Intersection	Time	2007 Total	2008 Total	% Change (07-08)
11th & Howard	5:00 p.m. - 6:30 p.m.	250	333	33.2%
11th & Market	5:00 p.m. - 6:30 p.m.	585	726	24.1%
14th & Folsom	8:00 a.m. - 9:00 a.m.	200	214	7.0%
17th & Valencia	5:00 p.m. - 6:30 p.m.	541	690	27.5%
23rd & Potrero	5:00 p.m. - 6:30 p.m.	34	73	114.7%
2nd & Townsend	5:00 p.m. - 6:30 p.m.	107	140	30.8%
3rd St. Bridge / Illinois St. Bridge*	5:00 p.m. - 6:30 p.m.	26	16	-38.5%
5th & Market	1:00 p.m. - 2:00 p.m.	152	163	7.2%
5th & Market	5:00 p.m. - 6:30 p.m.	519	615	18.5%
5th & Market	8:00 a.m. - 9:00 a.m.	397	409	3.0%
5th & Townsend	5:00 p.m. - 6:30 p.m.	266	306	15.0%
7th & 16th	5:00 p.m. - 6:30 p.m.	122	144	18.0%
7th & Kirkham	5:00 p.m. - 6:30 p.m.	45	47	4.4%
8th & Townsend	5:00 p.m. - 6:30 p.m.	214	264	23.4%
Alemany & Geneva	5:00 p.m. - 6:30 p.m.	28	28	0.0%
Arguello & Lake	5:00 p.m. - 6:30 p.m.	165	175	6.1%
Broadway & Columbus	5:00 p.m. - 6:30 p.m.	80	94	17.5%
Broadway & Embarcadero	5:00 p.m. - 6:30 p.m.	369	594	61.0%
Cervantes & Marina	5:00 p.m. - 6:30 p.m.	292	490	67.8%
Cesar Chavez & Harrison	5:00 p.m. - 6:30 p.m.	48	54	12.5%
Embarcadero & Townsend	5:00 p.m. - 6:30 p.m.	259	319	23.2%
Embarcadero to/from Ferry Building**	5:00 p.m. - 6:30 p.m.	55	350	536.4%
Fell & Scott	5:00 p.m. - 6:30 p.m.	250	302	20.8%
Golden Gate & Masonic	5:00 p.m. - 6:30 p.m.	38	47	23.7%
Great Highway & Sloat	5:00 p.m. - 6:30 p.m.	53	39	-26.4%
Illinois & Mariposa/Terry Francois	5:00 p.m. - 6:30 p.m.	62	56	-9.7%
JFK & Transverse	5:00 p.m. - 6:30 p.m.	186	270	45.2%
Lake Merced & Winston	5:00 p.m. - 6:30 p.m.	44	47	6.8%
Masonic & Panhandle	8:00 a.m. - 9:00 a.m.	172	212	23.3%
McAllister & Polk	5:00 p.m. - 6:30 p.m.	266	295	10.9%
O'Shaughnessy & Portola	5:00 p.m. - 6:30 p.m.	29	29	0.0%
Page & Scott	5:00 p.m. - 6:30 p.m.	420	578	37.6%
Polk & Sutter	5:00 p.m. - 6:30 p.m.	181	209	15.5%
Randall & San Jose	5:00 p.m. - 6:30 p.m.	72	97	34.7%
Stockton & Sutter	5:00 p.m. - 6:30 p.m.	74	95	28.4%
	1. TOTALS	**6601**	**8520**	
	2. TOTALS* **	**6520**	**8154**	**25.1%**

* Count location was changed from 3rd Street bridge (2006-07) to Illinois Street bridge (2008).

** Count location was changed from Embarcadero at Market Street (2006-07) to the two ferry terminals behind the Ferry Building (2008).

