

Bike to Work Day and Get Rolling Advertisement ASSESSMENT REPORT


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## Background


#### Abstract

Alameda County Transportation Commission The Alameda County Transportation Commission (Alameda CTC) is the public agency in Alameda County charged with planning, funding, and delivering a broad range of transportation projects and programs to provide a range of transportation choices throughout Alameda County. As part of its mission and legislative requirements under the Congestion Management Program and state clean air legislation (SB 375 and AB 32), Alameda CTC supports and encourages transportation choices to help reduce traffic congestion and air pollution emissions from cars. One of the ways it does this is to support Alameda County's Bike to Work Day efforts.


## Bike to Work Day

Bike to Work Day is a San Francisco Bay-Area event designed to promote bicycling for Bay Area commutes. It is held in early to mid-May as a component of National Bike Month, which was started nationally in 1956. Alameda County is one of the nine Bay Area counties that participates in Bike to Work Day-related events and activities throughout the month and especially on Bike to Work Day itself. The event was initiated in Alameda County in 1994, and regionally in 1995.

Starting in 2008, the East Bay Bicycle Coalition (EBBC) and Alameda CTC (formerly Alameda County Transportation Improvement Authority (ACTIA) and Alameda County Congestion Management Agency (ACCMA)) have collaborated on an advertising campaign that is designed to promote bicycling in general. The ads have run in April and May of each year to also support the promotion of Bike to Work Day. For each of the two years studied in this report, 2010 and 2011, Alameda CTC provided $\$ 20,000$ in funding, as well as a significant amount of in-kind assistance, to support the advertising campaign to encourage more bicycling in Alameda County.

In Alameda County, the East Bay Bicycle Coalition (EBBC) is the lead agency coordinating Bike to Work Day and Month activities. EBBC receives funding for Bike to Work Day from several sources including the Alameda CTC, the Bay Area Bicycle Coalition, local jurisdictions, sponsoring companies, and bicycle shops,. Bike to Work Day and Month activities have included
coordinating and staffing "energizer stations," where bicyclists stop on their way to work on Bike to Work Day.

The East Bay Bicycle Coalition (EBCC) promotes registration for Bike to Work Day each year for participants. They also organize bicyclist counts at each of their energizer stations. The number of people counted at the same energizer stations in 2010 and 2011 is listed below. These numbers represent a comparison of the change in the number of people at the same stations over two years.

- Bike to Work Day 2010 (May 13, 2010): 9, 799 counted
- Bike to Work Day 2011 (May 12, 2011): 11,083 counted

Additionally, EBBC organizes and staffs the Bike Away From Work Party for bicycle commuters, promotes the Team Bike Challenge, and conducts outreach and promotion for Bike to Work Day events. The Team Bike Challenge is a team competition for teams of two to five people to earn the most points by commuting by bicycle for as many days and as many miles as possible in May. Winning teams are selected from division for county, regional and company bike challenge, in addition to individual performance, with prizes from certificates of recognition to bicycle accessories.

A number of other events to encourage bicycling occur during Bike to Work Month in Alameda County, such as bike-in movies, Bike to School Days, Kids Bike Rodeos, bike safety classes, organized rides, Bike Commuter of the year awards, Bicycle-Friendly Business awards, bicycleoriented exhibits, and outreach at local festivals and farmer's markets.

## 2010 Advertising Campaign

The 2010 advertising campaign was branded Get Rolling, and consisted of bicycling lifestyle ads around the county. The ads showcased bicyclists riding to work, school, the market, the movies, and as a family. Ads ran for a four-week period leading up to Bike to Work Day, from April 19 to May 15, 2010.

2010 Advertising Summary

- Total Number of Ads Placed: 333 (including Contra Costa County, which was not funded by Alameda CTC)

Get Rolling" advertisements were placed in Alameda County as follows:

- AC Transit Bus "Tails" (ads on backs of buses): 150 bus tails on buses traveling from Fremont to Richmond (1 in 7 AC Transit buses;
- Bus Shelters: 45 bus shelters from Hayward to Richmond;
- Street Pole Banners: 127 street pole banners were installed in Albany/Berkeley (Solano Avenue), Oakland (Telegraph Avenue in the Temescal and MacArthur Boulevard in the Dimond District), San Leandro (San Leandro Boulevard), Hayward (Mission Boulevard), Dublin (all around), Pleasanton (Owens Drive at Dublin/Pleasanton BART), and El Cerrito (San Pablo Avenue);
- BART Stations: 10 -foot banners were hung at the following BART Stations: North Berkeley, MacArthur, Rockridge, Fruitvale, San Leandro, Fremont, and Dublin/Pleasanton;
- Print: Ads ran in the East Bay Express (May 5 Bike to Work Day Guide) and the Tri-City Voice (week of May 4);
- Kiosks: Berkeley downtown BART Station.


## 2011 Advertising Campaign

The 2011 advertising campaign was branded Get Rolling/Ride Into Life!, and consisted of a similar set of bicycling lifestyle advertisements as in 2010, with much of the same imagery and look as in 2010, but different tag lines (Ride Into Life was added). Ads ran for a four-week period leading up to Bike to Work Day.

- Total Number of Ads Placed: 178 (including Contra Costa County, which was not funded by Alameda CTC)
"Get Rolling/Ride Into Life!" ads were placed in Alameda County as follows:
- LAVTA Bus Tails: 20 bus tails in the Tri-Valley;
- Bus Shelters: 25 bus shelters in the City of Oakland;
- Street Pole Banners: 127 street pole banners were installed in Albany/Berkeley (Solano Avenue), Oakland (Telegraph Avenue in the Temescal and MacArthur Blvd in the Dimond District), San Leandro (San Leandro Boulevard), Hayward (Mission Boulevard), Dublin (all around), Pleasanton (Owens Drive at Dublin/Pleasanton BART), and El Cerrito (San Pablo Avenue);
- Print: Ads ran in the East Bay Express (May 4 Bike to Work Day Guide);
- Kiosks: 4 were placed (Berkeley Bike Station, Old Oakland, Jack London Square, and Fremont central business district).
- BART Station Banners: displayed in 2010 only


## Differences between 2010 and 2011 Ad Campaigns

While the Alameda CTC contributed the same amount of funds to the Bike to Work Day advertising campaign in 2010 and 2011, the 2010 campaign included placing more ads on AC

Transit and in BART stations, while the 2011 campaign was focused on re-branding to add the "Ride Into Life" message to the "Get Rolling" message and shifting some of the bus advertising to LAVTA buses in East County.

- Ads on AC Transit Bus Tails: 2010 only
- LAVTA Bus Tails: 2011 only
- Print: Tri-City Voice was used in 2010 only
- Kiosks: In 2010, only one kiosk ad was placed; in 2011, 4 were placed
- Bus Shelters: 2010 had nearly twice as many placements as 2011, with a wider geographic spread than in 2010


## Project

In October 2009, the Alameda CTC Board approved Transportation for Clean Air (TFCA) funding to conduct a two year study to assess how effective the Get Rolling advertising campaign and the Bike to Work Day program are at encouraging commuters to travel to work by bicycle. The information from the study was intended to provide information to help guide the Board's decisions about whether the Bike to Work Day Program should continue to be funded at the same level and to identify other ways to encourage commuters to bicycle to work, and to bicycle in general.

