

2008

SAN FRANCISCO

State of Cycling Report



SFMTA

Municipal Transportation Agency

2008

SAN FRANCISCO

State of Cycling Report

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Mayor Gavin Newsom

San Francisco Board of Supervisors

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Technical Advisory Committee:

Michael Radetsky
Faiz Khan
Melissa Pelkey
Travis Fox
Dr. Andrew Bindman

San Francisco Bicycle Coalition

CONSULTING TEAM

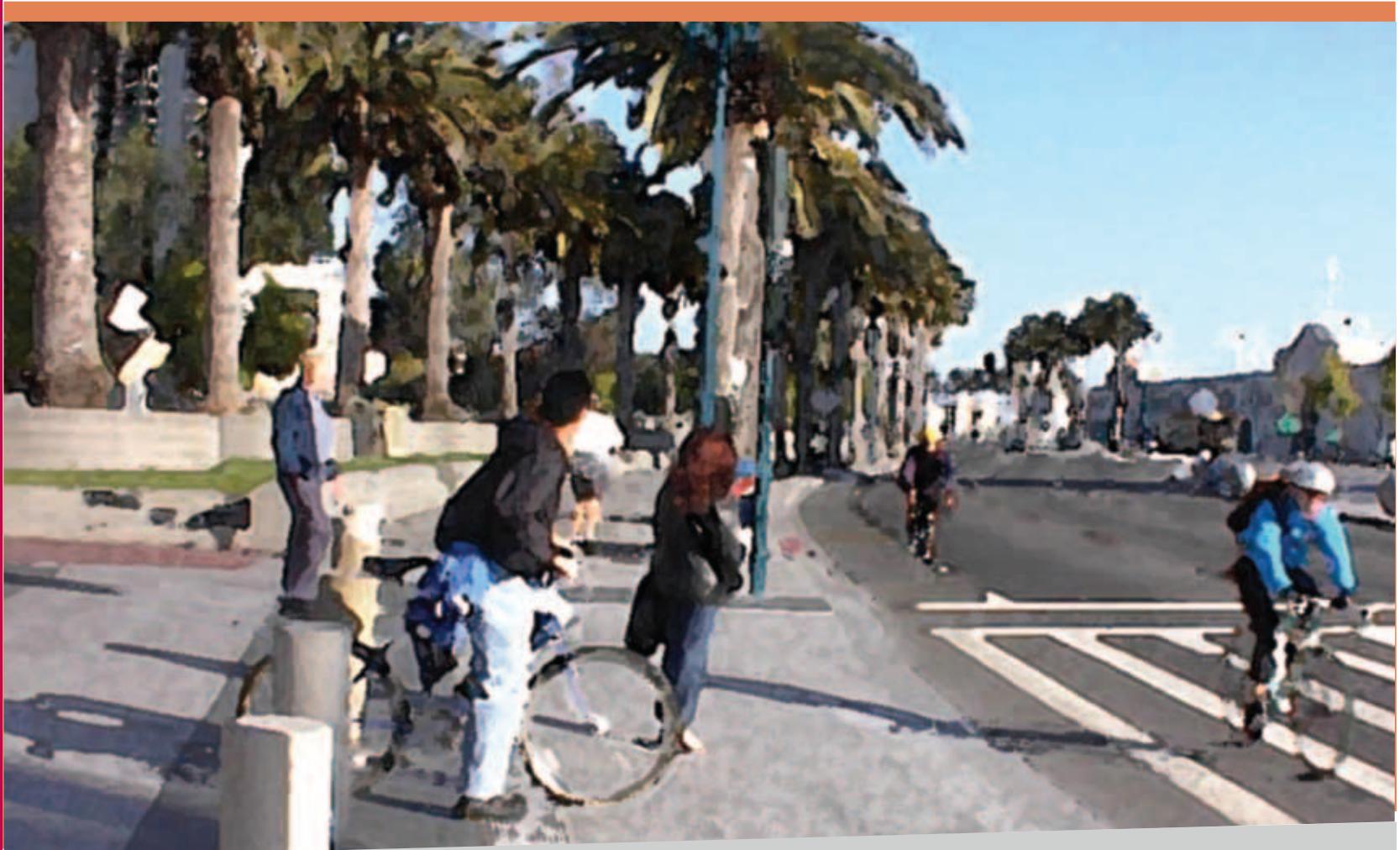
Alta Planning + Design
Brett Hondorp, Principal
Lauren Ledbetter, Associate
Holly Dabral, Designer

Henne Group
Jeff Henne, Principal

1 Introduction

Over the past several years the number of people bicycling in San Francisco has surged. Bike to Work Day has seen dramatic increases since its inception in 1994, with bicycles outnumbering cars two to one on Market Street at Van Ness Avenue during 2008's Bike to Work Day. Bicycle usage has increased on roadways where the City has installed bicycle lanes including Valencia Street, Polk Street and Fell Street.¹ San Francisco voters asked for and received car-free Saturdays in Golden Gate Park. The San Francisco Municipal Transportation Agency (SFMTA) recognizes and supports the increased popularity of bicycling and the associated environmental, health and transportation benefits. At the same time, the Agency acknowledges the potential for safety issues and road user conflicts that may arise as more cyclists—and more people new to urban bicycling—take to the streets. This first State of Cycling Report has been developed to provide a snapshot of cycling in San Francisco and to identify ways that the SFMTA can increase safe bicycling.

¹ See evaluation reports for these three streets on the San Francisco Municipal Transportation Agency's website: <http://www.sfmta.com/cms/rbikes/3172.html>



Purpose of the State of Cycling Report

This first State of Cycling Report is intended to give a snapshot of cycling in San Francisco. The report provides a baseline analysis of bicycling from information gathered via bicycle counts and surveys conducted during 2006, 2007 and 2008. This report responds to the questions:

- How have bicycle volumes changed between 2006 and 2008?
- How much do people bicycle in San Francisco?
- Who is bicycling in San Francisco and who is not?
- Why are people bicycling and what motivates them to do so?
- What are the differences, if any, between people who bicycle and people who do not?
- What barriers prevent people from bicycling in San Francisco?
- How satisfied are cyclists with San Francisco's bicycling infrastructure?
- How safe and comfortable do people feel when bicycling in San Francisco?
- How well do cyclists and motorists share the road?
- How well-known are the SFMTA's bicycling outreach programs?

In addition to this State of Cycling Report, the SFMTA has published two companion technical documents that provide detailed descriptions of the count and survey methodologies along with additional analysis, and include summary tables of count and survey results.

History of the State of Cycling Report

In August 2006, the SFMTA Bicycle Program conducted its first citywide bicycle count to provide a baseline for future bicycle count comparisons. Thirty-three locations were selected for bicycle counts.

In August 2007 and in August 2008, the City conducted follow-up bicycle counts, which were compared to the 2006 counts to determine changes in cycling volumes and patterns.

In spring 2008, the City conducted two survey efforts including a random phone survey of San Francisco residents and cyclist intercept surveys at 15 locations. Both surveys included a "trip diary" component. Approximately 400 usable responses were received from each survey. These 800 responses were analyzed and compared to determine characteristics of bicycling trips, characteristics of cyclists, behavior of cyclists and attitudes toward bicycling.

2 Bicycle Counts

The bicycle counts collected during 2006, 2007 and 2008 provide a valuable snapshot of the level of cycling in San Francisco. These counts serve as baseline measurements for the SFMTA Bicycle Program. An analysis of these counts identified several statistically significant trends in ridership, including a 14 percent increase in overall bicycle ridership from 2006 to 2007, a 24 percent increase in overall bicycle ridership from 2007 to 2008 and a 43 percent increase in overall bicycle ridership from 2006 to 2008. Future counts are planned so that the City can continue to track changes in bicycle ridership.

This chapter provides a brief overview of the 2006-08 bicycle count data. For a more detailed report on the latest data, please see the “2008 San Francisco Bicycle Count Report.”



Purpose of the Bicycle Counts

The SFMTA has established regular bicycle counts for several reasons. First, these counts document baseline bicycling activity at key locations and allow the City to measure changes in bicycle volumes over time. Second, correlating count data with changes in the environment such as installation of bicycle lanes, increased publicity around cycling or economic changes, such as increased gas prices, may assist the SFMTA in understanding how these changes affect travel behavior. With additional data, forecasting models can be improved to better predict changes in cycling rates.