*** For comparison purposes, omits changed count locations.

Appendix E: Rider Gender

Intersection	Total	Female Riders	% Female Riders	Male Riders	% Male Riders
11th & Howard	190	48	25%	142	75%
11th & Market	Data not available				
14th & Folsom	253	74	29%	179	71%
17th & Valencia	597	219	37%	378	63%
23rd & Potrero	72	19	26%	53	74%
2nd & Townsend	130	31	24%	99	76%
Illinois Street Bridge	13	4	31%	9	69%
5th & Market (Midday)	Data not available				
5th & Market (Evening)					
5th & Market (Morning)					
5th & Townsend	257	60	23%	197	77%
7th & 16th	194	66	34%	128	66%
7th & Kirkham	52	12	23%	40	77%
8th & Townsend	248	61	25%	187	75%
Alemany & Geneva	29	6	21%	23	79%
Arguello & Lake	233	58	25%	175	75%
Broadway & Columbus	Data not available				
Broadway & Embarcadero	564	202	36%	362	64%
Cervantes & Marina	Data not available				
Cesar Chavez & Harrison	57	12	21%	45	79%
Embarcadero & Townsend	231	57	25%	174	75%
Embarcadero to/from Ferry Building	Data not available				
Fell & Scott*	360	104	29%	256	71%
Golden Gate & Masonic	46	13	28%	33	72%
Great Highway & Sloat	82	16	20%	66	80%
Illinois & Mariposa/Terry Francois	78	18	23%	60	77%
JFK & Transverse	340	94	28%	246	72%
Lake Merced & Winston	57	13	23%	44	77%
Masonic & Panhandle	228	69	30%	159	70%
McAllister & Polk	305	82	27%	223	73%
O'Shaughnessy & Portola	28	6	21%	22	79%
Page & Scott	120	31	26%	89	74%
Polk & Sutter	215	53	25%	162	75%
Randall & San Jose	69	19	28%	50	72%
Stockton & Sutter	113	30	27%	83	73%
	5161	**1477**	**29%**	**3684**	**71%**

Percentages are based on total reported total male/female riders, not on the total number of bicyclists counted citywide.

Appendix F: Helmet Usage

Intersection	Total	Helmet	% Helmet	No Helmet	% No Helmet
11th & Howard	190	135	71%	55	29%
11th & Market	Data not available				
14th & Folsom	253	195	77%	58	23%
17th & Valencia	597	370	62%	227	38%
23rd & Potrero	72	38	53%	34	47%
2nd & Townsend	130	95	73%	35	27%
Illinois Street Bridge	13	7	54%	6	46%
5th & Market (Midday)	Data not available				
5th & Market (Evening)					
5th & Market (Morning)					
5th & Townsend	257	200	78%	57	22%
7th & 16th	194	133	69%	61	31%
7th & Kirkham	52	32	62%	20	38%
8th & Townsend	248	208	84%	40	16%
Alemany & Geneva	29	17	59%	12	41%
Arguello & Lake	233	197	85%	36	15%
Broadway & Columbus	Data not available				
Broadway & Embarcadero	554	339	61%	215	39%
Cervantes & Marina	Data not available				
Cesar Chavez & Harrison	57	45	79%	12	21%
Embarcadero & Townsend	231	155	67%	76	33%
Embarcadero to/from Ferry Building	Data not available				
Fell & Scott					
Golden Gate & Masonic	46	24	52%	22	48%
Great Highway & Sloat	82	43	52%	39	48%
Illinois & Mariposa/Terry Francois	78	47	60%	31	40%
JFK & Transverse	340	240	71%	100	29%
Lake Merced & Winston	57	37	65%	20	35%
Masonic & Panhandle	228	180	79%	48	21%
McAllister & Polk	305	209	69%	96	31%
O'Shaughnessy & Portola	28	22	79%	6	21%
Page & Scott	120	90	75%	30	25%
Polk & Sutter	215	138	64%	77	36%
Randall & San Jose	59	42	71%	17	29%
Stockton & Sutter	113	72	64%	41	36%
	4781	**3310**	**69%**	**1471**	**31%**

Percentages are based on total reported total helmet/no helmet riders, not on the total number of bicyclists counted citywide.

