

STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION
TECHNICAL REPORT DOCUMENTATION PAGE
 TR0003 (REV. 10/98)

1. REPORT NUMBER CA 09-1869	2. GOVERNMENT ASSOCIATION NUMBER	3. RECIPIENT'S CATALOG NUMBER
4. TITLE AND SUBTITLE Caltrans District 4 Employee Bikesharing Pilot Program	5. REPORT DATE February 2011	6. PERFORMING ORGANIZATION CODE
	8. PERFORMING ORGANIZATION REPORT NO.	
7. AUTHOR(S) Susan A. Shaheen, Ph.D., Co-Director Madonna Camel, Project Manager Meera Velu, Staff Research Associate	10. WORK UNIT NUMBER 191	
9. PERFORMING ORGANIZATION NAME AND ADDRESS Transportation Sustainability Research Center Institute of Transportation Studies University of California, Berkeley 1301 S. 46 th Street, Building 190, Richmond, CA 94804-4603	11. CONTRACT OR GRANT NUMBER 65A0327	
	13. TYPE OF REPORT AND PERIOD COVERED Final: May 1, 2009 thru December 31, 2010	14. SPONSORING AGENCY CODE
12. SPONSORING AGENCY AND ADDRESS California Department of Transportation Division of Research and Innovation, MS-83 1227 O Street (P.O. Box 942874) Sacramento CA 95814	15. SUPPLEMENTAL NOTES	
16. ABSTRACT Bikesharing, the short-term rental of a shared fleet of bicycles, is one strategy to improve the environment, air quality, and community health. This study, sponsored by the California Department of Transportation, explores the feasibility of an employee bikesharing program and includes a literature review on bikesharing projects, a description of the Caltrans District 4 employee bikesharing pilot, and user analyses (surveys and usage). Bikesharing consists of the short-term rental of shared bicycles located in a common site. The Caltrans District 4 bikesharing pilot included eight bicycles placed in lockers in the office garage. Caltrans District 4 employees interested in participating in the program completed a pre-program questionnaire and attended a training session. A total of sixty-two employees joined the bikesharing program between the start of the pilot in March 2010 and its end in November 2010. Bicycle usage was tracked through cards monitoring the number of bicycles and rental period of bicycles borrowed within a day. In November 2010, participants responded to a post-program questionnaire that explored participants' changes in travel behavior and provided a forum for commentary about the program. The program aimed at providing employees with alternate transportation to increase the number of healthy, sustainable travel options.		
17. KEY WORDS Bikesharing, Caltrans District 4, Employees	18. DISTRIBUTION STATEMENT No restrictions.	
19. SECURITY CLASSIFICATION (of this report) Unclassified	20. NUMBER OF PAGES 46	21. PRICE



UNIVERSITY OF CALIFORNIA *Berkeley*

Transportation Sustainability
RESEARCH CENTER

California Department of Transportation, District 4 Employee Bikesharing Pilot Program Evaluation

Final Report

February 2011

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Acknowledgements

The authors would like to thank the California Department of Transportation (Caltrans) for funding this research. In particular, we would like to thank Caltrans staff Ina Gerhard and Bob Justice. Without their assistance and contributions this research would not have been possible. We would also like to thank Steven Grover at eLock Technologies for providing bike usage data and Alameda Bicycles for providing the program's bicycles. The content of this report reflects the views of the authors who are responsible for the facts and the accuracy of the data presented herein.

Abstract

Bikesharing, the short-term rental of a shared fleet of bicycles, is one strategy to improve the environment, air quality, and community health. This study, sponsored by the California Department of Transportation, explores the feasibility of an employee bikesharing program and includes a literature review on bikesharing projects, a description of the Caltrans District 4 employee bikesharing pilot, and user analyses (surveys and usage).

Executive Summary

This report examines a pilot employee bikesharing program at the California Department of Transportation District 4 office in Oakland, California. Bikesharing consists of the short-term rental of shared bicycles located in a common site. The Caltrans District 4 bikesharing pilot included eight bicycles placed in lockers in the office garage. Caltrans District 4 employees interested in participating in the program completed a pre-program questionnaire and attended a training session. A total of sixty-two employees joined the bikesharing program between the start of the pilot in March 2010 and its end in November 2010. Bicycle usage was tracked through cards monitoring the number of bicycles and rental period of bicycles borrowed within a day. In November 2010, participants responded to a post-program questionnaire that explored participants' changes in travel behavior and provided a forum for commentary about the program. The program aimed at providing employees with alternate transportation to increase the number of healthy, sustainable travel options. This study analyzes the program's usage and its feasibility as a long-term option for alternate travel.

Initial interest in the bikesharing program was high, with potential participants indicating that they would use bikes to go to lunch, run errands, and exercise. The initial questionnaire discovered that most participants, the majority already using public transit or walking for their commute, would use the bikes for short trips, as bikes could provide a convenient, faster option than walking or using public transit. However, use of the program throughout its nine month duration remained low. Bike rental averages peaked in March with 2.6 rentals a day. Averages after March remained at about one bike rental a day. Bike usage data did reveal that bikesharing participants, as they had indicated in the pre-program questionnaire, used the bicycles for short trips, with the duration of most rentals at one hour or less. The post-program questionnaire showed that twenty percent of participants never used the bicycles after signing up for the program. These participants cited inadequate opportunities or discomfort with the bikes as reasons for not using the program. Some participants also already had personal bikes and preferred to use them. Those who did use the program indicated that they used the bikes most for exercise purposes. There were also several participants who noted a change in their travel patterns during the work day; instead of walking or taking public transit, participants would bike to lunch or to run errands.

Despite employees' low use of the bikesharing program, those who responded to the post-program questionnaire maintained a high interest in the program and provided suggestions for changes. The main suggestions included providing different bicycle models and allowing for overnight bike rental. In the end, the results of the bikesharing program in District 4 provide important information for the continuation of the program and the wider implementation of an employee bikesharing program.

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Introduction

There is an increasing need to address global warming, environmental sustainability, and energy security. Within California, increasing traffic congestion and air pollution from automobiles has created a need for transportation alternatives, such as bikesharing. Bikesharing, or the shared use of a fleet of bicycles located in a commonly accessible site through short-term rentals, offers benefits to the environment and individual health, improves air quality, and reduces congestion by limiting automobile travel. Public interest in bikesharing is growing across the globe. However, while bikesharing programs have proven successful, hurdles such as limited capital and bike infrastructure and maintenance issues limit program use and challenge program viability.

This study was sponsored by the California Department of Transportation (Caltrans) to examine the viability of an employee bikesharing program. It builds upon previous work regarding connectivity between public transit and travel destinations and targets employee transportation needs during the work day. The program was initiated in July 2009 and began with a feasibility study to determine where and how bicycles would be best stored, distributed, and accessed. At the end of the feasibility study, Caltrans District 4 in Oakland became the designated location for the pilot program. In Spring 2010, a pre-program questionnaire was administered to District 4 employees, and in March 2010, the bikesharing pilot launched. The pilot ended with a post-program questionnaire administered at the end of November 2010.

This report examines the employee bikesharing field test in Caltrans District 4. It begins with a literature review and synopsis of worldwide bikesharing programs. Following the literature review is an overview and methodology of the field test implemented in District 4. Next, results from the pre-program and post-program questionnaires and bicycle usage data are presented and evaluated. The study concludes with suggestions to improve the program.

Literature Review

Globally, bikesharing is represented in almost every continent, although the oldest and most extensive programs are found in Europe. Bikesharing programs have a variety of different business models and have been funded through advertising, self-funding, user fees, municipalities, and public-private partnerships. Most programs require annual membership fees, and some include additional hourly rental fees. Membership fees include maintenance and secure parking and storage of bicycles. Often situated in urban settings, bikesharing programs typically have multiple bicycle stations, allowing users to rent bicycles from one location and return them to another. The benefits of bikesharing include increased mobility, cost savings from a shift in transportation modes, reduced traffic congestion, reduced fuel use, increased public transit usage, increased health benefits, and increased environmental benefits. Bikesharing also integrates bicycle usage into transportation systems and serves as a solution to the “last mile” problem, or the short distance between transit stations and destinations (Shaheen et al. 2010).

The history of bikesharing has been described in three generations: 1) the “White Bikes” generation, 2) the “Coin-Deposit Systems” generation, and 3) the “Information Technology-Based Systems” generation. The earliest bikesharing program started in 1965 with Amsterdam’s “White Bike Plan.” This program provided unlocked bicycles in various locations in the city for public usage. Other bikesharing programs within the “White Bikes” generation operated on a similar basis; bike provision was small-scale, free, and served to increase environmental awareness. Programs that functioned within this framework, however, suffered from heavy bicycle theft. Thus program operators began implementing bikesharing with a coin-deposit system. An example of the second-generation, coin-deposit system is Copenhagen’s Bycyken (City Bike), launched in 1995 and the first large-scale bikesharing program in Europe. Users unlocked bikes from designated bike racks with a coin deposit that was refunded upon return (Shaheen et al. 2010).