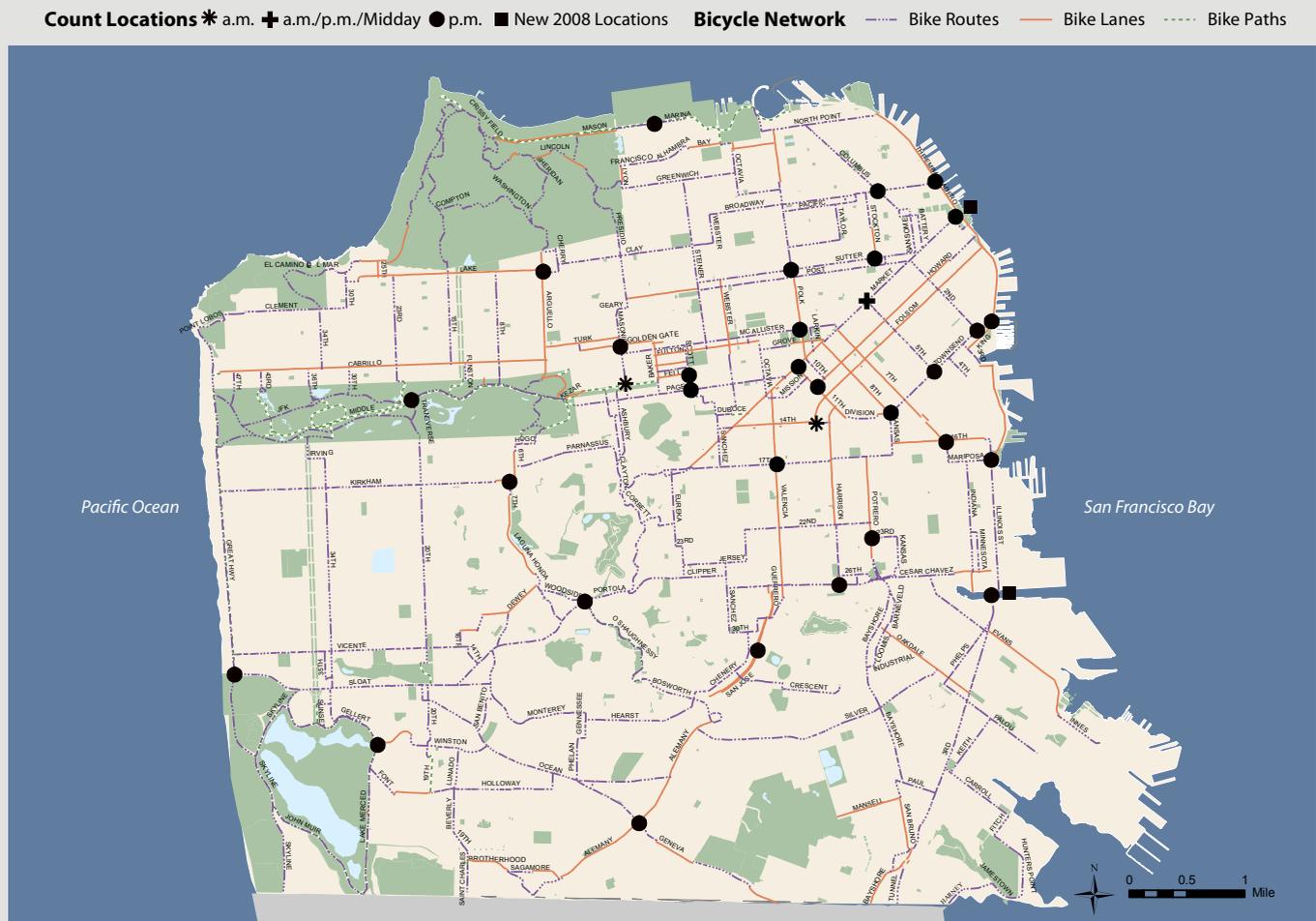
How the Counts Were Conducted

Bicycle counts were conducted at 33 intersections during August of 2006, 2007 and 2008. A total of 35 counts were conducted each year, 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. The evening peak period was chosen as the focus, as there is a greater mix of trips than in the morning when most trips are work-related.

Counts were collected at three general locations: 1) in the downtown core, 2) at a secondary cordon established midway across the City along key bicycle routes, and 3) in outlying neighborhoods. Most count locations were at the intersection of two bicycle routes. Figure 1 shows the count locations from 2006-08.

At each count location, observers recorded the number of cyclists, the direction of the cyclist and whether cyclists were riding on sidewalks or riding against the designated flow of traffic. At locations where bicycle volumes were low, observers also recorded if a cyclist was wearing a helmet and noted the perceived gender of the cyclist.

Figure 1. Bicycle Count Locations



The City will continue to conduct bicycle counts annually, with the ultimate goal of installing automated bicycle counters throughout the City.

Results

Comparing bicycle counts from 2006 to those collected in 2007 and 2008 allows the SFMTA to identify changes in bicycle volumes, safety behavior and other demographic information.

Volume Trends

A comparison of bicycling volumes between 2006, 2007 and 2008 indicates:

Bicycling is increasing in San Francisco.

Between 2006 and 2008 San Francisco experienced a statistically significant 43 percent overall increase in the number of bicyclists counted at 33 intersections.

Bicycling is on the rise during the evening commute.

Between 2006 and 2007, San Francisco experienced a statistically significant 12 percent increase in citywide cyclist volumes during the evening commute. From 2007 to 2008, there was a 39 percent increase in citywide cyclist volumes during the evening commute.

Four of 33 locations accounted for 39 percent of the total cyclist volumes counted during the evening commute in 2007.

The highest cyclist volumes were recorded at:

- 11th at Market (419 cyclists)
- 17th at Valencia (360 cyclists)
- Embarcadero at Broadway (326 cyclists)
- 5th/Cyril Magnin at Market (322 cyclists)

The same four locations accounted for 38 percent of the total cyclist volumes counted during the evening commute in 2008:

- 11th at Market (522 cyclists)
- 17th at Valencia (485 cyclists)

- Embarcadero at Broadway (458 cyclists)
- 5th/Cyril Magnin at Market (443 cyclists)

Natural Variation in the Number of Bicycles at a Location

The number of cyclists counted at a location may vary by 10 percent (+/-) from one day to the next. This means that what may seem like an important increase or decrease in bicycle volumes could be just part of the natural variation. The changes in bicycle volumes listed in Table 1 are statistically significant changes outside of this normal daily variation. As more data is collected, the City will be able to determine a more accurate daily variation at each count location and will be able to develop a better understanding of what changes in bicycle volumes are statistically significant.

Table 1: Locations with Statistically Significant Changes in Bicycle Volumes during the Evening Commute (2006 to 2008)

Location	2006	2008	% Change
	Bicycle Counts	Bicycle Counts	
11th at Market	390	522	34%
11th at Howard	156	232	49%
8th at Townsend	123	191	55%
Sutter at Stockton	32	69	116%
Polk at McAllister	169	214	27%
5th/Cyril Magnin at Market	314	443	41%
Illinois at Mariposa	26	43	65%
17th at Valencia	325	485	49%
23rd at Potrero	24	50	108%
Scott at Fell	147	222	51%
Scott at Page	292	418	43%
Marina at Cervantes	183	352	92%
Embarcadero at Townsend	131	240	83%
Embarcadero at Broadway	236	458	94%
7th at 16th	59	105	78%
Randall at San Jose	24	76	217%
Geneva at Alemany	8	22	175%

Source: Bicycle Counts 2006 and 2008.
Note: Percent change is statistically significant at a 95 percent confidence level.

Safety Trends**

From 2006 to 2007, two locations exhibited statistically significant decreases in sidewalk riding:

Masonic at Golden Gate (-86 percent) and 14th at Folsom (-88 percent). Most other locations exhibited a slight decrease in sidewalk riding that was not statistically significant.

From 2006 to 2007, downtown locations showed a statistically significant decrease in wrong-way riding (-28 percent), while non-downtown sites showed a statistically significant increase in wrong-way riding (120 percent).

These trends should be monitored closely when the installation of new bicycle lanes and shared lane markings—both of which are intended to decrease wrong-way riding—resumes after the Bike Plan injunction is lifted.

From 2007 to 2008, helmet wearing showed a five percent decrease from 72 percent to 67 percent.

These percentages are based on total reported helmet/no helmet riders, not on the total number of cyclists counted citywide. As noted below, these percent changes were not tested for statistical significance.

Gender Trends**

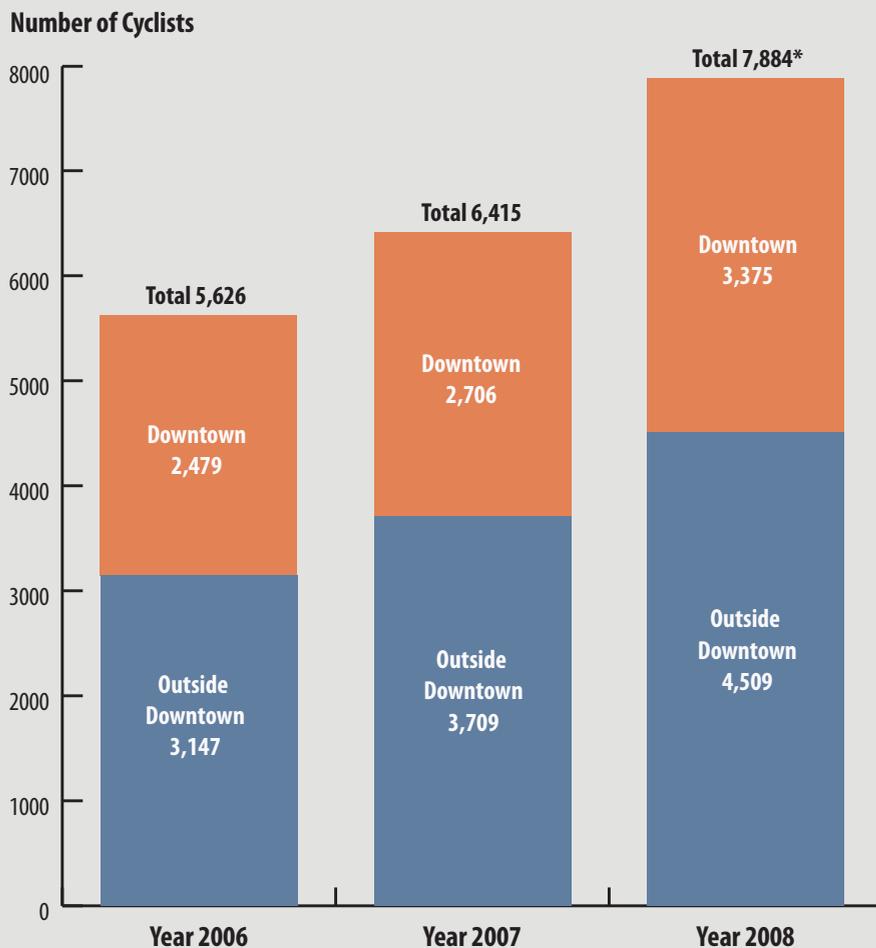
From 2006 to 2007, the percentage of female bicyclists showed a very slight decrease from 25 percent to 24 percent.