Appendix G: Sidewalk Riders

Intersection	2008 Total	Sidewalk Riders (2008)	% Sidewalk Riders (2008)	2009 Total	Sidewalk Riders (2009)	% Sidewalk Riders (2009)
11th & Howard	333	11	3%	332	11	3%
11th & Market	726	48	7%	808	45	6%
14th & Folsom	214	Data Not Available		258	9	3%
17th & Valencia	690	5	1%	606	9	1%
23rd & Potrero	73	11	15%	74	5	7%
2nd & Townsend	140	0	0%	133	4	3%
Illinois Street Bridge	16	0	0%	13	0	0%
5th & Market (Midday)	163	18	11%	192	17	9%
5th & Market (Evening)	615	35	6%	745	25	3%
5th & Market (Morning)	409	19	5%	470	Data Not Available	
5th & Townsend	306	2	1%	325	2	1%
7th & 16th	144	3	2%	202	16	8%
7th & Kirkham	47	13	28%	54	8	15%
8th & Townsend	264	14	5%	276	16	6%
Alemany & Geneva	28	6	21%	29	7	24%
Arguello & Lake	175	19	11%	233	17	7%
Broadway & Columbus	94	12	13%	63	1	2%
Broadway & Embarcadero	594	0	0%	554	0	0%
Cervantes & Marina*	490	441	90%	518	461	89%
Cesar Chavez & Harrison	54	15	28%	57	7	12%
Embarcadero & Townsend*	319	113	35%	315	134	43%
Embarcadero to/from Ferry Building	Not applicable to this location					
Fell & Scott	302	28	9%	373	59	16%
Golden Gate & Masonic	47	14	30%	43	13	30%
Great Highway & Sloat*	39	15	38%	82	39	48%
Illinois & Mariposa/Terry Francois	56	1	2%	78	0	0%
JFK & Transverse*	270	18	7%	410	69	17%
Lake Merced & Winston*	47	33	70%	57	36	63%
Masonic & Panhandle*	212	210	99%	228	223	98%
McAllister & Polk	295	43	15%	309	23	7%
O'Shaughnessy & Portola	29	0	0%	28	13	46%
Page & Scott	578	8	1%	613	9	1%
Polk & Sutter	209	3	1%	203	11	5%
Randall & San Jose	97	21	22%	70	16	23%
Stockton & Sutter	95	Data Not Available		113	11	10%

* The sidewalk in these locations is a multi-use path

Appendix H: Wrong-Way Riders

Intersection	2008 Total	Wrong-Way Riders (2008)	% Wrong-Way Riders (2008)	2009 Total	Wrong-Way Riders (2009)	% Wrong-Way Riders (2009)
11th & Howard	333	3	1%	332	11	3%
11th & Market	726	29	4%	808	40	5%
14th & Folsom	214	Data Not Available		258	10	4%
17th & Valencia	690	4	1%	606	10	2%
23rd & Potrero	73	7	10%	74	5	7%
2nd & Townsend	140	0	0%	133	7	5%
Illinois Street Bridge	16	1	6%	13	0	0%
5th & Market (Midday)	163	1	1%	192	9	5%
5th & Market (Evening)	615	3	0%	745	21	3%
5th & Market (Morning)	409	4	1%	470	Data Not Available	
5th & Townsend	306	4	1%	325	1	0%
7th & 16th	144	0	0%	202	12	6%
7th & Kirkham	47	8	17%	54	4	7%
8th & Townsend	264	5	2%	276	4	1%
Alemany & Geneva	28	7	25%	29	0	0%
Arguello & Lake	175	12	7%	233	12	5%
Broadway & Columbus	94	13	14%	63	1	2%
Broadway & Embarcadero	594	0	0%	554	0	0%
Cervantes & Marina*	490	0	0%	518	1	0%
Cesar Chavez & Harrison	54	5	9%	57	3	5%
Embarcadero & Townsend*	319	0	0%	315	10	3%
Embarcadero to/from Ferry Building	350	Not Applicable to this location				
Fell & Scott	302	9	3%	373	Data Not Available	
Golden Gate & Masonic	47	6	13%	43	1	2%
Great Highway & Sloat*	39	1	3%	82	0	0%
Illinois & Mariposa/Terry Francois	56	0	0%	78	4	5%
JFK & Transverse*	270	9	3%	410	Data Not Available	
Lake Merced & Winston*	47	2	4%	57	0	0%
Masonic & Panhandle*	212	2	1%	228	4	2%
McAllister & Polk	295	19	6%	309	19	6%
O'Shaughnessy & Portola	29	0	0%	28	4	14%
Page & Scott	578	1	0%	613	5	1%
Polk & Sutter	209	2	1%	203	7	3%
Randall & San Jose	97	15	15%	70	11	16%
Stockton & Sutter	95	Data Not Available		113	5	4%