Questions addressed as part of this research project follow, along with the section in this report where the responses to the questions are found:

- Should the agency continue to promote BTWD and the Get Rolling advertising campaign at current levels? (See 2, Recommendations)
- Are there other ways to more effectively encourage commuters to shift to bicycling? (See 2, Recommendations)
- What are the perceived barriers to bicycle commuting? (See 1, Top Research Findings)
- What can be done to help overcome barriers to bicycle commuting? (See 2, Recommendations)
- How many reduced vehicle miles and resulting reduced emissions from eliminated trips can be attributed to BTWD in 2010 and 2011? (See 5C, Bike to Work Day and Events)
- How many county residents participate in BTWD? (See 1, Top Research Findings)
- Who is the 'next' likely group to participate in BTWD - how large is that group, and what would help encourage their participation? (See 1, Top Research Findings and 5d, Targeting Future Promotions)

This report summarizes findings from the two-year project, which consisted of two telephone surveys of county adult residents and two web-based surveys of bicyclists. It also includes a comparative report on Bike to Work Day activities in programs throughout the United States. The report is organized into the following sections (detailed section breakout with page numbers can be found in the table of contents):

1. Top Research Findings
2. Recommendations
3. Methodology
4. Detailed Research Findings
a. Bicycling Habits and Perceptions
b. Advertising Campaign
c. Bike to Work Day/Bike to Work Events
d. Targeting Future Promotion
e. Sub-County Level Analysis
5. Comparative analysis of Bike to Work Day Programs throughout the United States

## Top Research Findings

## Bicycling in Alameda County

- About half of Alameda County residents (48\%) have access to a working bicycle, while $83 \%$ have access to a car.
- One in five Alameda County residents ( $20 \%$ ) report riding a bicycle at least once a week for any purpose, while another $15 \%$ say they ride less frequently (but more than never).
- North County (Oakland, Alameda, Albany, Berkeley, Emeryville and Piedmont) has the highest concentration of cyclists using their bicycles for transportation, while East County residents (Dublin, Pleasanton and Livermore) are most likely to ride for health and recreation.
- More people ride bicycles for health and recreation than for any other purpose, and health benefits are the most compelling reason to ride for both overall residents and cyclists.
- Environmental benefits, reduced energy usage, air quality improvements, and reduced greenhouse gas emissions are also strong motivators for bicycle riding.
- Reduction in traffic congestion and avoidance of traffic do not rank as highly as motivators for bicycle riding.
- Approximately one in ten (11\%) of working residents in the county say they ride their bicycle for at least part of their trip to work at least once a week.
- One out of four Alameda County residents who drive (or $21 \%$ of the county adult population) say it would not be difficult to replace at least one car trip per week with bicycling.
- The safety of riding a bicycle is a top concern for many current and would-be bicyclists, particularly with cars on roadways $-66 \%$ are worried about riding with cars on the road, $65 \%$ believe there aren't enough bike lanes on their route, $64 \%$ are worried about personal safety, and $63 \%$ are worried about getting home in an emergency. Trip distance is also a significant barrier for many residents, with $65 \%$ saying they go places that are too far away to ride.
- The top concerns remained consistent over the two-year study period.
- Residents are most likely to ride more often if they have more places where bikes can ride away from cars, like bike paths ( $56 \%$ more likely to ride), followed by safety improvements at major intersections ( $54 \%$ more likely to ride), more secure bike parking (51\%), more dedicated bike lanes (49\%), and more secure parking at transit stations (47\%).


## Bike to Work Day

- Nearly two-thirds (72\%) of adult residents of Alameda County have heard of Bike to Work Day (BTWD).
- In the 2011 telephone survey, $9 \%$ of adult residents said they have participated in Bike to Work Day at some point, with 2\% participating in 2011.
- These figures are lower than reported in 2010, when $17 \%$ said they had participated in Bike to Work Day at some point, and 5\% said they participated in that year.
- Three quarters (74\%) of 2011 BTWD participants from the bicyclists' web survey rode their bikes the entire distance to work on Bike to Work Day; 20\% combined biking and public transit; 2\% combined biking and driving a car.
- Two out of three bicyclists who participated in Bike to Work Day were likely to have ridden their bicycles anyway, but $30 \%$ would have driven in a car alone.
- In the two years studied, according to self-reported participation and mileage figures, and understanding that survey data is subject to known and unknown sources of sampling and other margins of error, Alameda County residents drove about one hundred thousand to one hundred fifty thousand miles less on Bike to Work Day.
- 2010: 15,210 solo trips replaced $\times 10.25$ average miles traveled by bicycle $=$ 156,358.8 reduced Vehicle Miles Traveled (VMT).
- 2011: 7,005 solo trips replaced $\times 13.17$ average miles traveled by bicycle $=$ 92,250 reduced VMT.
- Participants in the 2011 bicyclists' survey heard about Bike to Work day from a variety of sources, including the East Bay Bicycle Coalition (EBBC) website (33\%), their employer (32\%), a coworker (32\%), a poster or billboard (18\%), 511.org (16\%), a local bicycle organization newsletter (16\%), or www.youcanbikethere.com (the Bay Area BTWD website) (15\%).
- Almost all Bike to Work Day participants are likely to participate again. In 2011, 67\% of adult residents and $94 \%$ of bicyclists who participated in Bike to Work Day say they are very likely to participate in 2012, with most of the remainder saying they are somewhat likely to participate in 2012.
- Twenty-seven percent (27\%) of participants from the bicyclists' web survey who participated in BTWD 2011 say they ride their bicycles more often since participating, with $11 \%$ of this group saying they ride a lot more often.
- Those residents whose employers generally support bicycling to work report a higher level of participation in BTWD than those who have less supportive employers.


## Team Bike Challenge

- Approximately one in ten adult residents of Alameda County (9\%) have heard of the Team Bike Challenge, while approximately three-quarters (73\%) of those from the bicyclists' web survey have heard of it.
- Amongst bicyclists from the web survey, awareness of and participation in the Team Bike Challenges (TBC) is highest in Central County (Hayward, San Leandro, unincorporated Central County including San Lorenzo): $80 \%$ are aware of TBC, and 45\% participated.
- Nearly half of bicyclists who participated in the Team Bike Challenge did so due to workplace support or peer relationships.
- Fifteen percent (15\%) of past participants who did not participate in TBC in 2011 couldn't find a team/teammates.
- Thirty-five percent (35\%) of 2011 Team Bike Challenge participants from the web survey of bicyclists say they ride more after participating in the TBC (with 9\% saying a lot more). This is higher than the rate of $27 \%$ of all BTWD participants who say they bicycle more after participating in BTWD (with $11 \%$ saying they participate a lot more)


## Walk and Roll to School Day

- One in five adult Alameda County residents (21\%) have heard of Walk \& Roll to School Day, with awareness slightly higher amongst those who took the bicyclist survey (30\%).
- Participation in Walk \& Roll to School Day is consistent across surveys as well, as well, with $9 \%$ of adult residents in the 2011 telephone survey and $10 \%$ of bicyclists in the web survey reporting participation.
- Participation in Walk and Roll to School Day 2011 by adult residents was highest in East County (17\%), followed by South (Union City, Newark and Fremont) (12\%) and North (11\%). Just 2\% of Central County adult residents participated in Walk \& Roll to School Day.