In recent years interest in the environment and alternative transportation has propelled bikesharing in major global cities. Vélib, one of the largest bikesharing programs in the world, has over 20,600 bicycles in Paris, France and provides bicycle access 24 hours a day. Vélib users ride free the first half hour, after which they are charged for each additional half hour. The success of Vélib is made apparent by the further development of bikesharing programs including Bicincittà in Barcelona, Spain and BIXI in Montreal, Canada. These programs constitute the third generation of bikesharing with a network of web-enabled stations and technologies to unlock bicycles electronically.

In the U.S., the largest bikesharing program is Washington D.C.’s “SmartBike” program that launched in 2008. SmartBike manages 120 bicycles and 10 stations, serving a reported 1,050 subscribers for a \$40 annual fee (Shaheen et al. 2010). Currently there are no commercial bikesharing programs in the San Francisco Bay Area, though there has been a recent launch of a pilot program and a proposal for another. The Santa Clara Valley Transportation Authority received \$500,000 to start a bikesharing pilot project for Santa Clara County in the spring of 2010 (VTA.org 2009). In October of 2010, the San Francisco Municipal Transportation Agency announced a 4.9 million dollar grant to fund a regional bikesharing program composed of 1,000

bicycles and 100 kiosk stations in the Bay Area (MTC.ca.gov 2010). The purpose of both programs is to reduce greenhouse gas emissions and traffic congestion in the region.

In addition to commercial bikesharing, several employers and municipalities in the U.S. have developed bikesharing programs to increase the physical health of their employees and the environmental health of their cities. Humana, a healthcare company in Louisville, Kentucky, created Freewheelin' in 2007 as an innovative employee wellness program. Humana later expanded Freewheelin' to other offices in the U.S. and provided bicycles for Democratic and Republican National Conventions. Other employee bikesharing programs have been implemented by U.S. cities. These include Denver's B-Cycle, influenced by Freewheelin's model; East Lansing, Michigan's Share-A-Bike; Austin, Texas's pilot Employee Bike Share, and Denton, Texas's City Employee Bike to Work program (DeMaio and Meddin 2009; City of Easy Lansing 2010; American City & County 2009; Bike Denton 2009). All of these programs are free of cost, available as a benefit to employees and a means of providing alternative transportation to reduce air pollution.

References:

“City of Easy Lansing Launches Employee Bike Sharing Program.” *City of East Lansing Media Room: News Release*,

August 7, 2010.

<http://www.cityofeastlansing.com/NewsReleases/articleType/ArticleView/articleId/614/City-of-East-Lansing-Launches-Employee-Bike-Sharing-Program/>

“City to Revive Employee Bike Program.” *Bike Denton*, August 5, 2009.

<http://bikedenton.wordpress.com/tag/bike-sharing/>

DeMaio, Paul and Russell Meddin. “Denver is (Mile-)High on Bike-sharing.” *The Bike-sharing Blog*, January 14, 2009.

<http://bike-sharing.blogspot.com/2009/01/denver-is-mile-high-on-bike-sharing.html>

“Keeping Austin Wheeled.” *American City & County*, May 1, 2009.

<http://americancityandcounty.com/admin/austin-starts-employee-bike-share-200905/>

Rose, Paul. “San Francisco Bike Sharing Moves Ahead with Regional Plan and Funding.” *SFMTA Press Release*, October 27, 2010.

http://www.mtc.ca.gov/news/press_releases/SFMTA_rel_10-27-10.pdf

Shaheen, S., S. Guzman, and H. Zhang. “Bikesharing in Europe, the Americas, and Asia: Past, Present, and Future.” *Transportation Research Board* (2010): 159-167.

“VTA Awarded \$500,000 for Valley Bike Share Pilot Project.” *VTA: News Releases*, December 21, 2009.

<http://www.vta.org/news/show/nr+09+12+14>

Program Overview

The Caltrans District 4 employee bikesharing program provided an opportunity for Caltrans employees to use an alternative form of transportation during the workday to run errands or attend off-site work meetings. Bikesharing also offered connectivity to employees and reduced usage of automobiles, thus decreasing traffic congestion and air pollution in the District’s office location of downtown Oakland.

The program commenced in October 2009, with a feasibility survey administered to assess interest in a shared-bike program. To advertise the program, Caltrans placed posters at the entrance of the District 4 office and sent an email to all employees. Alameda Bicycles provided the hybrid bicycles that were used throughout the study. The initial program design included electric bicycles, but Caltrans regulations prohibited their use.

The bicycles were stored on the second floor garage of the Caltrans District 4 office in lockers on loan from E-Lock Technologies. Access to bicycles was granted through the use of an electronic “BikeLink” card. The lockers and cards monitored and tracked bicycle use. The field test launched in March 2010, and interested Caltrans employees completed an initial questionnaire to assess travel behaviors and environmental attitudes. Participants were then required to attend one of two informational training sessions during lunch breaks to gain familiarity with safety guidelines, operation of the bike lockers and bicycles, and to receive individual BikeLink access cards. Throughout all stages of the program, participants were able to provide comments, complaints, and other feedback. At the end of November 2010, bikesharing program participants were given a post-program survey to aggregate their experiences and opinions of the program. The study concluded December 31, 2010.



Image 1: Bike Training Session

Methodology

To evaluate the benefits received and cost incurred from a shared bicycle program, researchers at the Transportation Sustainability Research Center (TSRC) at UC Berkeley used a variety of tools to extract both quantitative and qualitative data. Collaboration between researchers at UC Berkeley, Caltrans, and bicycle manufacturers resulted in the use of electronic bicycle lockers as a data collection mechanism and the development of two questionnaires that were distributed to program participants at different points in the study.

The participants in the study completed two online questionnaires: one before and one after their participation in the program. The longitudinal questionnaire asked for participants' basic demographic information, travel destinations and modes, and interest in bikesharing. The purpose of the questionnaire was to understand travel choices throughout the workday to observe behavior before and after the bicycle field test's inception.

Completion of the initial questionnaire was a requirement to participate in the Caltrans bikesharing program. A Caltrans representative sent an email advertising the shared bike pilot program to all employees in the District 4 office. The email contained a link to an online survey that interested employees completed. Participant identity and responses were not linked; instead participants maintained anonymity using a survey ID number to enable correlation between the before and after questionnaire. A total of 82 employees completed the pre-program questionnaire, of which 46 attended the training session and joined the shared bike program in March. By May, a total of 62 employees joined the program.



Image 2: BikeLink Access Card

Forty-six participants attended the informational training sessions held during the lunch break hour on March 4 and 5, 2010. Each session began with a video introduction of the program, program goals, next steps, and an opportunity to ask any administrative questions. During the presentation, program administrators distributed bikesharing packets containing a description of the program and consent forms. Next, the participants were escorted to the bike lockers in the parking garage to demo the bicycles and lockers and review safety guidelines. At the end of the training session, participants returned signed consent forms and received their personal BikeLink access cards.

The study concluded on December 31, 2010, after which Caltrans bikesharing program participants received a request to complete a post-program questionnaire to aggregate their experiences and opinions of the program. A total of 40 participants completed the “after” questionnaire. The post-program questionnaire was structured similar to the pre-program questionnaire to

assess differences in travel behavior based on the existence of a shared bike program. In addition, the post-program questionnaire asked explicitly if participants changed their travel modes and destinations because of the program.

In addition to the two questionnaires, BikeLink e-locker technology tracked bicycle use electronically. The system provided easy-access usage data including: daily and monthly bike rental information and rental duration. Quantitative usage data from e-lockers were compiled and analyzed as one component of the evaluation for this project.

Both e-locker and questionnaire methods of data collection and analysis aided researchers in drawing conclusions about the bikesharing field test a Caltrans District 4.

While the questionnaires and usage data aided in observing how a bikesharing program could operate within the Caltrans District 4 office, the pilot program itself is limited in scope. The District 4 office is set in an urban location where most employees already use alternative transportation. Thus those who participated in the program are a self-selected group of individuals who have made conscious efforts to use different methods of commuting and travelling. As such, the study's results and conclusions do not succeed as a general study on employee bikesharing programs.