Sutter at Polk, Polk at McAllister, 5th /Cyril Magnin at Market, 7th at 16th and Arguello at Lake all saw statistically significant increases in the number of female riders counted. This analysis is based on gender counts at 18 locations, since the remaining locations only had gender counts available for one year.

From 2007 to 2008, the share of female riders increased from 24 percent to 27 percent.

These percentages are based on total reported female/male riders, not on the total number of cyclists counted citywide. As noted below, these percent changes were not tested for statistical significance.

Figure 2: San Francisco Bicycle Counts 2006-08



* For comparison purposes, totals exclude some count locations which were changed from 2007 to 2008. Please see Table 2 in the "2008 San Francisco Bicycle Count Report" for more detailed information.

Source: 2006-08 San Francisco Bicycle Counts

** A statistical analysis was not performed for the 2008 data pertaining to safety or gender trends because this data was not collected at a consistent number of locations from 2007 to 2008 (due to the high volume of bicyclists and location changes). However, general trends from 2007 to 2008 were observed.

3 Bicycle Survey

As part of the 2008 survey effort, over 800 people were asked about bicycling in San Francisco. This survey answered important questions that will direct the SFMTA's Bicycle Program in the future: What percentage of San Franciscans are cyclists? How often do people ride? What motivates someone to ride? What barriers are there to bicycling in San Francisco and how can people be encouraged to ride more? How do cyclists feel about San Francisco's bicycle facilities? What are the differences between frequent cyclists and occasional cyclists? How many cyclists obey traffic laws? What are attitudes and behaviors toward cyclists? Some of these questions have not been answered before, and the answers are surprising.



Purpose of the Bicycle Survey

The survey was developed for two reasons: first, to identify trends in bicycling habits and cyclists' perceptions of the bicycling environment; second, to estimate the number of bicycle trips taken on an average day and the purpose and duration of those trips.

How the Survey Was Conducted

Survey data was collected using two methods:

1. Phone survey

A phone survey was conducted during Spring 2007 of randomly selected San Francisco residents. The responses collected from this survey represent all San Franciscans, not just those who bicycle and include those who do not engage in any form of cycling activity. In all, 408 usable responses were collected.

2. Intercept survey

An intercept survey of "practicing cyclists" was collected during May 2008. Fifteen locations distributed throughout San Francisco were used as survey collection points. Surveys were collected during 24 collection times, with a quarter of these collection times scheduled at "Energizer Stations" during Bike to Work Day.

After agreeing to participate in the survey, a cyclist was given two ways to participate: in-person at the time of the intercept or via an online survey. A total of 416 usable responses were collected. Intercept surveys were conducted in English, Spanish and Chinese.

All survey respondents were asked to complete trip diary information for the prior day. The sampling methods and the number of responses collected were designed to provide responses that would be statistically significant with a five percent margin of error and 95 percent confidence rate.

Figure 3: Intercept Survey Locations



Table 2: Location and Day of Intercept Surveys

Location	Day of Week of Intercept			Non-native Speakers	
	Bike to Work Day	Other Weekday	Weekend	Survey conducted in Chinese	Survey conducted in Spanish
19th and Irving	X	X		X	
19th and Judah (N-Judah Station)	X	X		X	
Sunset and Judah (N-Judah Station)		X		X	
Clement Street (3rd to 5th Ave)		X		X	
Clement Street (9th to 12th Ave)			X	X	
9th and Brannan		X		X	
Harrison at Cesar Chavez		X	X		X
5th/Cyrl Magnin at Market		X	X		X
San Francisco Ferry Building	X	X	X		
Scott at Fell	X	X			
San Francisco Civic Center (Market and Polk)	X				
Marina at Cervantes		X	X		
Valencia at 17th		X			X
JFK at Transverse			X		
Fourth and King (Caltrain Station)	X	X			

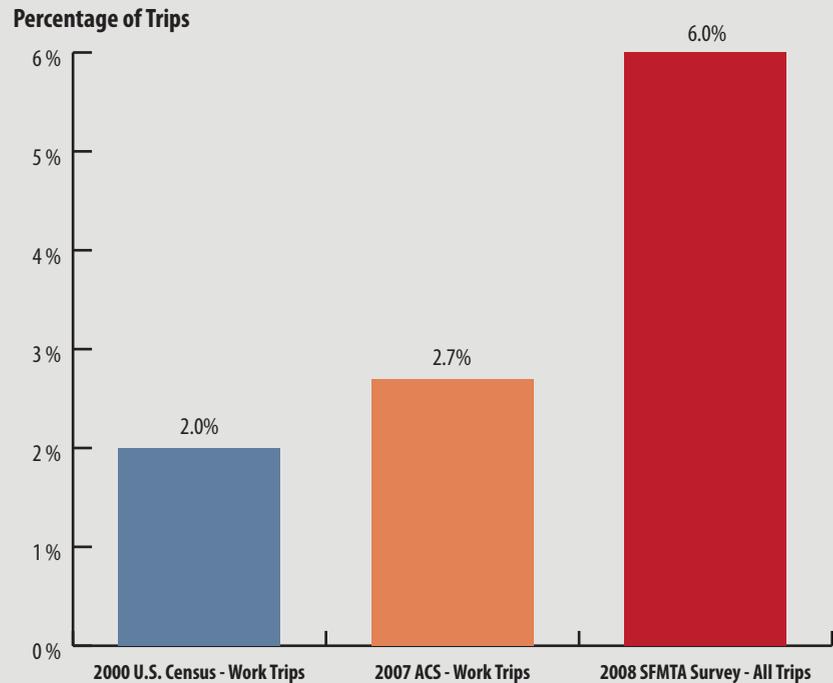
Results

How much do people bicycle in San Francisco?

San Francisco continues to have a high rate of bicycling. The City should capitalize on this high level of bicycling and continue to support it through infrastructure and programmatic improvements.

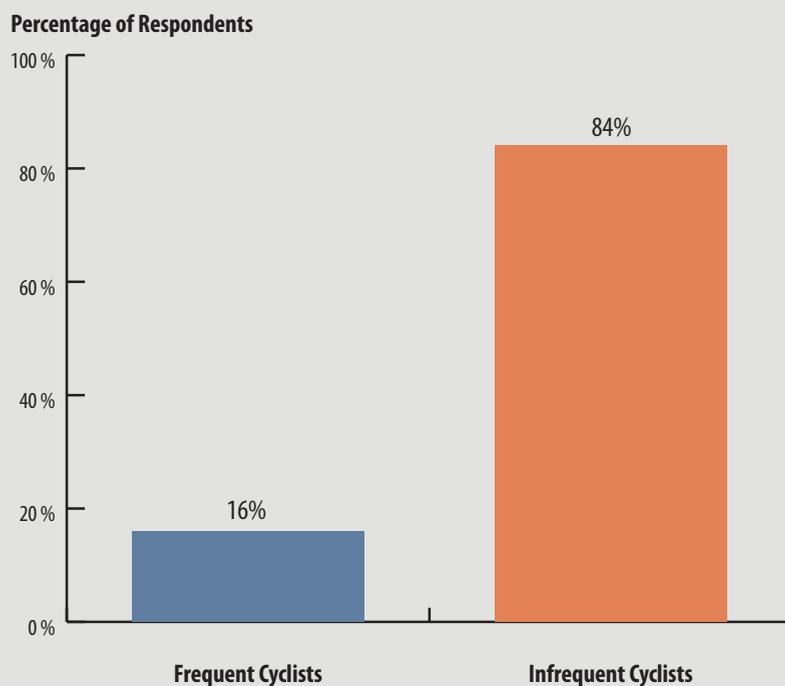
- Nearly 16 percent of phone survey respondents reported bicycling an average of two or more days per week for all trip purposes (Figure 5).
- It is estimated that there are approximately 128,000 bicycle trips made each day in San Francisco.
- Approximately six percent of all trips in San Francisco are completed via bicycle.

Figure 4: Measures of Bicycle Ridership in San Francisco



Sources: 2000 U.S. Census, 2007 U.S. Census - American Community Survey, 2008 SFMTA citywide survey
Note: The U.S. Census only measures work trips for those 16 years or older. The SFMTA survey number represents all trips in San Francisco made by bicycle.

Figure 5: Proportion of Frequent Cyclists to Infrequent Cyclists in San Francisco



Source: Phone (self-reported frequency of bicycling)

Note: Frequent cyclists are those who reported bicycling 2 or more times per week. Infrequent cyclists are those who reported bicycling less than 2 times per week, including those who didn't bicycle.

Frequent and Infrequent Cyclists

To analyze the survey results, respondents were grouped into two categories: frequent cyclists — those who self-reported that they bicycle two or more times per week, and infrequent cyclists — those who self-reported that they bicycle one or zero times per week. Infrequent cyclists include people who never bicycle.

Trips

A “trip” is defined as travel from one destination to another. Any stop along a journey is considered a destination. For example, a journey from work to the grocery store to home would count as two trips: one from work to the grocery store and one from the grocery store to home.

Trip Diary

Survey respondents were asked to complete trip diaries. Trip diaries are a list of all trips that a person makes in a set time period. Trip diaries for the San Francisco State of Cycling Report asked respondents to report the trip purpose and mode for all trips they made the day before.

Why are people bicycling in San Francisco?

Bicycling rates in San Francisco are distinct from national trends. While nearly a third of bicycle trips are for leisure or exercise, the majority of bicycle trips in the City are for utilitarian purposes, particularly commuting to work and school and shopping (Figure 6).