## Advertising

- While advertising penetration is low in Alameda County, people that have seen the advertisements find them effective, and the campaign gets the message of riding a bicycle as a regular form of transportation across to those who have seen it.
- Bicyclists are more likely than the overall population to recall the ads.
- When they view the ads, most bicyclists believe they are effective in promoting bicycling as a form of transportation.
- Four out of five ( $81 \%$ ) of those from the 2011 bicyclists survey who said they had seen Get Rolling/Ride Into Life ads thought they had something to do with bicycling.
- Upon viewing a sample of the ads in the 2011 web survey, $60 \%$ of bicyclist respondents thought the ads were either very or somewhat effective, while $34 \%$ thought they were not very effective, and $5 \%$ thought they were not at all effective.
- The image that recalls gas prices and suggests that money could be saved by cycling was cited most often as the most effective component of the ad campaign, with $37 \%$ finding that imagery effective in 2011, as compared to $22 \%$ in 2010. (The 2011 survey was taken more shortly after Bike to Work Day than the 2010 survey.)


## Segmentation of Bicyclists and Potential Targets

- Nearly the same size target groups of county residents most likely to increase biking resulted from the two "segmentation methods," discussed below. This shows that there is some widespread receptivity to messaging about cycling as transportation with about one in five adults in Alameda County.
- To identify and target groups most likely to increase bike ridership, the two adult population surveyed by phone were segmented using two distinct methods:
- in the 2010 survey, current biking habits and attitudes about barriers to bicycling were used as a segmentation method, and
- in the 2011 survey, current driving behavior and self-reported ease of replacing a car trip with a bike trip were used as a segmentation method.
- Committed bicyclists who already use a bicycle as transportation with frequency are largely men in North County. Whites (36\%) and Hispanics (28\%) make up a majority of this group.
- While encouraging bicycling as a means of transportation for all residents and workers in Alameda County is a goal, several potential bicycling groups were identified for future targeting as having the highest potential for increasing bicycle ridership:
- One of the groups with the highest potential to increase bike ridership is white men in North County who ride bicycles as transportation occasionally, but could be encouraged to ride more. They tend to be solo drivers who are concerned about safety issues and ride logistics (like weather, secure bicycle parking, and showers).
- Another potential target group to increase bike ridership is those who frequently ride recreationally, but do not use their bicycles as a mode of transportation. Two-thirds of this group are men, with East County residents having the largest share (as compared with the overall population). This group also tends to drive alone most often, with safety and distance to travel ranking high on their list of concerns.
- A third target group was created from those who drive regularly but say they can replace a car trip with a bike trip with relative ease. Half of this group are women, and they tend to be from North or Central County. This group equally cites safety concerns and difficulty as reasons they don't ride more often as transportation.


## Summary of Findings from Comparative Bike to Work Day Program Analysis

To learn about other Bike to Work Day programs, Alta Planning + Design conducted a survey of selected existing Bike to Work programs in North America by interviewing program staff. The results of the survey include successes and lessons learned from each of eight programs, as summarized below.

## Programs Surveyed

Based on the jurisdiction size, location, and program elements, as well as the ability to interview program staff, Bike to Work programs from the following locations were included in the survey:

- San Luis Obispo County, California
- Silicon Valley, California
- Boulder, Colorado
- Denver, Colorado
- Chicago, Illinois
- Oregon
- Toronto, Ontario
- Victoria, British Columbia


## Program Highlights and Successes

The following Bike to Work program elements emerged as unique and innovative strategies currently being implemented:

- Mobile applications for trip-tracking (Silicon Valley/Bay Area)
- Executive and celebrity bike commute challenges (San Luis Obispo, Silicon Valley)
- Robust event calendars (Toronto)
- Commuter stations sponsored by local businesses (Chicago)
- Competition among workplaces (Oregon)
- Media event with a bike/auto/transit race (Victoria)

Further, program staff recommended the following strategies as effective Bike to Work program components:

- Online trip-tracking
- Competition between individuals or groups
- Incentives/rewards for participating
- Promotion through workplaces, social media, and word of mouth
- Regional programs and branding (for cohesive messaging and to fully capture all commuters within a given area)


## Lessons Learned

Based on the interviews completed, program coordinators should consider the following options when creating or modifying a Bike to Work program:

- Timeframe: single day vs.week- or month-long programs
- Audience: workplace-based vs.individual- or team-based programs
- Structure: trip-tracking competition vs.informal events
- Incentives: whether or not to use them in the interest of encouraging participation

Based on the eight programs evaluated, the following strategies are not recommended based on a lack of evidence that they are successful in meeting the goals of this type of program:

- Paper-based trip tracking: As program participation grows, this type of tracking is seen as unsustainable for effective program management.
- Single-day programs: These events are effective at generating media attention, but they are expensive relative to their impact.
- Incentives/rewards for all participants: Attractive rewards can be expensive, particularly as program participation grows.
- Local programs that duplicate or compete with elements of a regional program: Participants may be confused, and multiple efforts may fragment workplaces or teams.


## Recommendations

## Bike to Work Day

- Provide support for employers to promote Bike to Work Day at the workplace, encourage employers to provide bicycle support facilities such as bike parking and showers, and promote communications about bike routes between work and home. These efforts can all help increase bicycling as a regular commute mode. The workplace is the most common place people got information about Bike to Work Day, most likely reflecting the heavy outreach to employers throughout Alameda County and the region. Bike to Work Day participants had most often heard of Bike to Work Day from their employer. People who did not participate did not receive much information about it from their employers. Workplaces are key partners in supporting biking to work and Bike to Work Day. Helping more employers create a culture where cycling can be easily integrated into worker commutes could help increase cycling in the county. Some of the county's larger employers could be targeted for pilot programs to understand how such a relationship would affect bicycling behaviors.
- Build on people's enthusiasm for sharing about their participation in Bike to Work Day with friends, co-workers and classmates. Many participants felt pride in their Bike to Work Day participation, shared it through social media, and discussed it with friends and coworkers. Encouraging this type of sharing can help spread the word about Bike to Work Day.
- Team Bike Challenges and Walk and Roll to School Day are opportunities to reach throughout Alameda County.
- Participants in the Team Bike Challenge (TBC) are more likely to increase future bicycling frequency than the rest of Bike to Work Day participants; however, finding a team or teammates has been a challenge for some past TBC participants. Facilitating TBC team formation can encourage more people to bike ride more often.
- Walk and Roll to School Day participants come from throughout the county, with the highest participation rates coming from East Alameda County. The Walk and Roll to School Day event presents an opportunity to communicate about bicycling with a group that sometimes sees it as too difficult to fit into their daily lives.