Results

Bikesharing Pre-Program Questionnaire

To explore interest in bikesharing and potential application and system use, a pre-program questionnaire was distributed to Caltrans District 4 employees. A total of 82 completed this questionnaire. The Caltrans employees who responded to the survey were almost all full-time staff (84%) who worked five days a week and commuted to the Oakland office. The majority of respondents were also educated (93% had a bachelor’s degree or higher), male (58%), self-identified as professional/technical workers (76%), lived in households with at least three others (58%), had a median income of \$80,000-\$109,999, and had one to two commuters and drivers in the household (51%).

The survey first explored travel trends of respondents to gauge typical modes of travel, travel destinations, and travel distances. To get to work, half the respondents drive alone at least 20 days of the month, and one fourth of respondents use public transit to commute to work for the majority of the month.

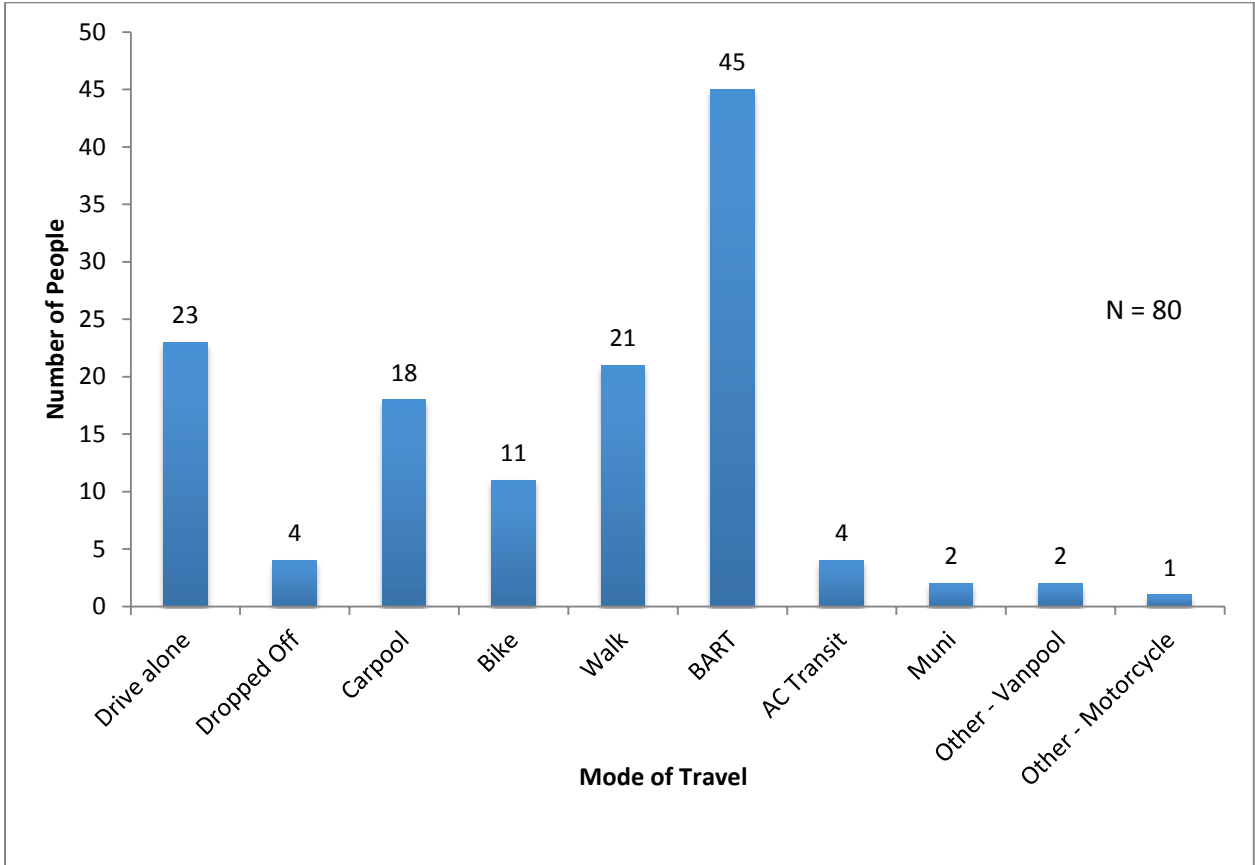


Figure 1: Modes of Travel Most Commonly Used to Commute

During work, most answered that they leave one to two times a week for lunch. Additionally, the most prevalent mode of transportation for lunch trips is by foot, with 90% of respondents walking to lunch destinations. For work-related meetings off-site, the majority of respondents

travel one to two times a week and either drive themselves or carpool. A third of participants answered to leaving work one to two times a week for errands, while another third leave only one to three times a month for such trips. Eighty percent of respondents walk for errands. The vast majority of participants noted that they leave work at least once a week to exercise and most either walk or bike for exercise. Finally, half of all respondents indicated that there were trips that they could not make due to a lack of transportation; most of these trips were for lunch or errands.

Modes of travel reflect the typical one-way distance for activities. For lunch and errands, the typical distance is three to five blocks, while off-site meetings are as far as 21 blocks. Thus, the short distance for lunch and errands make walking the most viable mode of transportation, while off-site meetings are more conducive to driving.

The before questionnaire revealed that participants shared a great interest in bikesharing, although only half of the respondents had heard of the term bikesharing. Interest in the program centered on bike use for lunch, to run errands, and to exercise. Once again, trip distance factored into bicycle usage for these activities since distance for lunch and errand trips was typically short. Forty-two percent of respondents said they would use a bike at least one to two times a week for these activities.

Respondents of the survey were by and largely concerned about the environment. The respondents were generally comprised of people who already use alternative modes of transportation, carpooled, or had other environmentally friendly means of commuting. Moreover, those who answered the survey were a group of physically active individuals who exercise at least twice a week, feel comfortable on a bike, and use them at least once a month.

Bikesharing Program Usage

E-Lock Technologies monitored bike use. E-Lock Technologies provided the cards for bike access and usage data consists of daily rentals of bikes, monthly rentals of bikes, daily parked bikes, and rental duration of bikes.

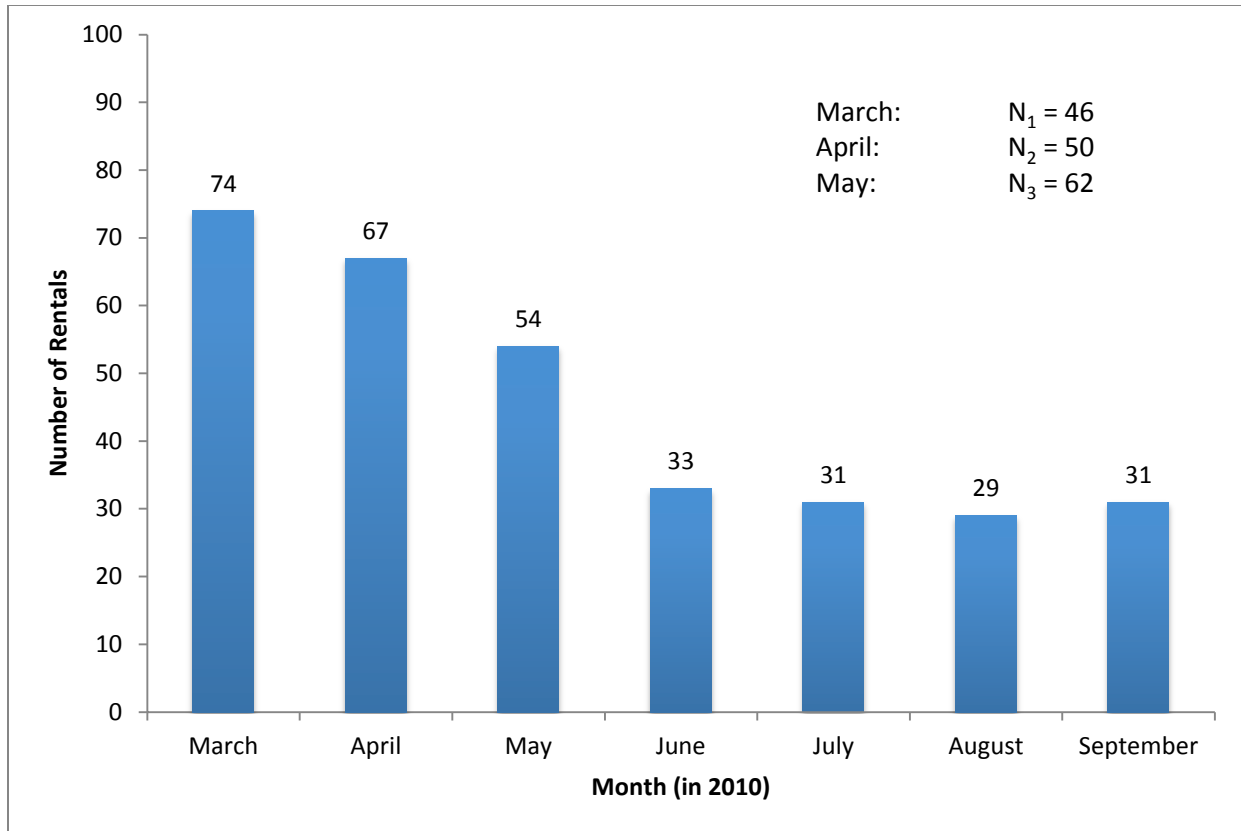


Figure 2: Monthly Bike Rentals

Figure 2 shows monthly bike rentals from the month of March, when the program launched to September, the last date of bike usage data retrieval. The starting month of the program, March 2010, had 74 rentals—the highest number of monthly rentals in the program’s duration. The high number of bike rentals for this month can be correlated to the mandatory bike training days required for program participation. Monthly rentals decreased every month until June, when monthly rentals averaged at 30 a month until the end of data collection in September.