* The sidewalk in these locations is a multi-use path

Appendix I: Downtown Cordon Counts (2006-09)

Downtown Cordon Intersections	Time	2006 Total	2007 Total	2008 Total	2009 Total	% Change (06-07)	% Change (07-08)	% Change (08-09)	% Change (06-09)
11th & Howard	5:00 p.m. - 6:30 p.m.	227	250	333	332	10.1%	33.2%	-0.3%	46.3%
11th & Market	5:00 p.m. - 6:30 p.m.	545	585	726	808	7.3%	24.1%	11.3%	48.3%
2nd & Townsend	5:00 p.m. - 6:30 p.m.	101	107	140	133	5.9%	30.8%	-5.0%	31.7%
5th & Townsend	5:00 p.m. - 6:30 p.m.	254	266	306	325	4.7%	15.0%	6.2%	28.0%
8th & Townsend	5:00 p.m. - 6:30 p.m.	167	214	264	276	28.1%	23.4%	4.5%	65.3%
Broadway & Columbus	5:00 p.m. - 6:30 p.m.	95	80	94	63	-15.8%	17.5%	-33.0%	-33.7%
Broadway & Embarcadero	5:00 p.m. - 6:30 p.m.	393	369	594	554	-6.1%	61.0%	-6.7%	41.0%
Embarcadero & Townsend	5:00 p.m. - 6:30 p.m.	195	259	319	315	32.8%	23.2%	-1.3%	61.5%
Ferry Building Terminals*	5:00 p.m. - 6:30 p.m.	84	55	350	171	-34.5%	536.4%	-51.1%	103.6%
McAllister & Polk	5:00 p.m. - 6:30 p.m.	223	266	295	309	19.3%	10.9%	4.7%	38.6%
Polk & Sutter	5:00 p.m. - 6:30 p.m.	158	181	209	203	14.6%	15.5%	-2.9%	28.5%
Stockton & Sutter	5:00 p.m. - 6:30 p.m.	37	74	95	113	100.0%	28.4%	18.9%	205.4%
TOTALS*		**2395**	**2651**	**3375**	**3431**	**10.7%**	**27.3%**	**1.7%**	**43.3%**

* For comparison purposes, the Ferry Building Terminals was omitted from these totals, which was relocated in 2008.

Appendix J: Non-downtown Cordon Counts (2006-09)

Non-Downtown Cordon Intersections	Time	2006 Total	2007 Total	2008 Total	2009 Total	% Change (06-07)	% Change (07-08)	% Change (08-09)	% Change (06-09)
14th & Folsom	8:00 a.m. - 9:00 a.m.	163	200	214	258	22.7%	7.0%	20.6%	58.3%
17th & Valencia	5:00 p.m. - 6:30 p.m.	441	541	690	606	22.7%	27.5%	-12.2%	37.4%
23rd & Potrero	5:00 p.m. - 6:30 p.m.	35	34	73	74	-2.9%	114.7%	1.4%	111.4%
3rd St. Bridge / Illinois St. Bridge*	5:00 p.m. - 6:30 p.m.	42	26	16	13	-38.1%	-38.5%	-18.8%	-69.0%
5th & Market	1:00 p.m. - 2:00 p.m.	156	152	163	192	-2.6%	7.2%	17.8%	23.1%
5th & Market	5:00 p.m. - 6:30 p.m.	468	519	615	745	10.9%	18.5%	21.1%	59.2%
5th & Market	8:00 a.m. - 9:00 a.m.	378	397	409	470	5.0%	3.0%	14.9%	24.3%
7th & 16th	5:00 p.m. - 6:30 p.m.	67	122	144	202	82.1%	18.0%	40.3%	201.5%
7th & Kirkham	5:00 p.m. - 6:30 p.m.	35	45	47	54	28.6%	4.4%	14.9%	54.3%
Alemany & Geneva	5:00 p.m. - 6:30 p.m.	9	28	28	29	211.1%	0.0%	3.6%	222.2%
Arguello & Lake	5:00 p.m. - 6:30 p.m.	136	165	175	233	21.3%	6.1%	33.1%	71.3%
Cervantes & Marina	5:00 p.m. - 6:30 p.m.	240	292	490	518	21.7%	67.8%	5.7%	115.8%
Cesar Chavez & Harrison	5:00 p.m. - 6:30 p.m.	39	48	54	57	23.1%	12.5%	5.6%	46.2%
Fell & Scott	5:00 p.m. - 6:30 p.m.	202	250	302	373	23.8%	20.8%	23.5%	84.7%
Golden Gate & Masonic	5:00 p.m. - 6:30 p.m.	42	38	47	43	-9.5%	23.7%	-8.5%	2.4%
Great Highway & Sloat	5:00 p.m. - 6:30 p.m.	50	53	39	82	6.0%	-26.4%	110.3%	64.0%
Illinois & Mariposa/Terry Francois	5:00 p.m. - 6:30 p.m.	36	62	56	78	72.2%	-9.7%	39.3%	116.7%
JFK & Transverse*	5:00 p.m. - 6:30 p.m.	300	186	270	410	-38.0%	45.2%	51.9%	36.7%
Lake Merced & Winston	5:00 p.m. - 6:30 p.m.	29	44	47	57	51.7%	6.8%	21.3%	96.6%
Masonic & Panhandle	8:00 a.m. - 9:00 a.m.	152	172	212	228	13.2%	23.3%	7.5%	50.0%
O'Shaughnessy & Portola	5:00 p.m. - 6:30 p.m.	23	29	29	28	26.1%	0.0%	-3.4%	21.7%
Page & Scott	5:00 p.m. - 6:30 p.m.	376	420	578	613	11.7%	37.6%	6.1%	63.0%
Randall & San Jose	5:00 p.m. - 6:30 p.m.	28	72	97	70	157.1%	34.7%	-27.8%	150.0%
TOTALS*		**3105**	**3683**	**4509**	**5010**	**18.6%**	**22.4%**	**11.1%**	**61.4%**