## Advertising

- Continue to run image-based advertising similar to the current approach, at least at the current funding levels; increase the number and placements of advertisements if possible. The current image-based advertising campaign is effective at communicating about bicycling as a mode of transportation, for those that have seen the ads. Delivering more ads to the populations most likely to increase their bicycling behavior is the most cost-efficient way to use limited resources to the greatest potential benefit.
- Continue to place ads in highly visible places. Ads on buses and bus shelters were highly visible in 2010, and flyers and handouts were most commonly recalled in 2011.
- Look for other approaches to promote BTWD and bicycling in areas of the county where bus and banner advertising is not as prevalent, such as through employers, community events, and local schools. Ads in these areas could also be complemented by other marketing approaches, such as increasing outreach to businesses and schools through the Team Bike Challenge and Walk and Roll to School Day.
- The most compelling messaging and images about bicycling are those that communicate the potential to save money and the environment while improving personal health. While some of the current images are communicating the money-saving potential (such as the image with high gas prices), more clearly connecting bicycle riding with money savings, the environment, and a healthy lifestyle would encourage more people who are "on the fence" to integrate cycling more into their regular travel habits.
- A focus on increasing riding by people who are currently bicycling is likely to be a more effective strategy for reducing vehicle traffic and increasing bicycling than attempting to convert non-cyclists. Those who are already bicycling on occasion, for any reason, are more likely to view cycling as a viable mode of transportation than those who are not currently bicycling.
- Provide target groups with the tools they need to increase their ridership: how to ride on the road safely and how to effectively deal with weather and distance challenges. Many in the target groups are concerned about safety riding with cars, distance, weather, and showering issues. These issues can be addressed in communications about riding safely on the road or help finding bike-safe routes, gear information (for safety and visibility, for bad weather, and for staying cool and sweat-free during the commute) and logistics details (to help those concerned about effort or distance find solutions that allow them to commute more easily by bicycle).


## Additional Approaches to Encouraging Bicycling in Alameda County

- Bicycle safety infrastructure improvements should be pursued to encourage more cycling. The safety of cycling is a major concern across the board. This concern appears to be related more to riding with cars on the roads and lack of bicycle facilities (like bicycle lanes and bicycle paths) than it is to the bicyclists' concern of their bike riding skills. Facilities that separate cars from bicyclists, such as bike lanes and bike paths, were more frequently mentioned as making people more likely to ride than other facility improvements. The need for safe and secure bicycle parking also rose to the top as a major barrier to biking to work.
- At the same time, finding ways to help cyclists be more comfortable on the road, such as through bicycle safety education classes for all ages, would help lower one major barrier to cycling.
- When marketing bike safety classes, a greater focus on riding confidently and safely with cars on the road, with less focus on how to handle a bike, would appeal to a wide range of potential participants and address some of the barriers felt by the target groups. Some of the target groups report that riding with cars on the road is one of their greatest concerns about bicycling more often as a form of transportation. Communicating that bike safety classes will give them tools and strategies for safely sharing roadways with cars can boost participation in classes, and lead to increased bicycling.


## Recommendations from Comparative Bike to Work Day Program Analysis

## Overall

- To make efficient use of technological and financial investments in the Bike to Work Day program, it should be longer than one day (e.g., a week- or month-long event).
- In an area with a successful regional program, Alameda County should continue to partner with and learn from existing Bike to Work Day efforts in the Bay Area.


## Trip Tracking

- As a way to encourage and streamline participation in Bike to Work Day, consider using an existing website/database that is used within the region. This will allow participants to easily track their trips. It will also avert high costs of building a new trip-tracking website.
- Use mobile applications for trip tracking.
- In a trip-tracking program, encourage individuals to easily participate with simple steps such as going online, registering, and logging their first trip. Reduce barriers to participation such as being required to ask permission from a supervisor, recruit a team, make a donation, or take other extraneous action in order to participate in the program.


## Team Bike Challenge

- In order to attract more new riders, consider adding competitive elements beyond distance, such as percentage of days participants commuted by bike or percentage of employees at a workplace participating.
- When promoting team participation, as an alternative to being required to create a team, allow participants to have their default team be their workplace. This would eliminate a potential barrier to participation.


## Encouragement

- Be creative with rewards structures and messaging. Participants respond to rewards, both tangible (prizes) and intangible (information about calories burned, dollars saved).
- Get civic and employer leaders to commit to riding as inspiration for others.


## Marketing

- Market bicycling as a positive, appealing commute option rather than conveying a potentially discouraging safety message.
- Brand the Bike to Work Day program with as few names as possible. For example, Oregon has Oregon's Bike Commute Challenge, in contrast to the San Francisco Bay Area Bike to Work Day program, which includes several brands such as Silicon Valley/Bay Area's Team Bike Challenge, iBikeChallenge, Bike to Work Day and youcanbikethere.com.
- Allow participants to create and promote their own events through the program's website or calendar (as in Toronto and Oregon).


## Research Methodology

A total of four surveys were conducted as part of this assessment. Two of the surveys were random representative telephone surveys of Alameda County adults, which serve to give a general picture of countywide attitudes towards biking, participation in Bike to Work Day activities, and Get Rolling/Ride Into Life ad penetration. The other two surveys were web-based surveys targeted to people who bicycle in Alameda County. Because the telephone survey sample yielded only a small sample of bicyclists (due to low representation in the countywide population), the web-based survey of bicyclists allows exploration in more depth about the attitudes and behaviors of bicyclists in the county.

## Wave 1 Surveys:

A telephone survey of a representative sample of 400 adult residents of Alameda County was conducted November 30 - December 5, 2010. The results have a margin of error of $\pm 4.9$ percentage points at the county level.

Following the initial telephone survey, a web survey targeted to bicyclists in Alameda County was conducted. The survey was distributed through many online channels, including the East Bay Bike Coalition mailing list, Bike to Work Day energizer station sign-in sheets, and social networking pages for organizations like the Bay Area Bike Coalition, TransForm, Walk Oakland Bike Oakland, UC Berkeley, and Oakland Yellowjackets. A total of 656 bicyclists completed the web survey, which was open from December 7, 2010 through January 17, 2011.

## Wave 2 Surveys:

The second representative countywide telephone survey was conducted with 402 adult residents of Alameda County June $20-26,2011$. The results have a margin of error of $\pm 4.9$ percentage points at the county level.

Following the second telephone survey, the second web survey of bicyclists in Alameda County was conducted. The survey was again distributed through online channels, including the East Bay Bike Coalition mailing list, Bike to Work Day energizer station sign-in sheets, and social networking pages for organizations like the Bay Area Bike Coalition, TransForm, Walk Oakland Bike Oakland, UC Berkeley, and Oakland Yellowjackets. A total of 679 bicyclists completed the web survey, which was open from July 26 through August 25, 2011.

In reading the following analysis, it is important to remember some basic things about the surveys:

- Telephone surveys (Residents) - Representative samples of adult residents of Alameda County. Data from these surveys are reliable and projectable across the entire county adult resident population, each with a margin of error of $\pm 4.9$ percentage points. Quotas were set by region to allow analysis at the regional level with a known margin of error as follows (countywide results were weighted to reflect actual population distribution):
- North: Margin of error $\pm 8.0$ percentage points
- Central: Margin of error $\pm 9.8$ percentage points
- East: Margin of error $\pm 11.3$ percentage points
- South: Margin of error $\pm 11.3$ percentage points
- Web surveys (Bicyclists) - Self-selected samples of bicyclists who regularly cycle in Alameda County, with survey access provided exclusively through email and internet links. Because there is no way to assure randomness or representativeness in a sample administered in this way, the data from these surveys are not necessarily projectable across the entire bicycling population of the county. In addition, it is reasonably safe to assume that the bicyclists taking this survey are likely to be more interested in bicycling as transportation (due to the distribution channels for these surveys), as well as more likely to be from North county (again, due to survey distribution channels).
- Survey Timing - The two waves of surveys were done at different times of year, with the first wave done in early winter 2010, about 6 months after Bike to Work Day 2010, and the second wave done in early summer 2011, only one month after Bike to Work Day 2011. This timing difference may contribute to some of the changes seen over the twoyear survey period, with respondents potentially able to more accurately report their own behaviors about Bike to Work Day in the 2011 survey, but some ability to better report summer/fall cycling behaviors in the 2010 survey.
- In general, data from both years of surveying is presented in the report. However, some questions were only asked in one of the two years, in which case only that year of data is described.