The daily rental average starting in the month of March was 2.6 bikes rented a day. This average gradually decreased each month with an April average of 2.2 bikes and a May average of 1.7 bikes. Starting in June, average bike rentals per day steadied at one bike rental a day. The longest period of no bike rentals was a week-long period immediately after the start of the program in March.

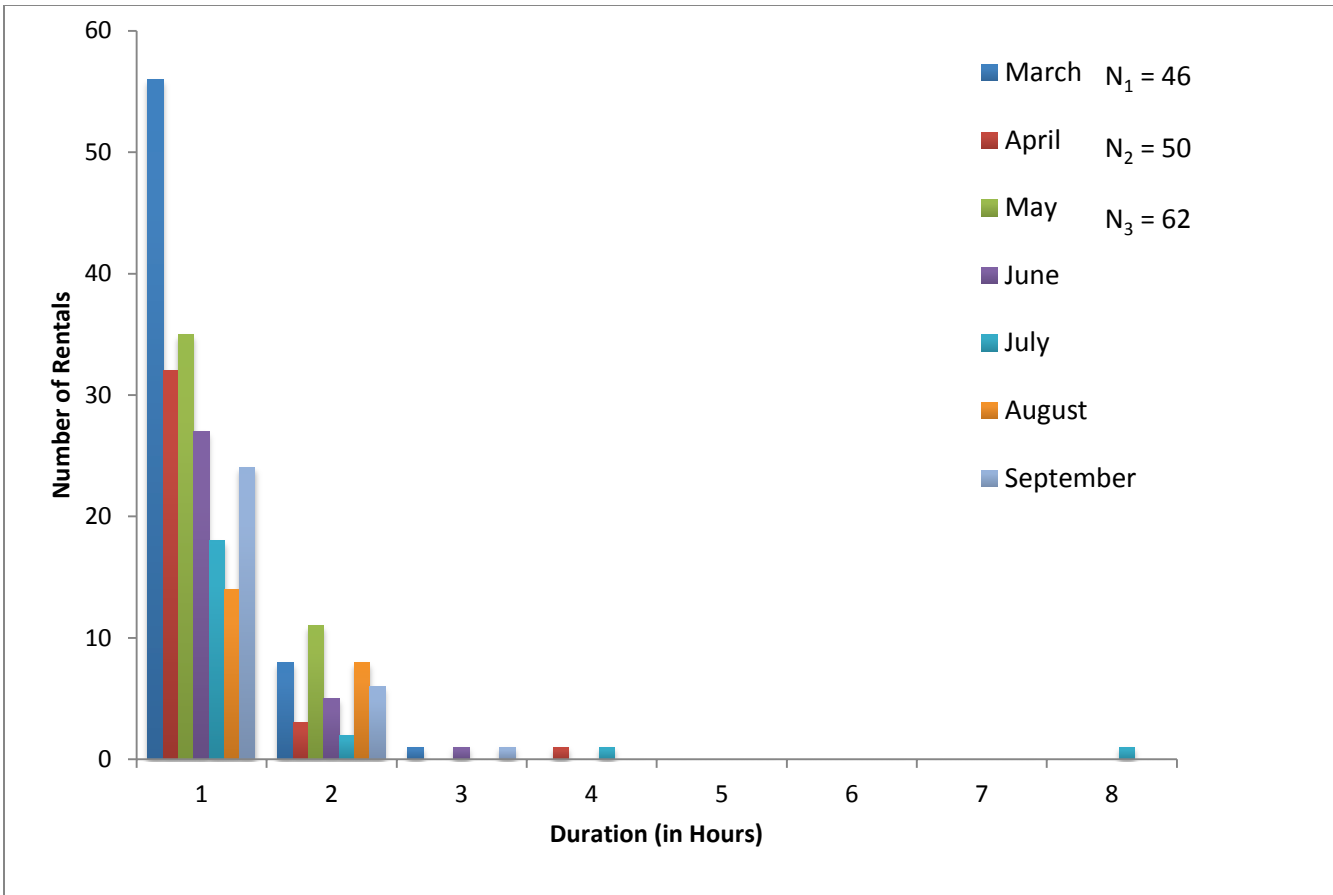


Figure 3: Bike Rental Duration from March 2010 to September 2010.

Figure 3 shows the duration of bike rentals in hours, starting in March and ending in September 2010. The length of duration for the majority of bike rentals was one hour or less. One outlier in the month of July indicates a bike rental of eight hours. Short rental periods reflect usage for short trips such as coffee, lunch, or errands.

Bikesharing Post-Program Questionnaire

In December 2010, a post-program questionnaire was administered to Caltrans District 4 employees who participated in the bikesharing program. Forty participants completed the survey. Respondents were demographically similar to those who participated in the pre-program questionnaire; all were educated (100% had at least a bachelor’s degree), and most were male (67%), full-time professional/technical employees (90%), and had an income of \$80,000-109,999 (46%). Respondents of the post-program questionnaire differed from pre-program questionnaire respondents in their travel behavior. Most answered to using the Bay Area Rapid Transit (BART) to commute to work. Driving followed as a close second mode for commuting, although 25% of participants never drive to work. About 20% of respondents also reported using bikes for at least part of their commute.

After signing up for the bikesharing program, a third of respondents began using the bicycles immediately, and two thirds used a bike within the first month of the program. Twenty percent of participants never used the bikes after signing up for the program. The main reason for participants not using the bicycles was that the job did not provide any opportunities to use a bicycle (e.g., meeting locations were too far). Safety and inconvenience of using a bike were other large concerns that deterred bicycle use. Other respondents who did not use the bikesharing program noted that: 1) they were not able to access the Internet site to reserve a bike; 2) they did not want to ride by themselves; 3) they did not like the bicycle provided, and 4) they preferred to walk instead of ride. One participant forgot about the program completely and did not use it. Only one participant did not use the bikes because he/she found it preferable to drive.

For those who did use the program, the vast majority used bicycles to travel to lunch, although only a third used the bikes for lunch more than once a month. The majority of participants also used bikes to run personal errands, and a third used the bikes to attend off-site meetings. Slightly more than half of participants used the bikes to exercise, but less than 25% did so once or more per week. Nevertheless, participants used bikes more often per month for exercise (one to three times/month) than any other reason. Regardless of the purpose of use, participants noted that they mostly used bicycles for less than an hour.

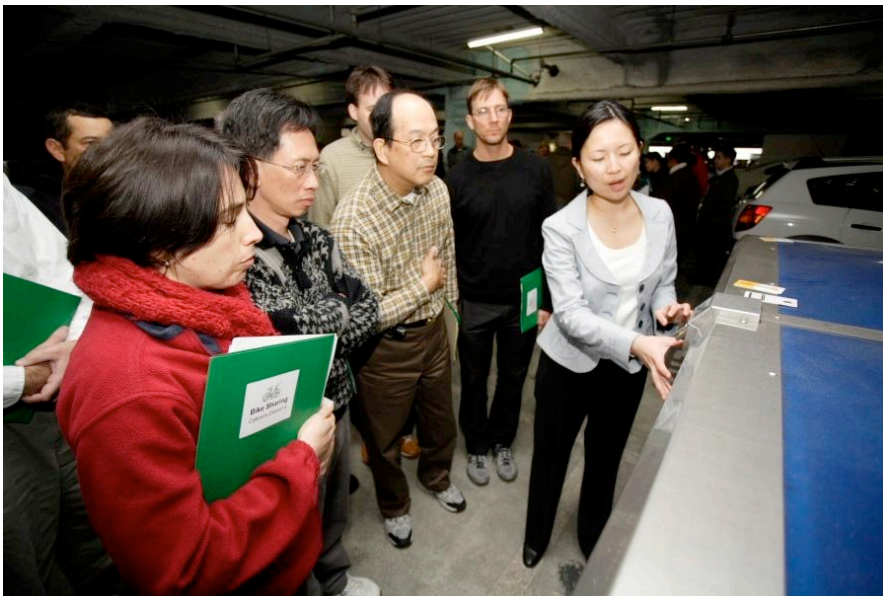


Image 3: Bike Lockers in Caltrans Garage

When asked whether or not the availability of a shared bike program has allowed them to commute to work differently, the vast majority of participants reported that the program has not influenced the way they commute to work. However, half of respondents indicated that the availability of a bikesharing program changed the way they travelled during the day on certain days. In the absence of a bikesharing

program, participants would have walked more, used BART, or used personal bicycles. Only five participants said they would have driven more in the absence of a bikesharing program. The availability of bikes did not result in changes in frequency of any given activity; participants switched their typical mode of transport, which was usually walking or public transit.