This is notably different from national trends, which indicate that 52 percent of bicycle trips are recreational and only five percent are school or work-commute related.¹ Bicycling in San Francisco is clearly a viable means of everyday transportation as evidenced by the number of people who

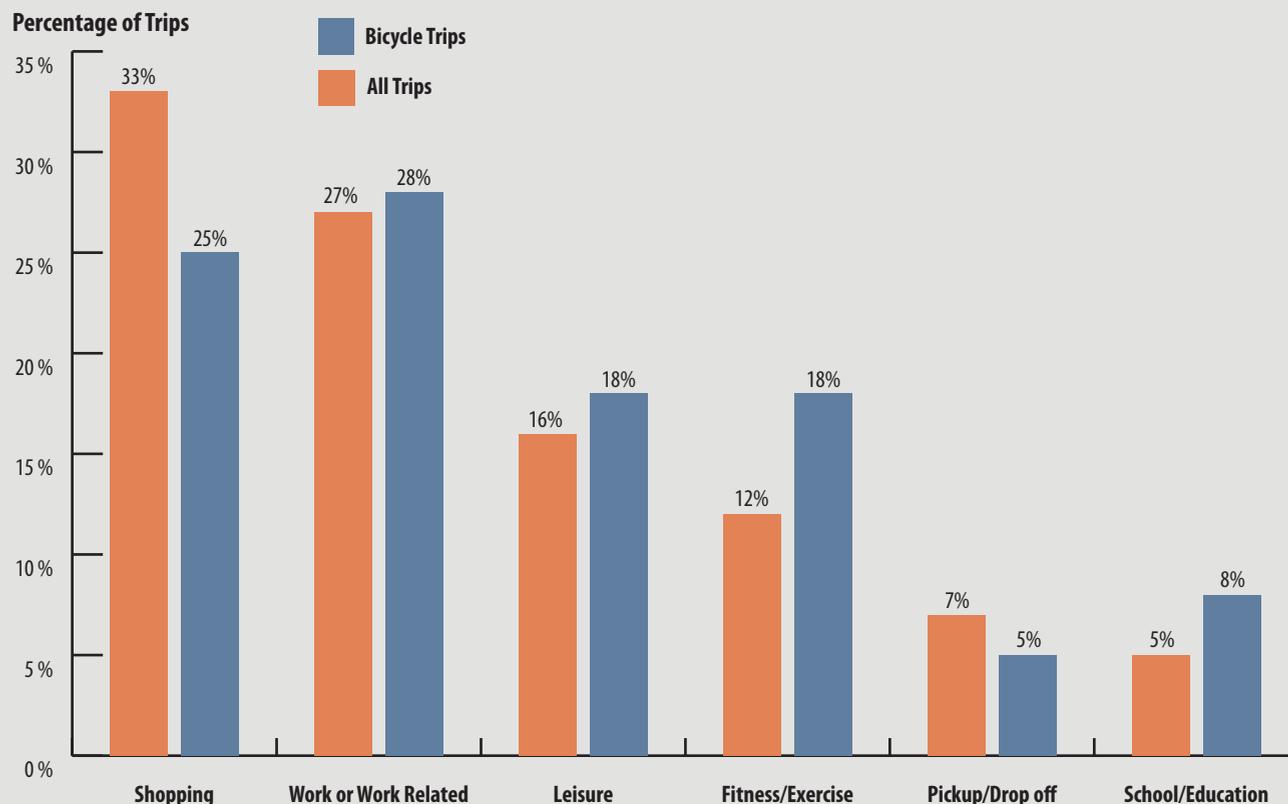
are successfully using their bicycle to get to work and school and to shop.

Specific findings from the survey include:

- 36 percent of bicycle trips are for leisure or fitness/exercise.
- 28 percent of bicycle trips are for work or are work related.
- 25 percent of bicycle trips are shopping related.
- Eight percent of bicycle trips are school or education related.

¹ The 2002 National Survey of Pedestrian and Cyclists Attitudes and Behaviors conducted by the Bureau of Transportation Statistics and the National Highway Traffic Safety Administration.

Figure 6: Trip Purpose as a Percentage of All Trips Made in a Day



Source: Phone Trip Diary. N=1,195 total trips and 80 bicycle trips.
Note: Return to home trips are included in all categories. Numbers may not add up to 100% due to rounding.

What motivates cyclists to bicycle?

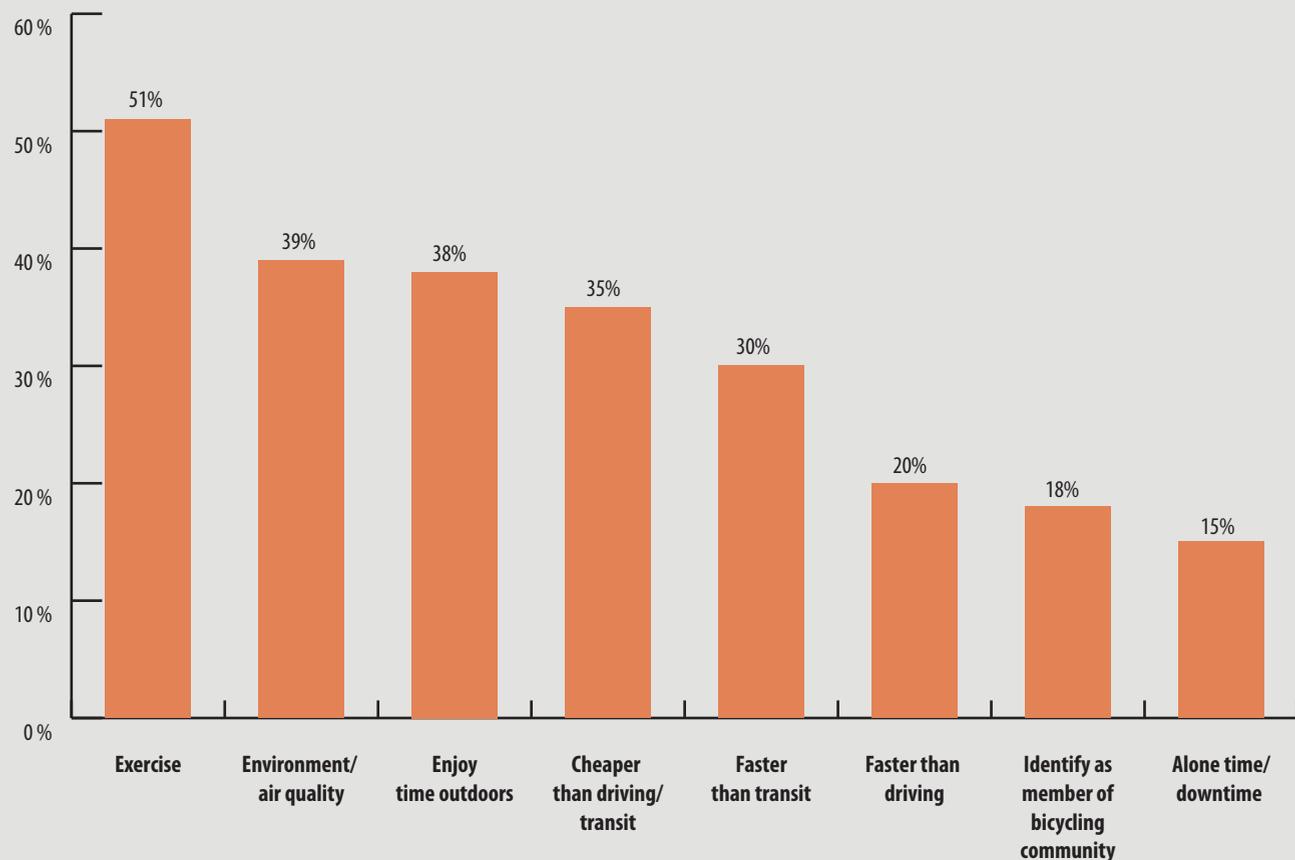
San Francisco's bicyclists are motivated to bicycle for many reasons, but the most commonly cited reason is "exercise." Approximately one-third of all respondents cited environmental reasons, enjoying time outdoors and the low cost of bicycling compared to driving or transit as motivations to bicycle (Figure 7). This suggests that programs to encourage people to bicycle should focus on health and fitness, environmental benefits and the cost benefits of bicycling.

Specific findings from the survey include:

- Regardless of the purpose of the trip, 51 percent of respondents cited "exercise" as a motivation to bicycle.
- 20 percent of respondents were motivated to bicycle because bicycling was "faster than driving."
- People who identify as a member of the bicycling community and bicycle because it is faster than transit and cheaper than driving and transit are significantly more likely to bicycle two or more times per week.

Figure 7: Cyclists' Motivation to Ride

Percentage of Respondents



Source: Phone and Intercept, all respondents who bicycled at least once in the last year.
Note: Respondents could choose more than one answer.

Who is bicycling and who is not?

While people of all ages, races and genders bicycle in San Francisco, frequent bicyclists are more likely to be male, Caucasian and between the ages of 26 and 35 (Figure 7 and Table 3). This suggests that San Francisco should customize outreach efforts to address the bicycling needs of those who are less likely to be bicyclists, i.e., women, minority groups and older people.

Specific findings from the survey include:

- Women make up 49 percent of San Franciscans, but only 23 percent of frequent cyclists.
- Asians make up 32 percent of San Franciscans, but only 12 percent of frequent cyclists.