## Detailed Research Findings

## Bicycling Habits and Perceptions

## Bicycling Habits

About half of Alameda County residents (48\%) have access to a working bicycle, while $83 \%$ have access to a car. A little less than half ( $44 \%$ ) have both a bike and a car, $39 \%$ have a car only, $4 \%$ have a bike only, and $13 \%$ have access to neither a bike nor a car. Among respondents to the bicyclists' web survey, all have access to a bike and $85 \%$ have access to a car.

## 2011: Access to a Car or Bicycle

■ Bicyclists $\quad$ Residents


In the 2011 survey, one in five residents (20\%) report riding a bicycle at least once a week for any purpose, while another $15 \%$ say they ride less frequently (but more than never).

Specifically, $21 \%$ of residents ride at least once a week for health or recreation, while $14 \%$ ride to get to a destination at least once a week.

Residents: In general, how many days per week would you say you...


Respondents to the web survey of bicyclists are much more likely to ride a bicycle regularly, with $89 \%$ saying they ride at least once a week for any purpose, $83 \%$ saying they ride at least once a week to get to a destination, and $66 \%$ riding a bicycle at least once a week for health or recreation.

Cyclists: In general, how many days per week would you say you...
$\square$ Weekly or more $\quad$ Less than once /wk $\quad$ Never / Don't Know / NA


Sixty-two percent of those who took the cyclist web survey consider themselves "experienced" cyclists, while $33 \%$ class themselves as "intermediate" and just 5\% claim to be "novice" riders. Half of respondents in the web survey said they most often ride in traffic lanes, while $45 \%$ most often ride in bike lanes (a lesser number reported riding on separate bike paths).

From the phone survey, two-thirds (66\%) of adult residents of Alameda County who work outside their home work within the county, and another $15 \%$ work in San Francisco. On average, residents surveyed by phone work about fifteen and a half miles from home, with one in five (22\%) working within three miles of home, and one quarter (25\%) working 20 miles away or more.
Three-quarters of working county residents in the phone survey usually drive alone to work, while one in ten ( $10 \%$ ) working residents say they ride their bicycle for at least part of their trip to work at least once a week. For those who combine cycling with public transportation, nearly all take their bicycle with them on public transportation.

Residents: Methods of transportation usually taken to work


| Bike and transit behavior for those who combine <br> biking with transit | Takes bike on | Parks bike before |
| :--- | :--- | :--- |
| Takes a PUBLIC BUS for part of the trip $(\mathrm{n}=36)$ | $81 \%$ | $19 \%$ |
| Takes BART for part of the trip $(\mathrm{n}=117)$ | $71 \%$ | $29 \%$ |
| Takes theTRAIN for part of the trip $(\mathrm{n}=20)$ $90 \%$ <br> Takes theFERRY <br> for part of the trip $(\mathrm{n}=8)$ $100 \%$ - $\mathbf{l}$ |  |  |

Over half (56\%) of working adult residents in Alameda County from the telephone survey have access to a changing area at their workplace, while two in five (41\%) have access to bike racks, and $30 \%$ each have access to a shower or secure bike room or locker. For adult students, twothirds (67\%) have bike rack access at school, while half (49\%) can access a changing room, 31\% can access a shower, and $23 \%$ can access a secure bike room or locker.

## Do you have access to... (working adult residents)

$$
\square \text { At Work }(n=285) \quad \text { At School }(n=98)
$$



For bicyclists from the web survey, bike racks are the most common amenity at both work (71\% have access) and school ( $82 \%$ have access). Three in five ( $62 \%$ ) bicyclists have access to a changing area at work ( $41 \%$ at school), half have access to a secure bike room or bike locker ( $16 \%$ at school), and $38 \%$ have access to a shower ( $23 \%$ at school).

> Do you have access to... (working bicyclists) $\square$ At Work $(n=626)$


## Bicycling Perceptions

Among adult residents of Alameda County from the telephone survey, health and environmental benefits are the most compelling reasons for Alameda County residents to ride a bicycle. On a scale from one to seven, where 1 meant not at all a convincing reason to ride and 7 meant a very convincing reason to ride, "Is good for your health" is the most convincing reason to ride a bicycle as a form of transportation among Alameda County adult residents, with a mean of 6.08. The next three top-ranked responses on the list relate to environmental and energy consumption concerns: "Is better for the environment" got a mean of 5.95, "Reduces gas and energy usage" scores a mean of 5.83, and "Improves air quality" scores 5.81. Reducing traffic congestion and saving time by avoiding traffic are quite low on the list, with means of 4.99 and 3.94 , respectively.

Priorities are similar among those who participating in the bicyclists survey, with "Is good for your health" again scoring the top mean response, at 6.17. After that, bicyclists have more pragmatic reasons to ride, with a mean score of 5.78 for both "Saves money" and "Helps manage your weight." Reducing gas and energy usage is fourth on the list for bicyclists, with a mean of 5.68.


Concerns about time/distance and safety top the list of reasons people do not ride bicycles as transportation more often. In an open-ended question in the 2011 research, nearly half (45\%) of adult residents from the telephone survey, and $51 \%$ of bicyclists from the web survey, say time or distance is the reason people don't use their bikes to get around more. For websurveyed bicyclists, time and distance are superseded only by safety concerns, which $72 \%$ of bicyclists say is the reason people don't use their bikes to get around more ( $32 \%$ for residents). For both adult residents and bicyclists, concerns about difficulty or not being in good enough shape were the third most frequent response to this open-ended question ( $29 \%$ for residents, $38 \%$ for cyclists) about reasons people would not ride a bike more often.

2011: Top reasons people do not ride their bicycles as a means of getting places more often (openended)


In a set of closed-ended questions about obstacles to bicycling in the 2010 research, concerns about safety and distance were also high on the list for county residents in the telephone survey, along with weather concerns. In general, adult residents reported a higher level of concern than bicyclists about every potential obstacle to bicycling tested in the survey. Seventy-two percent of residents said they are worried about cars on the road, $66 \%$ cited fear
of bad weather, and $65 \%$ each said there aren't enough bike lanes on their route or that the places they go are too far away to ride. Sixty-four percent (64\%) of residents were worried about their personal safety, and 63\% worried about getting home in an emergency.

On the same set of questions in 2010, respondents to the bicyclists' survey had a generally lower level of concern about all of the barriers tested, and their concerns were generally more practical day-to-day matters. Bicyclists' top worry was that there are not enough bike lanes or bike-safe streets on their route, with $53 \%$ saying that is an important concern. Just under half were worried about cars on the road and the inability to take bikes on BART during commute hours. These were followed by 47\% each concerned about the amount of things they have to carry, having a safe place to park their bike at their destination, and poor road and pavement conditions.