Eighty percent of respondents were either comfortable or very comfortable with the bicycles provided in the program, and most had no problem locating or checking out bikes (93%). Those who did not use the bikes often either felt discomfort in using the bikes or checking them out, found it more convenient and faster to walk, or owned their own bikes and just wanted to test the

program. Most program concerns dealt with the bicycle model and components. Of twenty-two respondents who commented on the program, four noted that coaster handbrakes were both cumbersome and unsafe and another four said that the bikes were too heavy and awkward to use.

Over 72% of respondents favored a continuation of the bikesharing program without changes. Those who indicated a need for changes mentioned that there should be a protocol for reporting damages to bikes and someone available to maintain the bicycles and make sure all accessories are intact. Many respondents were also interested in being able to check a bike out after work or for the weekend. This would encourage bicycle usage for commuting purposes.

Bikesharing Program Evaluation

Despite high interest, bicycle usage within the Caltrans bikesharing program was low. Those who participated in the program did so out of interest in the environment and personal health. This demographic typically already uses public transit, bikes, or walks. Thus the program did not significantly decrease driving or change commuting modes because most participants already used alternative modes. Program participants were also physically active, with more than half exercising at least three times a week. Additionally, they tended to have personal bikes, thus decreasing program bike usage. If participants did not participate in bikesharing, it was often because it was less convenient than walking or using personal bikes. One of the goals of the program was to offer the last mile of connectivity between public transit and the workplace destination through shared bikes, but this was not achievable due to these reasons.

Moreover, the number of participants in the after-program survey who indicated comfort with the bicycles is misleading. Those participants who signed up for the program but did not use the bicycles at all were often not comfortable with them.

Conclusion

Bikesharing programs provide various benefits, such as increasing the health of program users, decreasing pollution, and mitigating traffic congestion. The number of bikesharing programs both abroad and in the U.S. indicates high public interest. Employee bikesharing programs have also gained momentum, acting as a supplement to employee benefit programs and increasing employee wellness.

The Caltrans District 4 bikesharing pilot aimed to provide employees with connectivity and an alternative transportation mode. The pilot also served as a field test to help establish a protocol and model for the expansion of a larger-scale employee bikesharing program. Caltrans employees in the district demonstrated interest in the program. Questionnaire responses indicated that employees would use bikesharing for short-term trips to get lunch or make errands.

The high interest demonstrated in the pre-program questionnaire, however, was not reflected in program usage. Some program participants may have been a self-selected group of regular bicycle users who were simply curious about the program. Nevertheless, modifications to the program may be necessary for its continuation. Possible changes that might increase participation include offering different models of bikes, such as a hybrid bikes with hand brakes to increase comfort and more bike training. This would aid in addressing the concerns of participants who did not use the bicycles due to discomfort and safety concerns. Moreover, the program structure could not meet certain needs, such as commuting or traveling to off-site, work-related meetings that are too far to bike. Opening the program to overnight and weekend use might increase rentals, as it would allow people to use the bikes for a greater range of trip types.

Although bikesharing program usage was low, the program did contribute to a change in workday travel behavior for a third of participants. Participants were able to use bikes to travel to lunch and run errands during the day instead of walking or using public transit. While the bikesharing program did not necessarily contribute to a decrease in automobile travel, it did enhance employee wellness and health through exercise and increased connectivity. Moreover, most respondents of the post-program questionnaire favored the continuation of the shared bike program. At this time, Caltrans District 4 is discussing the continuation of the program for their employees.

Appendix A: Bikesharing Program “Before” Questionnaire

This one-year pilot program will provide shared bicycles for Caltrans employees who need local transportation throughout the workday for business and personal trips. This survey is part of a before-and-after questionnaire that will allow UC Berkeley researchers to evaluate how bikesharing will affect employee transportation choices and if employees will be motivated to participate. . The survey should take about 15 minutes to complete. The responses you provide will help inform the research team about the value of a bike-sharing program to Caltrans District 4 employees, and Caltrans employees at comparable downtown Oakland locations.

Thank you, in advance, for your participation.

Before we begin, we need to establish an ID for your survey. As part of your participation you will take two surveys. This ID will be used to link this survey with the second survey. Your ID is the last four digits of your phone number affixed to your zipcode. For example, if your phone number is 610-665-2719 and your zip code is 21218. Then your ID is 2719-21218.

It does not matter which phone number you use, but please remember the one you select because you will be asked to enter this ID again in about three months.

Have you previously heard of bike sharing?

- Yes
- No

CURRENT TRAVEL PATTERNS

For these next questions, please think about a typical workweek.

1. Please consider the commute that you make to work most often during the week. For this commute only, please check off each mode of transportation that you use. For instance, if you bike and BART to work most often, then just check off “Bike” and “BART” in the column labeled “Most Common Commute.”

Mode	Most Common Commute
Drive myself alone	<input type="checkbox"/>
Dropped off by someone else driving	<input type="checkbox"/>
Carpool	<input type="checkbox"/>
Bike	<input type="checkbox"/>
Walk	<input type="checkbox"/>
BART	<input type="checkbox"/>
AC Transit	<input type="checkbox"/>
Caltrain	<input type="checkbox"/>
Taxi	<input type="checkbox"/>
Muni	<input type="checkbox"/>
Shuttle	<input type="checkbox"/>
Ferry	<input type="checkbox"/>
Other	<input type="checkbox"/>

[IF Answer.1 = Other, THEN NEXT, ELSE GOTO Q.3]

2. Since you picked “Other”, please tell us which mode you were referring to?

_____ Mode of travel

3. How many days a week do you typically go to the office?

- 5 days a week
- 4 days a week
- 3 days a week
- 2 days a week
- 1 days a week
- Less than once a week

4. How many days a week do you commute as indicated above to the Caltrans office?

- 5 days a week
- 4 days a week
- 3 days a week
- 2 days a week
- 1 days a week

Less than once a week

5. How many days a month do you commute to work by driving yourself (put zero (0) if not applicable)?

_____ Days a month

6. How many days a month do you commute to work using public transit (put zero (0) if not applicable)?

_____ Days a month

do you

7. How many days a month do you commute to work using a bicycle (put zero (0) if not applicable)?

_____ Days a month using a bicycle with transit

_____ Days a month using a bicycle without transit

[IF Answer.5 ≠ 0, THEN NEXT, ELSE GOTO Q.10]

8. When you drive yourself, where do you usually park? (Please check one response)

- public parking lot near work-site
- metered street parking
- parking garage off-site (within walking distance)
- parking garage on site (above or below the building)
- Other, please specify: _____

9. How much do you pay for work-related parking each month?

_____ \$ per month

10. Please indicate how frequently you leave your office work-site during the day to complete the following trips: (Please consider round trips only. That is, trips in which you return to the District 4 Caltrans Headquarters.)

Frequency	Never	Less than 1 time a month	1-3 times a month	1-2 times a week	3-4 times a week	5 or more times a week
To go to lunch	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
To attend off-site work-related meetings or	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

tasks						
To run other personal errands	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Exercise	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

11. For each trip type, select all modes of transportation that you use on a regular basis to make that trip: (check all that apply)

Frequency	To go to lunch	To attend off-site work-related meetings or tasks	To run other personal errands	Exercise
I never make this trip	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Public Transportation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
On foot (walk)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Bicycle	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Automobile (drive myself)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Automobile (riding with someone else)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Shuttle	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Taxi	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other- please specify in following question:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

[IF Answer.11 = Other, THEN NEXT, ELSE GOTO Q.13]

12. Since you picked “Other” for one or more trip purposes, please tell us which mode you were referring to?

	To go to lunch	To attend off-site work meetings or tasks	To run other personal errands	Exercise
Mode of Travel	_____	_____	_____	_____

BIKE-SHARING INTEREST AND FREQUENCY OF USE

These next questions will ask about the frequency with which you might utilize a bicycle provided to you free of charge during the course of your workday.