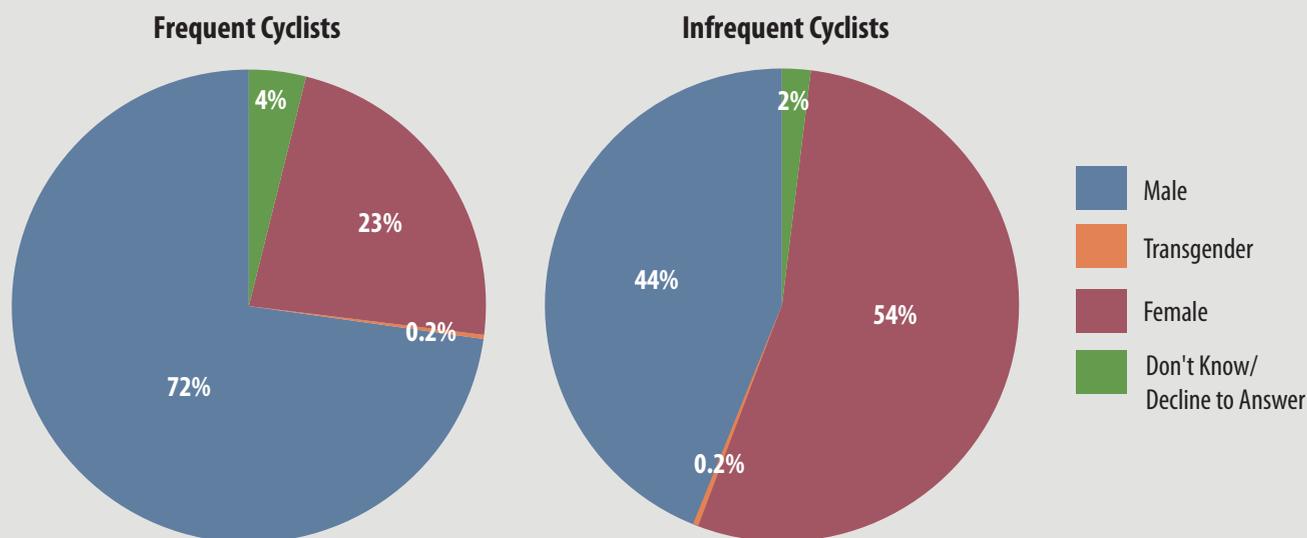
- African Americans make up seven percent of San Franciscans but only two percent of frequent cyclists.
- Hispanics make up 14 percent of San Franciscans but only 10 percent of frequent cyclists.

Table 3: Ethnic and Racial Comparison of Survey Data to San Francisco Population

	San Francisco Percentage (2006 ACS)	Margin of Error (2006 ACS)	Frequent Cyclists	Infrequent Cyclists
Race				
Caucasian	53%	+/- 8%	70%	53%
Asian	32%	+/- 4%	12%	25%
African-American	7%	+/- 3%	2%	6%
Native-American	0%	+/- 2%	1%	<1%
Other	8%	n/a	11%	15%
Ethnicity				
Hispanic	14%		10%	11%
Non-Hispanic	86%		80%	82%

Source: 2006 American Community Survey, 2008 Phone and Intercept Surveys
 Note: Percentages for the intercept and phone surveys have been recalculated to account for those who did not answer the question.

Figure 8: Reported Gender of Frequent vs. Infrequent Cyclists



Source: Phone and Intercept

Note: Frequent cyclists reported bicycling an average of two or more times per week. Infrequent bicyclists reported bicycling an average of one or zero times per week.

What are the barriers to bicycling?

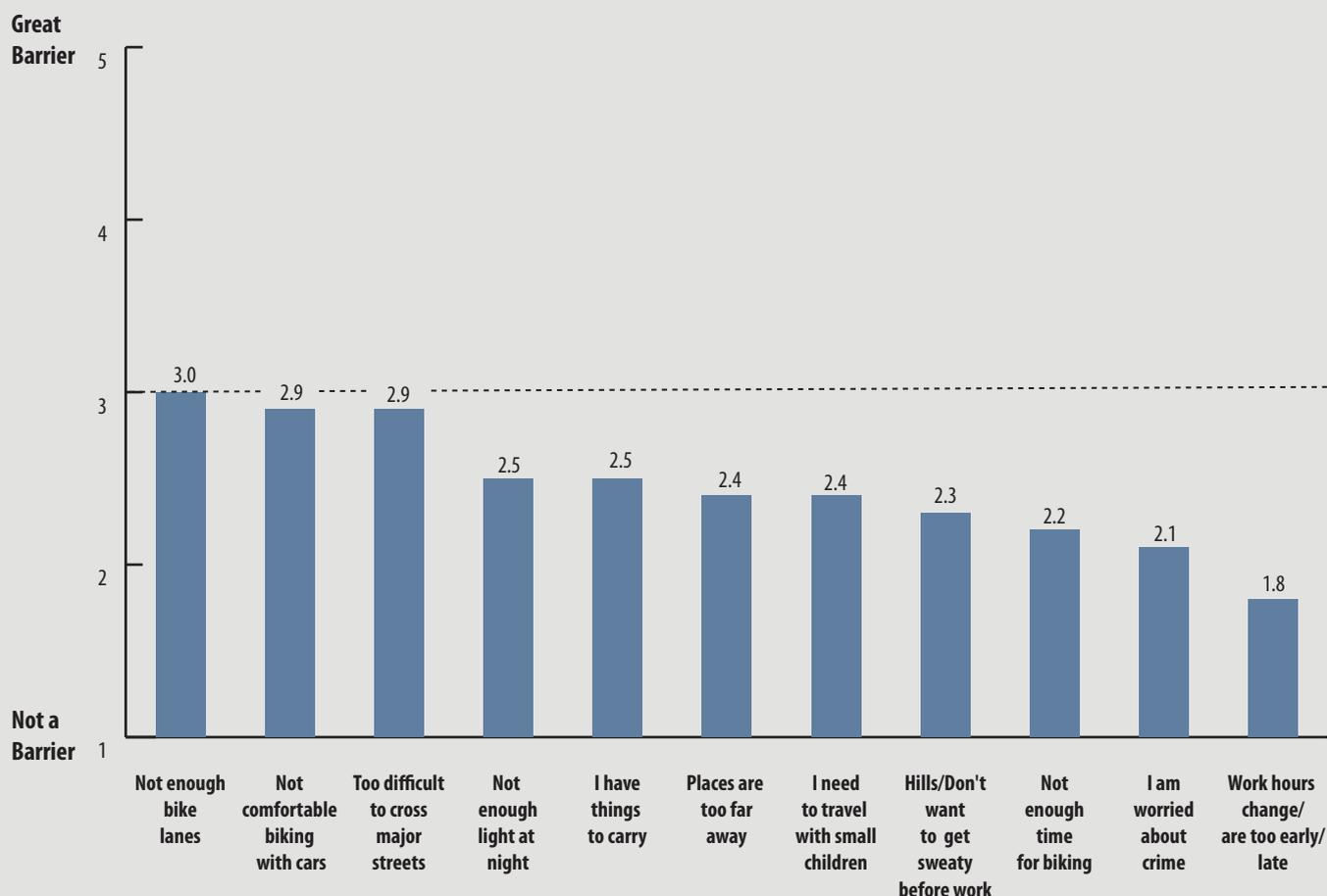
Respondents were asked to rate a list of potential barriers to bicycling on a one to five scale. Respondents rated nearly all barriers to bicycling at three or lower (Figure 9). Infrequent cyclists are slightly more likely than frequent cyclists to consider barriers a greater deterrence to bicycling (Figure 9). This is not surprising; however, it is interesting to note that both frequent cyclists and infrequent cyclists identified similar highest ranked barriers to bicycling, including: “not comfortable biking with cars,” “too difficult to cross major streets” and “not enough bike lanes.”

This suggests that while the barriers are an issue for frequent cyclists and infrequent cyclists alike, frequent cyclists have been able to overcome the barriers more easily than infrequent cyclists.

Key findings from the survey include:

- Between 71 and 79 percent of respondents were not comfortable biking with cars.
- Between 75 and 80 percent of respondents felt there are not enough bike lanes.
- Between 68 and 73 percent of respondents feel that it is too difficult to cross major streets.

Figure 9: Ratings of Barriers to Bicycling



Source: Phone and Intercept.

What predicts if one is a frequent bicyclist?

Survey responses were analyzed to determine which factors might be statistically significant predictors of whether someone is a frequent bicyclist or not. Seven factors were shown to be statistically significant predictors. These are summarized in the side bar to the right.