## 2010: Importance of factors in choosing to not ride a bicycle (\% Rated Important)



In the residents survey in 2011, four in five (79\%) said they drive a car at least one day a week. Of that group, one quarter (25\%) believe it would not be difficult to replace at least one of their weekly car trips with a bicycle trip, with $11 \%$ saying not very difficult, and $14 \%$ saying it would be not at all difficult. Over half of adults who drive a car at least once a week believe it would be very difficult to replace at least one car trip per week with a bicycle trip.

2011: In general, how many days per week would you say you...


| Thinking about all of the trips you take <br> in a car each week, how difficult would <br> it be to instead ride a bicycle for at <br> least one of those trips? |  |
| :--- | ---: |
| Very difficult $55 \%$ <br> Somewhat <br> difficult $19 \%$ <br> Not very difficult $11 \%$ <br> Not at all difficult $14 \%$ <br> Don't know $1 \%$ |  |

In the 2010 research, respondents were asked about how to encourage bicycling as a mode of transportation; residents and bicyclists were generally in agreement on these questions. The improvements rated the highest for both groups centered on safety measures and better access to bike parking and transit. Residents are most likely to ride more often if they have more places where bikes can ride away from cars, like bike paths ( $56 \%$ more likely to ride), followed by safety improvements at major intersections ( $54 \%$ more likely to ride), more secure bike parking (51\%), more dedicated bike lanes (49\%), and more secure parking at transit stations (47\%). Priorities for bicyclists are similar, with $65 \%$ saying they would ride more often with more dedicated bike lanes, $62 \%$ saying having more places for bikes to ride apart from cars would help them ride more often, and $59 \%$ each saying they would ride more with safety improvements at major intersections and if bikes were allowed on all forms of public transit at all times.

2010: Much more likely to ride my bicycle if there were...


Few from the telephone survey of county residents have taken a bicycle safety class. Sixty-eight percent (68\%) of those who took the 2011 bicyclists survey say they have never taken a bike safety class or workshop (69\% in 2010). Thirteen percent (13\%) have taken the Traffic Skills 101 Classroom Workshop (11\% in 2010), 6\% the Traffic Skills 101 Road Class (7\% in 2010), 6\% have attended a Kids' Bike Rodeo ( $5 \%$ in 2010), and 2\% have taken the Family Cycling Workshop put on by EBBC ( $1 \%$ in 2010). Two in ten (19\%) say they have taken some other bike safety class or workshop (same in 2010).
Sources for information about bicycling are disparate. In the web survey of bicyclists about one in five ( $22 \%$ ) say they get bike event and route information from the East Bay Bicycle Coalition (EBBC) or the EBBC newsletter (which is not surprising given that the bicyclists survey was distributed by the EBBC among others), $11 \%$ look for that information on the internet in general, $8 \%$ use Google or Google maps, $8 \%$ talk to coworkers, $7 \%$ from unspecified email lists, $6 \%$ talk to their friends, and $4 \%$ report getting cycling information from 511.org.

## Advertising Campaign

Recall of the Ride Into Life/Get Rolling advertising campaign is low, but consistent across the two-year study. Just 4\% of adult Alameda County residents in 2011 initially recall a campaign with the words "Ride Into Life" or "Get Rolling" (3\% in 2010, where they were only asked about "Get Rolling"). When told it is about encouraging bicycle riding, recall rises to $12 \%$ ( $14 \%$ in 2010). Recall by bicyclists is also consistent, with $13 \%$ initially recalling a "Ride Into Life" or "Get Rolling" campaign (14\% in 2010), and $16 \%$ saying they recall it after reading the campaign's message ( $17 \%$ in 2010).

In the bicyclist survey, after the prompt about the Ride Into Life/Get Rolling campaign, respondents were shown a subset of images from the advertising campaign. Nearly one in three of respondents from the bicyclist survey (30\%) recalled having seen the advertisements after reviewing the images ( $27 \%$ in 2010).

## 2011: Recall Seeing Advertisements



Images shown in survey are attached as Appendix B to this report.

In the 2011 survey, North County residents are the most likely to recall seeing the advertisements after being reminded of the campaign's message, with $17 \%$ of residents from the region recalling the ads (the same as in the 2010 survey). South and East County have ad recall rates in 2011 of 10\%, which are statistically unchanged from the 2010 survey given the sample sizes and margins of error. Eight percent (8\%) of Central County residents recall the ads in 2010 , down from $17 \%$ in 2010, a difference just at the edge of the 10 point margin of error for the region.
Ad recall after prompting is consistent across age groups in 2011, at 12\%-13\% in each age group. In the 2010 telephone survey, older residents were more likely and those aged 30-39 were least likely to recall the ads.


Looking at responses to the web survey of bicyclists, recall of advertisements was highest in North County in both 2010 and 2011, with $33 \%$ in 2011 recalling seeing the ads after being shown images of them ( $28 \%$ in 2010). South and East County had the lowest recall in the cyclist survey in 2011, with $16 \%$ and $19 \%$ respectively. Across both years, older bicyclists are least likely to recall the advertisements.


Bicyclists who have participated in some specific events related to bicycling are more likely to recall the advertising campaign. After viewing images of the campaign recall among those who participated in the Team Bike Challenge is at $35 \%$, and recall among those who have participated in Walk and Roll to School Day is at 46\%. One-third ( $33 \%$ ) of those in the bicyclists survey who participated in Bike to Work Day 2011 recall seeing the advertisements, a statistically insignificant difference from the overall bicyclist population.

For those who could recall seeing the advertisements (prior to being prompted or shown images), recall of what they were about is reasonably accurate. Four out of five (81\%) of those from the 2011 bicyclists survey who said they had seen Get Rolling/Ride Into Life ads thought they had something to do with bicycling. One-third (33\%) said they were about using a bike for everyday transportation, $27 \%$ said the ads were about biking, and $20 \%$ said they were about Bike to Work Day or biking to work. Just $11 \%$ of those who remembered seeing the ads were unable to give an answer when asked what they were about.

Web survey participants were most likely to say the advertising campaign was about using a bicycle for everyday transportation in 2011, while in 2010 they were most likely to say the campaign was about Bike to Work Day and biking to work. This change may in part be driven by a change in the imagery used in the advertising campaign: The 2011 images were more focused on bicyclists engaged in commuting activities, while 2010 images had more children and families. In addition, the words "Ride into Life" were added to the 2011 imagery (and survey question), which may better communicate the theme of riding as a part of a lifestyle.

| As far as you can recall, what was the <br> Ride into Life or Get Rolling advertising <br> about? (Bicyclists) | 2010 | 2011 |
| :---: | :---: | :---: |
| Using bike as everyday <br> transportation/multiple purposes | $21 \%$ | $33 \%$ |
| Biking | $28 \%$ | $27 \%$ |
| Bike to Work Day/Month/ <br> Biking to work | $32 \%$ | $20 \%$ |
| Using bikes on public transit | $6 \%$ | $4 \%$ |
| Recreational biking | $3 \%$ | - |
| Other | $8 \%$ | $8 \%$ |
| Other/ Don't Know | $11 \%$ | $8 \%$ |