* For comparison purposes, these totals exclude the observations from the 2 changed count locations in 2008.

Appendix K: Weather Report (2006-09)

		2006		2007		2008		2009	
Intersection	**Time**	**Temperature (°F)**	**Conditions**	**Temperature (°F)**	**Conditions**	**Temperature (°F)**	**Conditions**	**Temperature (°F)**	**Conditions**
11th & Howard	5:00 p.m. - 6:30 p.m.	65°	Scattered Clouds	65°	Partly Cloudy	69°	Clear	69°	Clear
11th & Market	5:00 p.m. - 6:30 p.m.	65°	Scattered Clouds	65°	Partly Cloudy	65°	Clear then foggy	65°	Clear
14th & Folsom	8:00 a.m. - 9:00 a.m.	64°	Scattered Clouds	66°	Scattered Clouds	60°	Partly Cloudy	60°	Clear
17th & Valencia	5:00 p.m. - 6:30 p.m.	62°	Mostly Cloudy	72°	Partly Cloudy	70°	Clear	70°	Clear
23rd & Potrero	5:00 p.m. - 6:30 p.m.	68°	Partly Cloudy	68°	Partly Cloudy	70°	Clear	70°	Overcast/Wind
2nd & Townsend	5:00 p.m. - 6:30 p.m.	65°	Scattered Clouds	65°	Partly Cloudy	68°	Clear	68°	Clear
3rd & Islais Creek (Illinois St. in 2008/09)	5:00 p.m. - 6:30 p.m.	64°	Scattered Clouds	66°	Scattered Clouds	73°	Clear	73°	Overcast`
5th & Market	1:00 p.m. - 2:00 p.m.	65°	Partly Cloudy	68°	Partly Cloudy	76°	Clear	76°	Clear
5th & Market	5:00 p.m. - 6:30 p.m.	63°	Partly Cloudy	68°	Partly Cloudy	59°	Mostly Cloudy	59°	Clear
5th & Market	8:00 a.m. - 9:00 a.m.	56°	Clear	55°	Partly Cloudy	60°	Mostly Cloudy	60°	Overcast
5th & Townsend	5:00 p.m. - 6:30 p.m.	65°	Scattered Clouds	65°	Partly Cloudy	68°	Clear	68°	Clear
7th & 16th	5:00 p.m. - 6:30 p.m.	63°	Partly Cloudy	66°	Scattered Clouds	70°	Clear	70°	Clear
7th & Kirkham	5:00 p.m. - 6:30 p.m.	62°	Mostly Cloudy	66°	Scattered Clouds	66°	Mostly Cloudy	66°	Clear/Warm
8th & Townsend	5:00 p.m. - 6:30 p.m.	65°	Scattered Clouds	65°	Partly Cloudy	67°	Clear	67°	Clear
Alemany & Geneva	5:00 p.m. - 6:30 p.m.	64°	Scattered Clouds	68°	Partly Cloudy	68°	Partly Cloudy	68°	Overcast/Wind
Arguello & Lake	5:00 p.m. - 6:30 p.m.	64°	Scattered Clouds	68°	Partly Cloudy	68°	Clear	68°	Clear/Wind
Broadway & Columbus	5:00 p.m. - 6:30 p.m.	65°	Scattered Clouds	65°	Partly Cloudy	68°	Clear then foggy	68°	Clear