Factors Shown to Predict Whether One is a Frequent Cyclist or Not

You are more likely to bicycle two or more times per week if:

Your motivation for bicycling is:

- It's faster than transit
- It's cheaper than driving/transit
- You identify as a member of the bike community

You feel that:

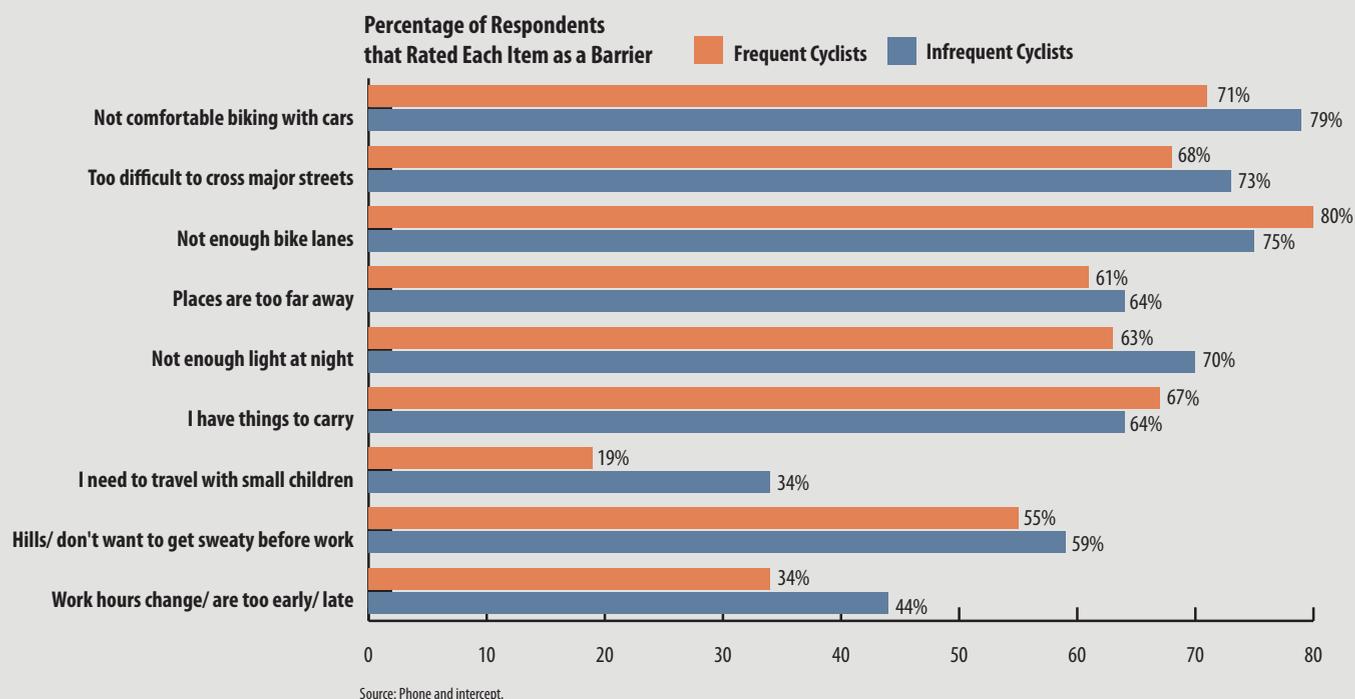
- You have enough time for bicycling
- You are comfortable biking with cars

Your demographics are:

- Male
- Under the age of 56



Figure 10: Percentage of Respondents who Identified Each Barrier as a Hindrance to Bicycling (Frequent vs. Infrequent Cyclists)



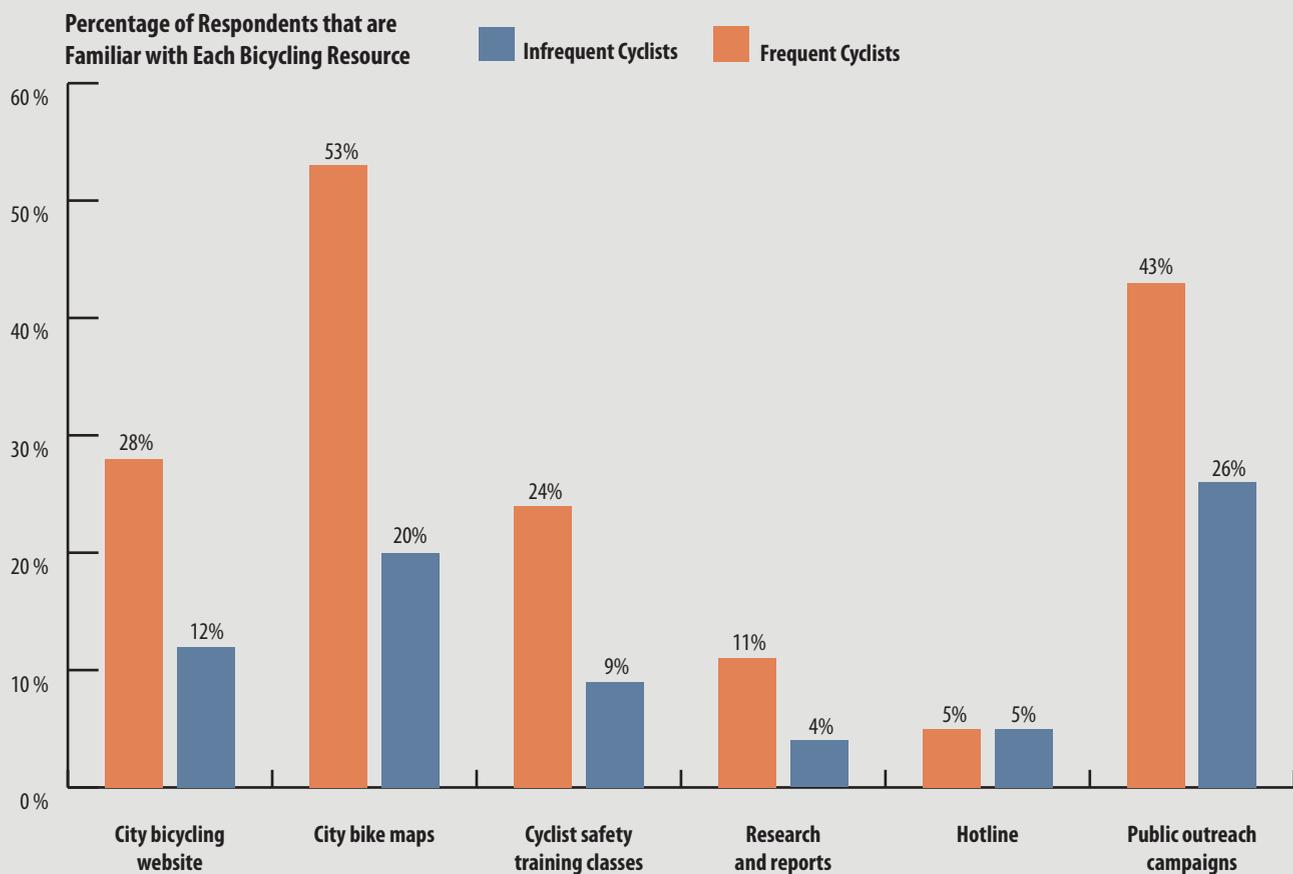
What is the overall awareness of the SFMTA's bicycling resources?

Within the general population, there is not much familiarity with the SFMTA's bicycling resources (Figure 11). The resources that the public are most familiar with are the public outreach campaigns and the bicycle maps. Frequent bicyclists are much more aware of the City's bicycling resources, and infrequent bicyclists are less aware of the City's resources. Very few people are familiar with the City's research, reports and bicycle hotline. The City may want to increase efforts to advertise these resources or re-evaluate existing outreach efforts.

Key findings from the survey include:

- Frequent cyclists are most aware of the City's bicycle maps (53 percent) and the public outreach campaign (43 percent).
- Infrequent cyclists are most aware of the public outreach campaign (26 percent) and the City's bicycle maps (20 percent).
- Respondents are least aware of the City's research and reports (11 percent of frequent cyclists and four percent of infrequent cyclists) and hotline (five percent).

Figure 11: Frequent and Infrequent Cyclists' Familiarity with San Francisco's Bicycling Resources



Source: Phone and intercept.

How satisfied are cyclists with San Francisco's bicycling infrastructure?

San Francisco's bicycling environment received mixed reviews. Survey respondents agree that San Francisco's bicycle facilities are easy to access from home and that they take cyclists where they need to go. However, cyclists do not feel that there is enough room on most streets to bicycle; they don't feel safe from traffic; and they don't think the pavement is in good condition (Figures 12, 13). Cyclists generally agree that they would bicycle more if there were more bike lanes.

Key findings from the survey include:

- Only 16 percent of frequent cyclists and 11 percent of infrequent cyclists feel safe from traffic.
- Nearly two-thirds of cyclists agree or strongly agree that more bike lanes would allow them to ride more.

Figure 12: All Cyclists' Ratings of San Francisco's Bicycling Infrastructure

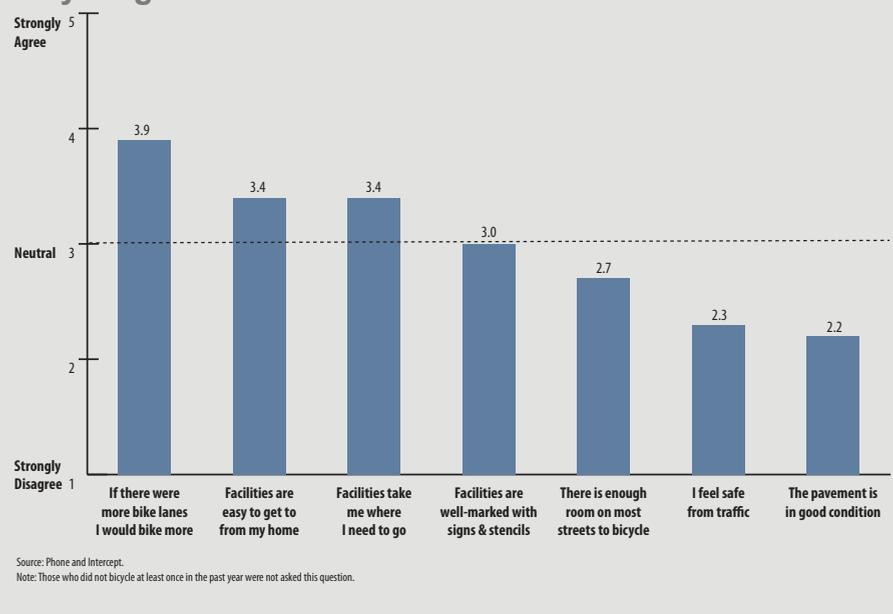
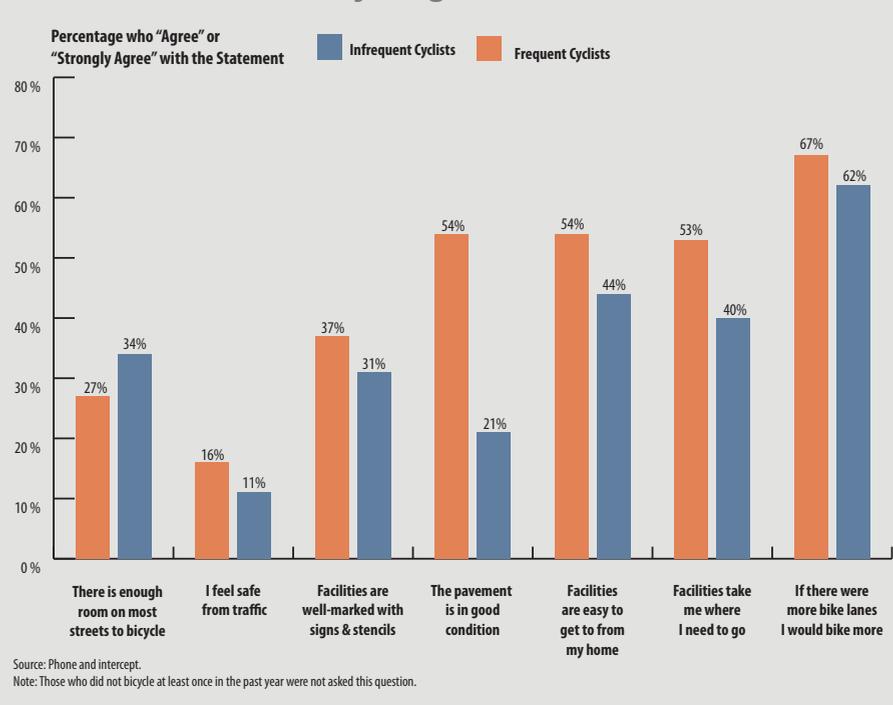