13. How often do you think you would use a bicycle to travel to the following destinations during your work day (from the Caltrans office in Oakland)?

Frequency	Never	Less than 1 time a month	1-3 times a month	1-2 times a week	3-4 times a week	5 or more times a week
To go to lunch	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
To attend off-site work-related meetings or tasks	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
To run other personal errands	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Exercise	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

14. Are there any other purposes for which you would use a bicycle during the workday, if one were made available to you?

Yes, please list the other reasons: _____
 No

15. What reasons do you have for participating in this shared bicycle program? (Check all that apply)

- So that I can get to and from personal appointments faster
- So that I can get to and from meetings faster
- So that I can go to and from lunch faster
- So that I can switch to a transit commute and stop driving to work
- So that I can stop driving to local appointments and use a bicycle instead
- So that I do not have to bring my bicycle to work
- So that I can save money
- For health & fitness
- To support environmental causes
- I do not have any specific motivations.
- I would not participate.
- Other, please specify: _____

[IF Answer.15 = I would not participate, THEN NEXT, IF Answer 15 = I do not have any specific motivations, THEN GOTO Q.18, ELSE GOTO Q.17]

16. What are the reasons you would not participate in a shared bicycle program?

- Job does not provide opportunity (e.g. no meetings off site)

- Safety concerns
- Work attire is prohibitive
- I cannot ride a bicycle
- It's not convenient
- I prefer to use public transportation
- Other, please specify: _____

[IF Answer.15 ≠ I would not participate, THEN NEXT, ELSE GOTO Q.18]

17. Please describe your primary motivation for participating in the bike-sharing program.

WORK-PLACE RELATED TRAVEL BEHAVIOR

Now, we will ask you some questions about your work-place related travel.

For the following questions, please consider the numbers at the top of the table to be in units of "city blocks". If you do not make this type of trip during the work day, please select "N/A".

18. For these next questions, please indicate the typical one-way distance from your work-site (the Caltrans office in downtown Oakland) that you have traveled to the following destinations.

	City Blocks
To go to lunch:	_____
To attend off-site work-related meetings or tasks:	_____
To run other personal errands:	_____

19. Please indicate the minimum one-way distance from your work-site (the Caltrans office in downtown Oakland) that you have traveled to the following destinations during the last 3 months.

	City Blocks
To go to lunch:	_____
To attend off-site work-related meetings or tasks:	_____
To run other personal errands:	_____

20. For these next questions, please indicate the maximum one-way distance from your work-site (the Caltrans office in downtown Oakland) that you have traveled to the following destinations during the last 3 months.

	City Blocks
To go to lunch:	_____
To attend off-site work-related meetings or tasks:	_____
To run other personal errands:	_____

21. How often do you anticipate using the bicycle, during the course of your workday, for health and fitness reasons:

- _____ Never
- _____ Less than 1 time a month
- _____ 1 to 3 times a month
- _____ 1 to 2 times a week
- _____ 3 to 4 times a week
- _____ 5 times a week

22. On days that you use public transit, what is the likelihood that you will use bikesharing?

- Very likely
- Somewhat likely
- Somewhat unlikely
- Very unlikely
- I will never take public transit to work

[If Answer 22 = “I will never take public transit to work” THEN GOTO Q24., ELSE NEXT]

23. During a typical month, on days that you use public transit, how many of those days would you use this bikesharing program?

24. On days in which you drive to work, do you think it is more likely or less likely that you will use bikesharing in comparison to the days in which you commute by transit.

- More likely
- About the same
- Less likely
- I never drive to work

[IF Answer 24 = “I never drive to work” THEN GOTO Q26., ELSE NEXT]

25. During a typical month, on days that you drive to work, how many of those days would you use this bikesharing program?

26. Are there trips you wish you could make during the workday but do not because of a lack of transportation?

- Yes, Please specify type of trip: _____
- No

ATTITUDES AND OPINIONS

Next, we have some questions about your attitudes and opinions.

27. For each of the following statements, please check the one response that best describes how strongly you agree or disagree.

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Does Not Apply
I like to experiment with new ways of doing things.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I sometimes don't drive because finding a parking space is difficult and frustrating.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I would like to reduce my auto use to reduce congestion and improve air quality.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I'd be willing to ride a bicycle or take public transportation to help improve air quality.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
If friends, family, and neighbors reduced their driving, I would follow their example.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
If friends, family, and neighbors took public transportation, I would follow their example.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
It is time to change the way we live to help address environmental problems.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Next, we have some questions about your health and exercise.

28. When was the last time you rode a bicycle?

- Today
- Not today, but during this past week
- More than a week ago, but during this month
- More than a month ago, but during the last 3 months
- More than 3 months ago, but during the last year
- More than a year ago, but during the last 5 years
- More than 5 years ago

29. How comfortable would you be with riding a bicycle today?

- Very comfortable
- Comfortable
- Not so comfortable
- Not comfortable at all

[IF Answer.28 > More than 3 months ago, but during the last year, THEN NEXT, ELSE GOTO Q.30]

30. What is the main reason you do not ride a bicycle regularly? (Please be specific)

[IF Answer.28 <= More than 3 months ago, but during the last year, THEN NEXT, ELSE GOTO Q.31]

31. What is the main reason you ride a bicycle? (Please be specific)

32. When was the last time you took any form of public transportation?

- Today
- Not today, but during this past week
- More than a week ago, but during this month
- More than a month ago, but during the last 3 months
- More than 3 months ago, but during the last year
- More than a year ago, but during the last 5 years
- More than 5 years ago

33. How comfortable would you be with taking any form of public transportation today?

- Very comfortable
- Comfortable
- Not so comfortable
- Not comfortable at all

[IF Answer.Error! Reference source not found. > More than 3 months ago, but during the last year, THEN NEXT, ELSE GOTO Q.35]

34. What is the main reason you do not use public transportation?
Please specify:

[IF Answer.Error! Reference source not found. is <= More than 3 months ago, but during the last year, THEN NEXT, ELSE GOTO Q.36]

35. What is the main reason you use public transportation?
Please specify:

36. How often do you participate in physical exercise (for 20 or more minutes at a time; do not include your commute)?

- Never
- Once a month
- 2 times a month
- 3 times a month
- Once a week
- 2 times a week
- 3 times a week
- 4 times a week
- 5 or more times a week

37. Please indicate your primary form of physical activity. Check one category below.

- | | |
|--|--|
| <input type="checkbox"/> Walking | <input type="checkbox"/> Aerobics/dance class/spin class |
| <input type="checkbox"/> Jogging/running | <input type="checkbox"/> Climbing/hiking |
| <input type="checkbox"/> Biking | <input type="checkbox"/> Kayaking/canoeing/sailing |
| <input type="checkbox"/> Swimming | <input type="checkbox"/> Rollerblading/skating |
| <input type="checkbox"/> Gym workouts | <input type="checkbox"/> None |
| | <input type="checkbox"/> Other, please specify: _____ |

Environmental Views

Now, we'd like to ask you questions about your views on the environment and energy use.

38. The earth is currently experiencing climate change.

- 1. Strongly agree
- 2. Agree
- 3. Disagree
- 4. Strongly disagree?

39. Human activity contributes to climate change.

- 1. Strongly agree
- 2. Agree
- 3. Disagree
- 4. Strongly disagree?

40. Dependence on foreign oil is a serious problem facing the United States.

- 1. Strongly agree
- 2. Agree
- 3. Disagree
- 4. Strongly disagree?

41. Please describe any concern(s) that you might have about the bike-sharing program.

Finally, we have a few questions that will help us categorize our data. The information you provide will remain completely confidential.

42. Gender: Female Male

43. Please check the category below that best describes your household.

- Self only
- Self with spouse/partner
- Self with spouse/partner and child(ren)
- Self with child(ren)
- Self with roommate(s)
- Other, please specify: _____

44. How many commuters, including yourself, are in your household? (A commuter is an adult who travels three or more days per week to and from work or school.) _____

45. How many people in your household can drive a motor vehicle? _____

46. How many vehicles are in your household? _____

[IF Answer.46 > 0, THEN NEXT, ELSE GOTO Q.48]

47. Could please tell us the make, model and year of the vehicle that you drive most often to work?

Make: _____

Model: _____

Year: _____

I never drive to work

48. How many people in your household use public transportation – either for work or general travel?

_____ Number of people

49. Could you name two streets that intersect near your home as well as the city? This intersection does not have to be the one closest to your home. Anything within a quarter mile would be helpful. For example, Edith St., Lincoln St., Berkeley is an example of a sufficient type of response.