Of respondents in the bicyclists survey who said they had seen the 2011 Ride Into Life ads, one third recall seeing them on flyers or handouts, one in five ( $21 \%$ ) recall seeing them at a BART station, $19 \%$ recall them on a bus shelter, $17 \%$ on a billboard, and $13 \%$ on the back or side of a bus. Recall of bus shelter and vehicle placements was significantly higher in 2010; this is likely reflective of reduced presence in 2011 on buses and at BART.

| Source: EBBC BTWD Reports | 2010 | 2011 |
| :---: | :---: | :---: |
| Bus Tails | $150$ <br> AC Transit: Fremont - Richmond | $\begin{gathered} 20 \\ \text { LAVTA - Tri-Valley } \end{gathered}$ |
| Bus Shelters | $\begin{gathered} 45 \\ \text { Hayward - Richmond } \end{gathered}$ | $25$ <br> Oakland |
| Street Pole Banners | $127$ <br> San Pablo Ave. in El Cerrito, Solano Ave., Temescal, Dimond, San Leandro Blvd. (San Leandro), Mission Blvd. (Hayward), Dublin, Pleasanton (BART) | $127$ <br> Same placements as 2010 |
| BART Stations | $10$ <br> Richmond, El Cerrito Del Norte, North Berkeley, MacArthur, Rockridge, Fruitvale, San Leandro, Fremont, Walnut Creek, Dublin/Pleasanton | 0 |
| Print | $2$ <br> East Bay Express, Tri-City Voice | $1$ <br> East Bay Express |
| Kiosk | $1$ <br> Downtown Berkeley BART | 4 <br> Berkeley Bike Station, Old Oakland, Jack London Square, Fremont business district |

Where do you recall hearing or seeing the Ride into Life or Get Rolling advertisement? (Bicyclists)


In both 2010 and 2011, a majority of cyclists report finding the Ride Into Life/Get Rolling campaign advertisements effective. Upon viewing a sample of the ads in the 2011 web survey, $60 \%$ of bicyclist respondents thought the ads were either very or somewhat effective, while $34 \%$ thought they were not very effective, and $5 \%$ thought they were not at all effective. The image that recalls gas prices and suggests that money could be saved by cycling was cited most often as the most effective component, with $37 \%$ finding that imagery effective in 2011, as compared to $22 \%$ in 2010. During this period, the price of regular unleaded gas rose from \$3.05per gallon in May 2010 to $\$ 4.12$ per gallon in May 2011. In both years, this image was the top response in an open-ended question about the most effective part of the campaign. (Images shown can be found as Appendix B to this report)

After viewing a sample of the ads in 2010 survey, bicyclist web survey participants were most likely to say the campaign was too subtle, unclear, or uninspiring (15\%), while in 2011 they were most likely to zero in on the specific images ( $12 \%$ thought the image of lifting the bike onto the bus rack was least effective, and $10 \%$ believed the imagery wasn't diverse enough in age, ability, or background). This is consistent with the timing of the surveys. The 2010 survey was taken in December, which was 6 months after Bike to Work Day. The 2011 survey was taken in June, shortly after the May Bike to Work Day.

| Most effective about ads (Open-ended) <br> **Top 6 Responses from 2011 | 2010 | 2011 | Least effective about ads (Open-ended) <br> **Top 6 Responses from 2011 | 2010 | 2011 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Images of gas prices/suggestions of saving money | 22\% | 37\% | Bus ad/lifting bike on bus rack |  | 12\% |
| Images of happy looking people/having fun | 18\% | 9\% | Not diverse enough/excludes certain groups like seniors/unathletic | 3\% | 10\% |
| Images of using bikes with public transit | 9\% | 9\% | Uninspiring/not enough motivation/unrelatable | 11\% | 9\% |
| Images of average-looking people/regular clothing/no bike gear | 7\% | 8\% | Not direct enough/too subtle/ unclear message/ not enough focus on bikes | 15\% | 7\% |
| Commuters biking to work / biking in work clothes | 7\% | 7\% | Logos/slogans | 8\% | 6\% |
| Looks easy/normal/fun | - | 5\% | Doesn't address actual reasons people don't bike | 10\% | 6\% |

## Bike to Work Day/Bike to Work Events

In this section in particular, it is important to keep in mind that one of the main distribution channels for the bicyclists' web survey link was the sign-in sheets and registration records from Bike to Work Day 2010 and 2011. While this means the data on Bike to Work Day participants from the bicyclists web survey is robust, those who did not participate in BTWD are likely underrepresented in the bicyclist web survey data.

## 2011 Estimate of Vehicle Miles Reduced by BTWD

In the 2011 telephone survey, one in ten adult residents (9\%) report that they have participated in Bike to Work Day (BTWD) at some point, with 2\% saying they participated in 2011. According to the 2010 U.S. Census, there are 1,168,949 adult residents (age 18 and up) in Alameda County. Bearing in mind that this information relies on self-reported behavior, and that the margin of error for this survey question is plus or minus about 5 percentage points, this works out to say that an estimated 23,350 adult residents of Alameda County participated in Bike to Work Day 2011 (although considering the margin of error that could range from near zero to about 81,825 ). As one comparison, the number of people counted at Bike to Work Day energizer stations in 2011 was 11,083. However, not all participants go to energizer stations and not all stations have counts.

From the 2011 bicyclists web survey, Bike To Work Day (BTWD) 2011 participants report traveling 13.17 total round-trip miles by bicycle on BTWD.

## 23,350 participants $x$ average 13.17 miles round trip $=$

307,520 bicycle miles traveled by Alameda County BTWD participants

Additionally, nearly one-third (30\%) of BTWD 2011 say they normally make some portion of their trip alone in a car.

| 23,350 participants $\times 30 \%$ travel alone in a car $=$ |
| :---: |
| 7,005 solo car trips replaced with bicycle trips on BTWD by Alameda |
| County residents |

> 7,005 solo car trips replaced with bicycle trips x average 13.17 miles round trip =
> 92,256 miles of solo car trips reduced on BTWD 2011

## 2010 Estimate of Vehicle Miles Reduced by BTWD

In the 2010 telephone survey, nearly one in five adult residents (17\%) reported that they had participated in Bike to Work Day at some point, with $5 \%$ saying they participated in 2010. According to the 2010 U.S. Census, there are 1,168,949 adult residents (age 18 and up) in Alameda County. Bearing in mind that this information is reliant on self-reported behavior several months removed from the event itself, and that the margin of error for this survey question is plus or minus about 5 percentage points, this works out to say that an estimated 58,500 adult residents of Alameda County participated in Bike to Work Day 2010 (although considering the margin of error that could range from near zero to about 116,000). In comparison, 9,799 people were counted at Bike to Work Day energizer stations in 2010. However, not all participants go to energizer stations and not all stations have counts.

From the 2010 bicyclist's web survey, Bike To Work Day (BTWD) 2010 participants report traveling 10.28 total round-trip miles by bicycle on BTWD.

58,500 participants $x$ average 10.28 miles round trip $=$
601,380 miles traveled by Alameda County BTWD participants

Additionally, about one-quarter (26\%) of 2010 BTWD participants say they normally make some portion of their trip alone in a car.
58,500 participants $\times 25 \%$ travel alone in a car $=$
15,210 solo car trips replaced with bicycle trips on BTWD by
Alameda County residents

15,210 solo car trips replaced with bicycle trips $x$ average 10.28 miles round trip =
150,345 miles of solo car trips reduced on BTWD 2010

## Bike to Work Day Awareness and Participation

Awareness of Bike to Work Day is high amongst Alameda County residents. Nearly two-thirds (72\%) of adult residents from the telephone survey say they have heard of Bike to Work Day. Awareness is highest in North and East County, where $79 \%$ in each area say they have heard of BTWD. Central and South County have lower awareness, with $64 \%$ and $63 \%$ respectively aware of BTWD.