Broadway & Embarcadero	5:00 p.m. - 6:30 p.m.	65°	Scattered Clouds	65°	Partly Cloudy	70°	Clear	70°	Clear
Cervantes & Marina	5:00 p.m. - 6:30 p.m.	66°	Partly Cloudy	73°	Clear	71°	Clear	71°	Clear
Cesar Chavez & Harrison	5:00 p.m. - 6:30 p.m.	64°	Scattered Clouds	65°	Partly Cloudy	60°	Partly Cloudy	60°	Clear
Embarcadero & Townsend	5:00 p.m. - 6:30 p.m.	65°	Scattered Clouds	65°	Partly Cloudy	68°	Clear	68°	Breeze
Embarcadero to/from Ferry Building	5:00 p.m. - 6:30 p.m.	65°	Scattered Clouds	65°	Partly Cloudy	70°	Clear	70°	Clear
Fell & Scott	5:00 p.m. - 6:30 p.m.	68°	Partly Cloudy	65°	Scattered Clouds	58°	Mostly Cloudy	58°	Clear
Golden Gate & Masonic	5:00 p.m. - 6:30 p.m.	68°	Partly Cloudy	68°	Partly Cloudy	64°	Clear	64°	Fog/Wind
Great Highway & Sloat	5:00 p.m. - 6:30 p.m.	66°	Partly Cloudy	68°	Partly Cloudy	58°	Mostly Cloudy	58°	Clear
Illinois & Mariposa/Terry Francois	5:00 p.m. - 6:30 p.m.	66°	Partly Cloudy	66°	Scattered Clouds	73°	Clear	73°	Clear
JFK & Transverse	5:00 p.m. - 6:30 p.m.	66°	Partly Cloudy	65°	Scattered Clouds	63°	Cloudy	63°	Clear/Wind
Lake Merced & Winston	5:00 p.m. - 6:30 p.m.	68°	Partly Cloudy	72°	Partly Cloudy	60°	Mostly Cloudy	60°	Clear/Wind
Masonic & Panhandle	8:00 a.m. - 9:00 a.m.	68°	Partly Cloudy	65°	Scattered Clouds	62°	Mostly Cloudy	62°	Overcast
McAllister & Polk	5:00 p.m. - 6:30 p.m.	65°	Scattered Clouds	65°	Partly Cloudy	65°	Partly Cloudy	65°	Windy
O'Shaughnessy & Portola	5:00 p.m. - 6:30 p.m.	62°	Mostly Cloudy	68°	Partly Cloudy	68°	Clear	68°	Overcast
Page & Scott	5:00 p.m. - 6:30 p.m.	68°	Partly Cloudy	65°	Partly Cloudy	64°	Clear	64°	Overcast/Wind
Polk & Sutter	5:00 p.m. - 6:30 p.m.	65°	Scattered Clouds	65°	Partly Cloudy	65°	Partly Cloudy	65°	Clear
Randall & San Jose	5:00 p.m. - 6:30 p.m.	66°	Partly Cloudy	72°	Partly Cloudy	70°	Clear	70°	Breeze
Stockton & Sutter	5:00 p.m. - 6:30 p.m.	65°	Scattered Clouds	65°	Partly Cloudy	65°	Clear	65°	Clear
	2006 Avg. Temp:	65°	2007 Avg. Temp:	66°	2008 Avg. Temp:	66°	2009 Avg. Temp:	66°	66°