Cross Street #1: _____

Cross Street #2: _____

City: _____

50. What is the highest level of school that you have completed?

_____ Grade School	_____ College
_____ High School	_____ Graduate/Professional
_____ Trade School	_____ Other, please specify: _____

51. What is your employment status?

_____ Employed full-time	_____ Student
_____ Employed part-time	_____ Other, please specify: _____

52. What category best describes your occupation?

_____ Manager/administrator
_____ Service/repair
_____ Clerical/administrative support
_____ Sales
_____ Professional/technical
_____ Production/construction/crafts
_____ Other, please specify: _____

53. In what year were you born?

_____ Year

54. How many individuals in your household are in each of the following age groups below, including yourself? In the spaces below, please indicate the number of people in each age group.

_____ 0 to 5 years old	_____ 30 to 39 years old
_____ 6 to 15 years old	_____ 40 to 49 years old
_____ 16 to 18 years old	_____ 50 to 59 years old

19 to 23 years old
 24 to 29 years old

60 to 69 years old
 70 years old or older

55. What was your household's 2009 gross income? (Your income before taxes.)

Under \$10,000
 \$10,000 to \$19,999
 \$20,000 to \$49,999
 \$50,000 to \$79,999
 \$80,000 to \$109,999
 More than \$110,000

Thank you very much for taking the time to complete this questionnaire!

Appendix B: Bikesharing Program “After” Questionnaire

This one-year pilot program will provide shared bicycles for Caltrans employees who need local transportation throughout the workday for business and personal trips. This survey is part of a before-and-after questionnaire that will allow UC Berkeley researchers to evaluate how bikesharing will affect employee transportation choices and if employees will be motivated to participate. The survey should take about 15 minutes to complete. The responses you provide will help inform the research team about the value of a bike-sharing program to Caltrans District 4 employees, and Caltrans employees at comparable downtown Oakland locations.

Please note that your participation in this survey is completely voluntary and should you choose to proceed with the survey, your answers will not be associated with you personally. The data are looked at in statistical format and will not be associated with any one individual. Furthermore, researchers will protect your privacy by not collecting any identifiable personal information.

Thank you, in advance, for your participation.

CURRENT TRAVEL PATTERNS

For these next questions, please think about a typical workweek.

1. Please consider the commute that you make to work most often during the week. For this commute only, please check off each mode of transportation that you use. For instance, if you bike and BART to work most often, then just check off “Bike” and “BART” in the column labeled “Most Common Commute.”

Mode	Most Common Commute
Drive myself alone	<input type="checkbox"/>
Dropped off by someone else driving	<input type="checkbox"/>
Carpool	<input type="checkbox"/>
Bike	<input type="checkbox"/>
Walk	<input type="checkbox"/>
BART	<input type="checkbox"/>
AC Transit	<input type="checkbox"/>
Caltrain	<input type="checkbox"/>
Taxi	<input type="checkbox"/>
Muni	<input type="checkbox"/>
Shuttle	<input type="checkbox"/>
Ferry	<input type="checkbox"/>
Vanpool	<input type="checkbox"/>
Other	<input type="checkbox"/>

[IF Answer.1 = Other, THEN NEXT, ELSE GOTO Q.3]

2. Since you picked “Other”, please tell us which mode you were referring to?

_____ Mode of travel

3. How many days a week do you typically go to the office?

- 5 days a week
- 4 days a week
- 3 days a week
- 2 days a week
- 1 days a week
- Less than once a week

4. How many days a week do you commute as indicated above to the Caltrans office?

- 5 days a week
- 4 days a week
- 3 days a week
- 2 days a week
- 1 days a week
- Less than once a week

5. How many days a month do you commute to work by driving yourself (put zero (0) if not applicable)?

_____ Days a month

6. How many days a month do you commute to work using public transit (put zero (0) if not applicable)?

_____ Days a month

7. How many days a month do you commute to work using a bicycle (put zero (0) if not applicable)?

_____ Days a month using a bicycle with transit

_____ Days a month using a bicycle without transit

8. Please indicate how frequently you leave your office work-site during the day to complete the following trips: (Please consider round trips only. That is, trips in which you return to the District 4 Caltrans Headquarters.)

Frequency	Never	Less than 1 time a month	1-3 times a month	1-2 times a week	3-4 times a week	5 or more times a week
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To go to lunch/coffee break	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
To attend off-site work-related meetings or tasks	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

9. For each trip type, select all modes of transportation that you use on a regular basis to make that trip: (check all that apply)

Frequency	To go to lunch	To attend off-site work-related meetings or tasks	Other
I never make this trip	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Public Transportation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
On foot (walk)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Bicycle	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Automobile (drive myself)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Automobile (riding with someone else)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Shuttle	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Taxi	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other mode – please specify in following question:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

[IF Answer.9 = Other, THEN NEXT, ELSE GOTO Q.11]

10. Since you picked “Other mode” for one or more trip purposes, please tell us which mode you were referring to?

Mode of Travel	To go to lunch/coffee break	To attend off-site work meetings or tasks	Other
	_____	_____	_____

BIKE-SHARING INTEREST AND FREQUENCY OF USE

These next questions will ask about the frequency with which you utilized the shared bicycle program during the course of your workday.

11. How soon after you signed up with the shared bicycle program did you begin to utilize the bicycles?

- Same day
- Next day
- Within a week
- Within the month
- Months after
- Never (go to 11a)

[IF Answer.11 = Never, THEN NEXT, ELSE GOTO Q.11a]

11a. Please tell us why you did not utilize the bicycles provided as part of the shared bike program.

- Job did not provide opportunity (e.g. no meetings off site)
- Safety concerns
- Work attire is prohibitive
- It was not convenient
- I preferred to use public transportation
- The bike was too small/too big for me
- I preferred to drive
- Other, please specify: _____

[IF Answer.11a, THEN GO TO Q.43]

12. How often did you use a bicycle to travel to any of the following destinations during your work day (from the Caltrans office in Oakland)?

Frequency	Never	Less than 1 time a month	1-3 times a month	1-2 times a week	3-4 times a week	5 or more times a week
To go to lunch/coffee break	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
To attend off-site work-related meetings or tasks	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

13. How often did you use a bicycle to travel to the following destinations before or after your work day?

Frequency	Never	Less than 1 time a month	1-3 times a month	1-2 times a week	3-4 times a week	5 or more times a week
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

To go to breakfast/dinner	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
To run other personal errands	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Exercise	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

14. Are there any other purposes for which you used a bicycle during the workday?

- Yes, please list the other reasons:
- No

15. For what duration did you use the bicycle for the following activities:

Frequency	Never	Less than 1 hour	1 hour	1-2 hours	3-4 hours	5 or more hours
To go to breakfast/dinner/lunch/coffee break	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
To attend off-site work-related meetings or tasks	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

16. What reasons did you have for participating in this shared bicycle program? (Check all that apply)

- So that I could get to and from personal appointments faster
- So that I could get to and from meetings faster
- So that I could go to and from lunch faster
- So that I could switch to a transit commute and stop driving to work
- So that I could stop driving to local appointments and use a bicycle instead
- So that I did not have to bring my bicycle to work
- So that I could save money
- For health & fitness
- To support environmental causes
- I did not have any specific motivations.
- Other, please specify:

17. On the days that you did not participate in the shared bike program, what were the reasons?

- Job does not provide opportunity (e.g. no meetings off site)
- Safety concerns
- Work attire is prohibitive
- It's not convenient

- I preferred to use public transportation
- The bike was too small/too big for me
- I preferred to drive
- Other, please specify: _____

18. While keeping in mind your reasons for participating in the shared bicycle program, please describe your primary motivation for participating in the bike-sharing program.

WORK-PLACE RELATED TRAVEL BEHAVIOR

Now, we will ask you some questions about your work-place related travel.

For the following questions, please consider the numbers at the top of the table to be in units of "city blocks". If you do not make this type of trip during the work day, please select "N/A".

19. For these next questions, please indicate the typical one-way distance from your work-site (the Caltrans office in downtown Oakland) that you have traveled to the following destinations.

City Blocks

- To go to lunch: _____
- To attend off-site work-related meetings or tasks: _____
- To run other personal errands: _____
- To exercise: _____

20. Please indicate the minimum one-way distance from your work-site (the Caltrans office in downtown Oakland) that you have traveled to the following destinations throughout the duration of the shared bike program.

City Blocks

- To go to lunch: _____
- To attend off-site work-related meetings or tasks: _____
- To run other personal errands: _____
- To exercise: _____

21. For these next questions, please indicate the maximum one-way distance from your work-site (the Caltrans office in downtown Oakland) that you have traveled to the following destinations throughout the duration of the shared bike program.