Figure 13: Frequent and Infrequent Cyclists' Perceptions of San Francisco's Bicycling Infrastructure



What are the perceptions regarding cyclist and motorist road manners? What are common unsafe behaviors?

The majority of respondents agree that cyclists have a legal right to use the road (Figure 12). However, respondents feel that cyclists and drivers do not follow the rules of the road or respect each other (Figure 15 and Figure 16).

There is a large difference in perception of behavior between those who bicycle frequently and those who do not (Figure 17). Frequent cyclists are more likely than infrequent cyclists to have seen unsafe cyclist behavior and dangerous motorist behavior toward cyclists. The majority of respondents have witnessed unsafe bicycling behavior. Self-reported behavior also shows that cyclists are not universally wearing helmets and the majority of bicyclists do not always follow traffic laws (Figure 18). Clearly, behavior on both sides can be improved and the City should continue to promote safe behavior on the streets.

Figure 14. Agreement with Statement “Cyclists have a legal right to use the road”

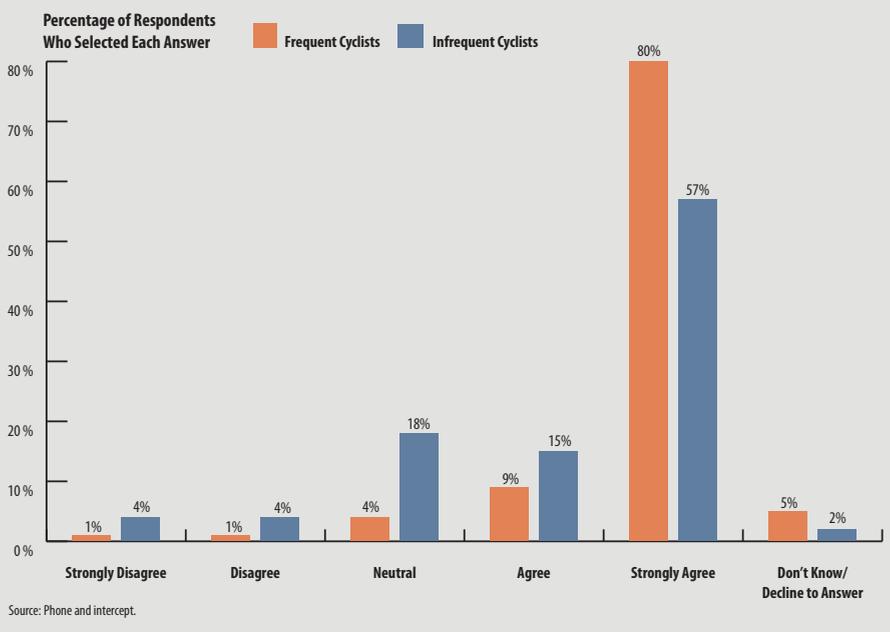
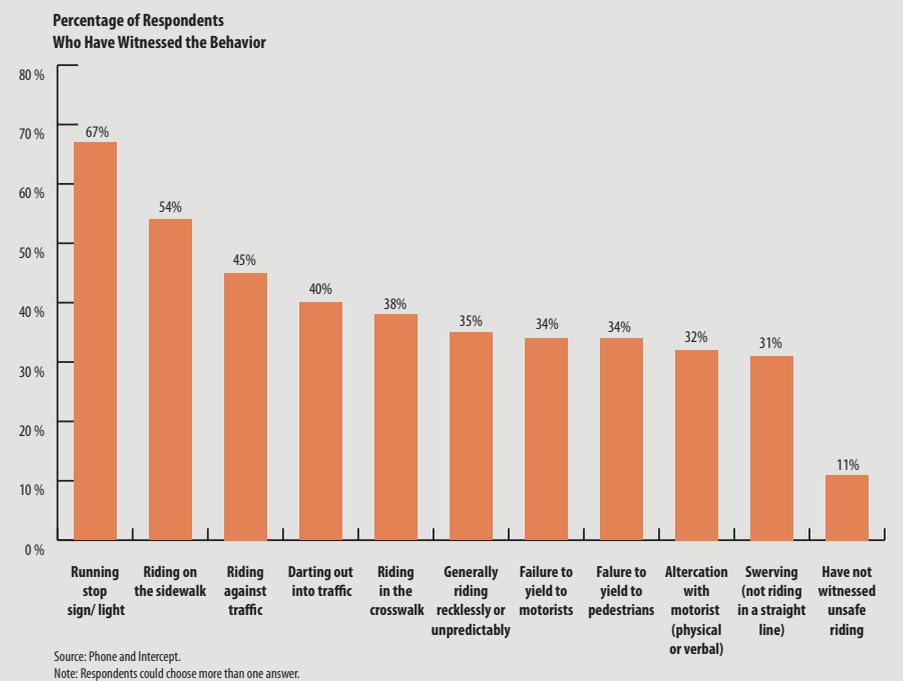


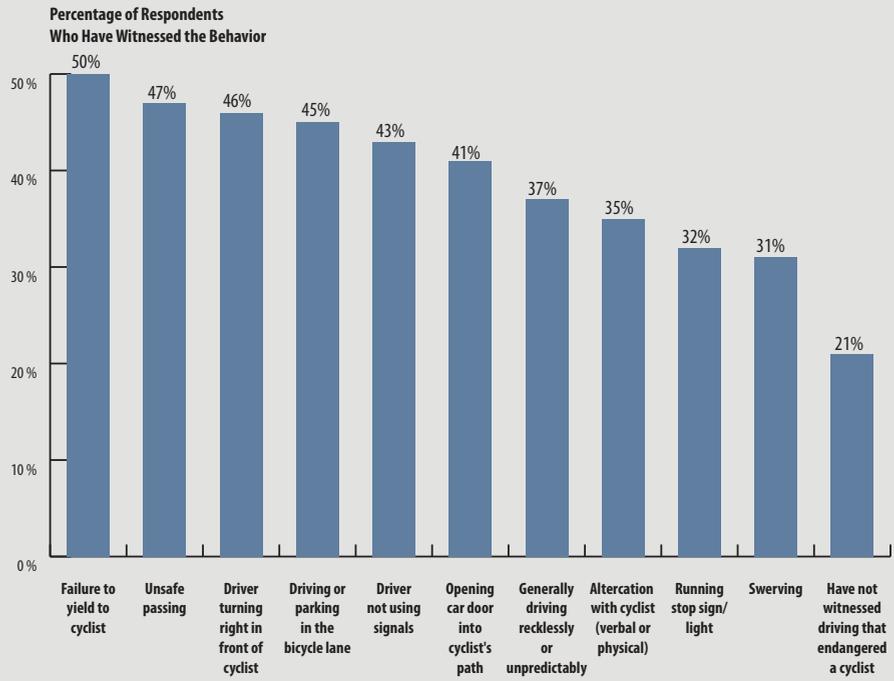
Figure 15. Commonly Witnessed Unsafe Cycling Behaviors



Key survey findings include:

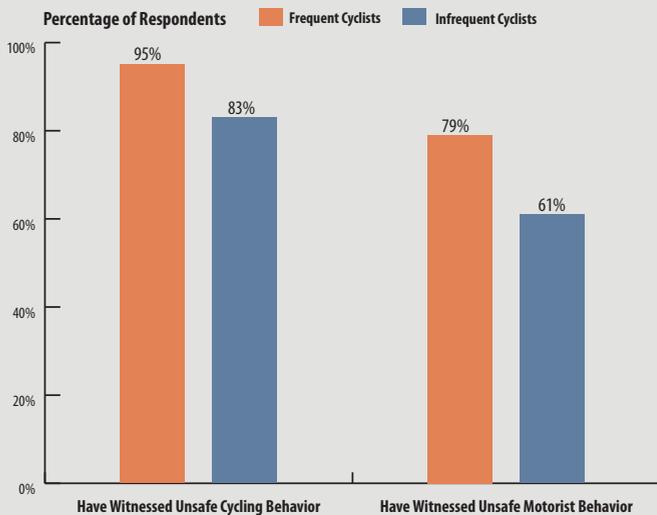
- A majority of respondents agree or strongly agree that cyclists have a legal right to use the road.
- 95 percent of frequent cyclists and 85 percent of infrequent cyclists have witnessed unsafe cycling behavior.
- 79 percent of frequent cyclists and 61 percent of infrequent cyclists have witnessed driving behavior that endangers a cyclist.
- 71 percent of frequent cyclists always wear a helmet, while only 55 percent of infrequent cyclists wear a helmet.
- Only 30 percent of frequent cyclists always obey traffic laws, while approximately 50 percent of infrequent cyclists obey traffic laws.