City Blocks

- To go to lunch: _____
- To attend off-site work-related meetings or tasks: _____
- To run other personal errands: _____
- To exercise: _____

22. How often did you use the bicycle, during the course of your workday, for health and fitness reasons:

- _____ Never
- _____ Less than 1 time a month
- _____ 1 to 3 times a month
- _____ 1 to 2 times a week
- _____ 3 to 4 times a week
- _____ 5 times a week

23. On days that you used public transit, did you also make use of the shared bike program during work hours?

- Yes
- No
- I never use public transit

[IF Answer.23 = "I never use public transit" THEN GOTO Q.25, ELSE NEXT]

24. During a typical month, on days that you used public transit, how many of those days did you use this shared bike program? _____

25. On days in which you drove to work, did you make use of the shared bike program more often, less often or about the same as you did on the days in which you commuted by transit.

- More often
- About the same
- Less often
- I never drive to work

[IF Answer.25 = "I never drive to work" THEN GOTO Q.27, ELSE NEXT]

26. During a typical month, on days that you drove to work, how many of those days did you use this shared bike program? _____

27. Are there trips you wish you could have made during the workday but did not because of a lack of transportation?

- Yes, Please specify type of trip: _____
- No

28. Are there trips you wish you could have made during the workday but did not because you were not able to with a bike?

- Yes, Please specify type of trip: _____
- No

29. When was the last time you rode a bicycle in the shared bike program?

- Today
- Not today, but during this past week
- More than a week ago, but during this month
- More than a month ago, but during the last 3 months
- More than 3 months ago, but during the last 8 months

30. Has the availability of the shared bike program at your office allowed you to commute to work differently?

- Yes, I have completely changed the way I commute to work because of the shared bike program
- Yes, on certain days, I commuted differently because the shared bike program was available
- No, the shared bike program has not influenced how I commute to work

[IF Answer.30 = "No..." THEN GOTO Q.32, ELSE NEXT]

31. What mode of travel did you switch from as a result of the shared bike program?

- Drive myself alone
- Dropped off by someone else driving
- Carpool
- Bike
- Walk
- BART
- AC Transit
- Caltrain
- Taxi
- Muni
- Shuttle
- Ferry
- Vanpool
- Other

32. Has the availability of the shared bike program at your office allowed you to travel during the day differently while at work?

- Yes, I have completely changed the way I travel in the middle of the day because of the shared bike program
- Yes, on certain days, changed the way I travel during the day because of the shared bike program
- No, the shared bike program has not influenced how I travel during the middle of the day

[IF Answer.32 = "No..." THEN GOTO Q.34, ELSE NEXT]

33. What modes of travel would you have used less of if the shared bike program were not available?

- Drive myself alone
- Ride with someone else as a passenger

- Personal Bike
- Walk
- BART
- AC Transit
- Caltrain
- Taxi
- Shuttle

34. When was the last time you rode a bicycle?

- Today
- Not today, but during this past week
- More than a week ago, but during this month
- More than a month ago, but during the last 3 months
- More than 3 months ago, but during the last 8 months

35. How comfortable were you with riding the bicycles provided in the program?

- Very comfortable
- Comfortable
- Not so comfortable
- Not comfortable at all

36. If you did not ride the bicycles regularly, what was the main reason? (Please be specific)

37. If you did not use a bicycle, what form of transportation did you use?

38. What is the main reason you rode a bicycle? (Please be specific)

39. When was the last time you took any form of public transportation?

- Today
- Not today, but during this past week
- More than a week ago, but during this month
- More than a month ago, but during the last 3 months
- More than 3 months ago, but during the last year
- More than a year ago, but during the last 5 years
- More than 5 years ago

40. How often do you participate in physical exercise (for 20 or more minutes at a time; do not include your commute)?

- Never
- Once a month
- 2 times a month
- 3 times a month

- Once a week
- 2 times a week
- 3 times a week
- 4 times a week
- 5 or more times a week

41. Please indicate your primary form of physical activity. Check one category below.

- | | |
|---|--|
| <input type="checkbox"/> Walking | <input type="checkbox"/> Aerobics/dance class/spin class |
| <input type="checkbox"/> Jogging/running | <input type="checkbox"/> Climbing/hiking |
| <input type="checkbox"/> Biking | <input type="checkbox"/> Kayaking/canoeing/sailing |
| <input type="checkbox"/> Swimming | <input type="checkbox"/> Rollerblading/skating |
| <input type="checkbox"/> Gym workouts | <input type="checkbox"/> None |
| <input type="checkbox"/> Other, please specify: _____ | |

Now we have a few questions about the use of the bicycles, lockers and other equipment provided as part of this program.

First, please indicate the ease with which you were able to do the following tasks.

42. How about locating the bicycles? How easy was it for you to locate the bicycles that were made available to you for this program?

- Very easy
- Somewhat easy
- Somewhat difficult
- Very difficult

43. How about using the bicycles? In general, how easy did you find it to use/ride the bicycles that were made available to you for this program?

- Very easy
- Somewhat easy
- Somewhat difficult
- Very difficult

44. How about using the card provided for accessing the lockers? In general, how easy did you find the use of the card needed to access the lockers?

- Very easy
- Somewhat easy
- Somewhat difficult
- Very difficult

45. How about accessing the locker where the bicycle was stored? In general, how easy did you find the process of accessing the locker to be?

- Very easy
- Somewhat easy
- Somewhat difficult
- Very difficult

46. What, if any, problems did you face when trying to take out or return a program bicycle?

Please specify: _____

47. We would like to explore opportunities to continue and perhaps even expand the shared bike program. Based on your experience with the program and the equipment provided, please tell us how favorably you feel about continuing the shared bike program as is-without any changes:

- Very favorable
- Somewhat favorable
- Neutral
- Not too favorable
- Not at all favorable: (Please explain):

48. Based on your experience with the program and the equipment provided, please tell us how interested you would be in continuing the shared bike program with the option of taking out a bicycle overnight (for example for commute purposes).

- Very interested
- Somewhat interested
- Neutral
- Not too interested
- Not at all interested: (Please explain):

49. What modifications would you make to the program?

- None

Please specify: _____

Finally, we have a few questions that will help us categorize our data. The information you provide will remain completely confidential.

50. Gender: ____ Female ____ Male

51. Please check the category below that best describes your household.

- Self only
- Self with spouse/partner
- Self with spouse/partner and child(ren)
- Self with child(ren)
- Self with roommate(s)
- Other, please specify: _____

52. How many commuters, including yourself, are in your household? (A commuter is an adult who travels three or more days per week to and from work or school.)

53. How many people in your household can drive a motor vehicle? _____

54. How many vehicles are in your household?

[IF Answer.50 > 0, THEN NEXT, ELSE GOTO Q.52]

55. Could please tell us the make, model and year of the vehicle that you drive most often to work?

Make: _____

Model: _____

Year: _____

I never drive to work

56. How many people in your household use public transportation – either for work or general travel?

_____ Number of people

57. Could you name two streets that intersect near your home as well as the city? This intersection does not have to be the one closest to your home. Anything within a quarter mile would be helpful. For example, Edith St., Lincoln St., Berkeley is an example of a sufficient type of response.

Cross Street #1:

Cross Street #2:

City:

58. What is the highest level of school that you have completed?

_____ Grade School

_____ College

_____ High School

_____ Graduate/Professional

_____ Trade School

_____ Other, please specify: _____

59. What is your employment status?

_____ Employed full-time

_____ Student

_____ Employed part-time

_____ Other, please specify: _____

60. What category best describes your occupation?

_____ Manager/administrator

- Service/repair
- Clerical/administrative support
- Sales
- Professional/technical
- Production/construction/crafts
- Other, please specify: _____

61. In what year were you born? _____ Year

62. How many individuals in your household are in each of the following age groups below, including yourself? In the spaces below, please indicate the number of people in each age group.

- | | |
|---|--|
| <input type="checkbox"/> 0 to 5 years old | <input type="checkbox"/> 30 to 39 years old |
| <input type="checkbox"/> 6 to 15 years old | <input type="checkbox"/> 40 to 49 years old |
| <input type="checkbox"/> 16 to 18 years old | <input type="checkbox"/> 50 to 59 years old |
| <input type="checkbox"/> 19 to 23 years old | <input type="checkbox"/> 60 to 69 years old |
| <input type="checkbox"/> 24 to 29 years old | <input type="checkbox"/> 70 years old or older |

63. What was your household's 2009 gross income? (Your income before taxes.)

- Under \$10,000
- \$10,000 to \$19,999
- \$20,000 to \$49,999
- \$50,000 to \$79,999
- \$80,000 to \$109,999
- More than \$110,000

Thank you very much for taking the time to complete this questionnaire!