Figure 16: Commonly Witnessed Unsafe Motorist Behaviors Toward Cyclists



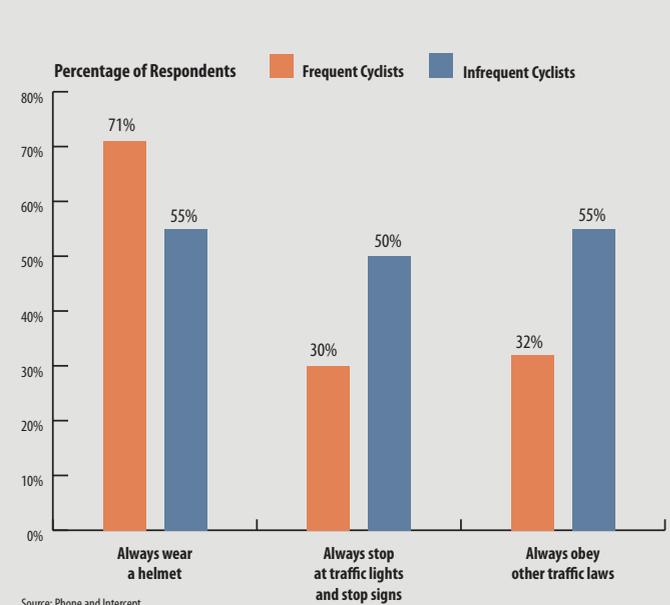
Source: Phone and Intercept.
Note: Respondents could choose more than one answer.

Figure 17: Unsafe Driving and Cycling Behavior: Differences in Perception



Source: Phone and Intercept.

Figure 18: Safety and Cyclist Behavior



Source: Phone and Intercept.

3 Improving Bicycling in San Francisco

The count and survey results from this first State of Cycling Report provide valuable guidance to the City of San Francisco on bicycling improvements. While San Francisco has a high number of people who bicycle frequently and a high proportion of trips are made by bicycling, survey results show that the City can improve on several fronts. In particular, the City should focus on constructing additional bicycle facilities, understanding and meeting the needs of people who are not yet bicycling in large numbers and continuing to improve relations between cyclists and motorists through education, outreach and enforcement.



Rating Bicycling in San Francisco

Table 4 provides a summary evaluation of how well the SFMTA is meeting the needs of San Francisco’s cyclists. This evaluation will be revised in future years as new survey and count data are acquired.



Table 4: Rating Bicycling in San Francisco

Category	Rationale	Rating (max = 5 bikes)
How much do people bicycle in San Francisco?	San Francisco has high rates of bicycling that are comparable to other bicycle-friendly cities in the United States.	🚲🚲🚲🚲🚲
Who is bicycling in San Francisco and who is not?	San Francisco cyclists do not proportionally represent San Francisco’s racial, ethnic, gender and age mix. Women, minority groups and older people are underrepresented as cyclists.	🚲🚲
What barriers prevent people from bicycling in San Francisco?	Respondents identified many barriers, but did not rate them as very severe. Out of nine possible barriers, seven of them were cited as a barrier by more than half of the respondents. However, when asked to rate the barriers, most of them were rated as “somewhat of a barrier” or less.	🚲🚲🚲
How satisfied are cyclists with San Francisco’s bicycling infrastructure?	Frequent cyclists are more satisfied with the City’s bicycling infrastructure than infrequent cyclists. Out of seven measures of satisfaction, frequent cyclists felt that the City met four and infrequent cyclists felt that the City met only one.	🚲🚲
How safe and comfortable do people feel when bicycling in San Francisco?	Only 10 percent of respondents agree or strongly agree that they “feel safe from traffic.”	🚲
How well do cyclists and motorists “share the road.”	Cyclists and motorists are not sharing the road as well as they could be. Only 24 percent of respondents agree that “most motorists respect the rights of cyclists.” Only 28 percent agree that most cyclists obey traffic laws. A majority of respondents have witnessed unsafe cycling behavior or driving behavior that endangers a cyclist. Less than half of the respondents always follow traffic rules when bicycling. However, a majority of respondents agree that bicyclists have a legal right to use the road.	🚲🚲
How well known are The SFMTA’s bicycling outreach programs?	Out of six public outreach efforts, two were identified by more than a quarter of respondents.	🚲🚲🚲

Recommendations

Based on the results of this first annual State of Cycling Report, the SFMTA recommends the following steps to improve bicycling in San Francisco:

Focus on improving cyclist and motorist behavior.

Unsafe cyclist and motorist behavior is very commonly witnessed. Only 30 percent of frequent cyclists and 50 percent of infrequent cyclists report that they always obey stop signs, traffic signals and other traffic laws, while 79 percent of frequent cyclists have witnessed drivers behaving in a way that endangers cyclists. The City should continue its marketing campaigns to improve the behavior of both groups and consider additional enforcement programs.

Stripe more bicycle lanes.

All respondents feel that lack of bicycle lanes was a strong impediment to bicycling. “Not enough bike lanes” was cited as a barrier to bicycling by 75 to 80 percent of all respondents and was rated as one of the top three barriers to bicycling. Two-thirds of cyclists agreed that they would ride more if there were more bicycle lanes.

Develop outreach programs to underrepresented groups.

Women, minority groups and older people are underrepresented as frequent cyclists. Women make up 49 percent of San Franciscans, but only 23 percent of frequent cyclists. Asians make up 32 percent of San Franciscans, but only 12 percent of frequent cyclists. African Americans make up seven percent of San Franciscans but only two percent of frequent cyclists and Hispanics make up 14 percent of San Franciscans but only 10 percent of frequent cyclists. The City should work with these groups to identify ways in which infrastructure, education, encouragement and enforcement programs can encourage members of these groups to bicycle more.

Provide safety education for all cyclists.

Seventy-six percent of all respondents cited “not comfortable biking with cars” as a barrier to bicycling and both frequent and infrequent cyclists rated this as the highest barrier to bicycling. These concerns can be alleviated to some degree through bicycle education, particularly training to teach cyclists how to “drive” their bicycles in traffic. Safety education can also help improve helmet use. Only 55 percent of infrequent cyclists and 71 percent of frequent cyclists “always” wear a helmet when bicycling. The City should continue to support bicycle training and safety education programs and promote them to all cyclists.

Provide bicycling areas that are separated from cars.

Being uncomfortable riding on roads with motor vehicles was the highest rated impediment to bicycling for both frequent and infrequent cyclists and nearly two-thirds of cyclists do not feel safe from traffic. In addition to providing education for cyclists, the City should consider providing standard bike paths as well as innovative alternatives to shared roadways, such as cycle tracks, separated bicycle lanes and car-free streets.

Improve bicycle crossings of major roadways.

Over 70 percent of all respondents feel that it is “too difficult to cross major streets.” The City should consider a program to identify and improve problematic roadway crossings, particularly those on bicycle routes.

Continue administering and refining counts and surveys.

These counts and surveys represent a first step in an ongoing process of evaluation for the City. The team has identified ways to improve future counts and surveys. Specific improvements should focus on year to year count and survey comparisons. The SFMTA should continue to evaluate, refine and administer these counts and surveys—ideally on an annual basis.

Plans for Future Reports

The SFMTA will continue to conduct bicycle counts and surveys on a regular basis and will publish the results of these efforts in future State of Cycling Reports. Specific recommendations for improving these surveys are listed in the sidebar on this page. Future counts and surveys will incorporate these recommendations.



Ways to Improve Future Survey Efforts

- Reduce the number of questions and length of the survey form
- Re-evaluate the decision to conduct intercept surveys on Bike to Work Day
- Reformat answers so that respondents are required to choose from a series of options for trip length and duration
- Ask about what makes an individual stop riding a bicycle
- Ask about barriers to utilitarian bicycling and barriers to recreational bicycling separately
- Require an answer for all on-line survey questions
- Rephrase questions to include information that is useful for decision-makers
- Re-evaluate intercept locations to include underrepresented populations

Ways to Improve Future Count Efforts

- To improve the accuracy of counts, to ensure that the counts provide a representative sample and to allow for comparison from year to year, it is recommended that the City:
- Improve counter training and quality control efforts
- Calculate the average daily variation for each count location as more count data becomes available
- Change the count date to September to take advantage of better weather, the increase in the number of students and national count efforts
- Collect traffic count data at all bicycle count locations
- Collect bicycle count data at Golden Gate Transit Ferry terminals and adjacent BART stations
- Work with bicycle messenger companies to maintain data about number of active messengers and operating routes
- Work with bicycle rental companies to maintain data about the number of rentals and typical routes



SFMTA

San Francisco Municipal Transportation
Agency
1 South Van Ness
San Francisco, CA 94103
www.sfmta.com



Alta Planning + Design
2560 9th Street
Berkeley, CA 94618
www.altaplanning.com



Henne Group
116 New Montgomery Street
Suite 640
San Francisco, CA 94105