Although awareness of Bike to Work Day is high in the county, participation rates do not approach these numbers. In 2011, $9 \%$ of residents say they have participated in Bike to Work Day at some point, and $2 \%$ say they participated in 2011. These figures are lower than reported in 2010, when $17 \%$ said they had participated in Bike to Work Day at some point, and $5 \%$ said they participated in that year. As mentioned earlier in this report, the tendency to over-report participation in BTWD may be higher in the 2010 survey, which was conducted 6 months after BTWD, as compared to 2011 which was conducted 1 month after BTWD. The majority of bicyclists from the web survey participate in Bike to Work Day, with $89 \%$ of cyclists who took the 2011 web survey saying they have participated at some point, and $74 \%$ saying they participated in 2011.

The questions about whether they had heard of BTWD was new in the 2011 telephone survey; participants in the bicyclists web survey were not asked if they had ever heard of BTWD in either year.

Three quarters (74\%) of 2011 BTWD participants from the bicyclist's web survey rode their bikes the entire distance to work on Bike to Work Day, nearly identical to the 2010 figure. The average distance ridden was 13.17 miles. In 2011, $20 \%$ combined biking and public transit, and $2 \%$ combined biking and driving. Most BTWD participants (92\%) were traveling to work that day, while $2 \%$ were traveling to school and $6 \%$ were going somewhere else.

Many of those from the bicyclist web survey who participate in Bike to Work Day say their primary reason is that they usually would bike anyway (41\% in 2011). Fifteen percent (15\%) say they primary participate for fun, $13 \%$ to set a good example, $8 \%$ for incentives, food, or prizes, and $5 \%$ say they are trying out biking to see if it works for them.

| What was your primary reason for participating in BTWD? <br> (one response) | 2010 | 2011 |
| :--- | :--- | :--- |
| Almost always bike to work anyway | $42 \%$ | $41 \%$ |
| For fun | $11 \%$ | $15 \%$ |
| Set a good example for others | $14 \%$ | $13 \%$ |
| Incentives/food/prizes from BTWD organizers | $8 \%$ | $8 \%$ |
| Try out biking and see if it works for me | $5 \%$ | $5 \%$ |
| Good for the environment | $5 \%$ | $4 \%$ |
| Personal health | $3 \%$ | $4 \%$ |
| Other | $12 \%$ | $11 \%$ |

When asked how they would have gotten to work had it not been Bike to Work Day, three in ten Bike to Work Day participants ( $30 \%$ ) in the 2011 bicyclist web survey said they would have driven alone in a car to work that day otherwise ( $25 \%$ in 2010) , and another $4 \%$ in each survey said they would have driven in a carpool. A majority of Bike to Work Day participants in both 2010 and 2011 would have ridden their bikes to their destination even if it was not Bike to Work Day ( $66 \%$ and $62 \%$, respectively).


Most of the 2011 BTWD participants (71\%) from the bicyclists' web survey reported stopping at an energizer station, and $63 \%$ picked up a BTWD canvas bag. Seventeen percent (17\%) stopped at the Bike away From Work Party and $12 \%$ left their bike at a free bike check.

Participants in the 2011 bicyclists' survey heard about Bike to Work day from a variety of sources, including the EBBC website (33\%), their employer (32\%), a coworker (32\%), a poster or billboard (18\%), 511.org (16\%), a local bicycle organization newsletter (16\%), or www.youcanbikethere.com (the Bay Area BTWD website) (15\%).

2011: How did you learn about BTWD? (Bicyclists) (Choose all that apply)


Participation in Bike to Work Day is something people like to share. In 2011, over half (55\%) of those from the bicyclists web survey who participated in Bike to Work Day said that they talked to their coworkers or classmates about their participation. In addition, 20\% of BTWD participants posted something about Bike to Work Day on their Facebook profile and 4\% made a post about it on Twitter, while a combined 9\% heard about BTWD on either Facebook or Twitter.

Almost all Bike to Work Day participants are likely to repeat. In 2011, 67\% of residents and 94\% of bicyclists who participated in Bike to Work Day say they are very likely to participate in 2012, with most of the remainder saying they are somewhat likely.

Twenty-seven percent (27\%) of participants from the bicyclists' web survey who participated in BTWD 2011 say they ride their bicycles more often since participating, with $11 \%$ of this group saying they ride a lot more often. In the 2010 web survey, $20 \%$ of BTWD 2010 participants say they ride their bicycles more often since participating, with $10 \%$ saying they ride a lot more often.

Since participating in Bike to Work Day, would you say you ride your bicycle...


Seventeen percent (17\%) of BTWD participants from the 2011 bicyclists' web survey said they rode their bicycle less than once a week prior to participating in their first BTWD. For that group, the primary reasons for participation were to try our biking and see if it works for them (21\%), for fun (21\%), and to set a good example for others (17\%). At the time of the survey, when that same group was asked how often they ride a bicycle now, half (49\%) say they ride once a week or more.

2011: Before participating in your first BTWD, how often would you say you rode your bicycle? (Bicyclists)


Bike to Work Day did not appear to attract much attention for its effects on vehicle or bicycle traffic on the roads. Over half of adult residents from the telephone survey did not notice any difference in vehicle traffic on Bike to Work Day, and nearly half said they did not notice more bicycles on the roads or on public transportation. Just one in five said they changed how they drove because of Bike to Work Day, a number that may be inflated due to the question context and a known bias to over-report socially correct behavior. Among bicyclists from the web survey, there was wide awareness of an increase in cyclists on the road ( $78 \%$ agree that they noticed more), but much less awareness of more bicycles on public transportation (27\%) or a reduction in vehicle traffic (8\%).

2011: I'm going to read you a few statements about Bike to Work Day, which took place this year on Thursday May 12th. For each one, please say if you agree or disagree with that statement.


Employer support, as reported by employees, for bicycling to work in general, and Bike to Work Day in particular, is not consistent. Among the 66\% of Alameda County adult residents from the telephone survey who go to a job outside their home, about half (48\%) say their employer generally supports biking to work, but just $23 \%$ report seeing promotional Bike to Work Day posters at work, $21 \%$ say company management participated in Bike to Work Day, and one in five (20\%) say their employer gave them information about Bike to Work Day.

Those residents whose employers generally support bicycling to work report a higher level of participation in BTWD than those who have less supportive employers. Of the $48 \%$ of employed county residents with a supportive employer, $22 \%$ have participated in Bike to Work

Day at some point, and 4\% participated in 2011. For those with a less supportive employer, 7\% have participated in Bike to Work Day at some point, and 2\% participated in 2011.

For employed bicyclists from the web survey (99\% of bicyclists) the general perception of support is much higher, but we see a similar drop-off in the specific executions of support: Seventy-eight percent (78\%) say their employer supports biking to work, $46 \%$ had an employer give them information about BTWD, $44 \%$ recall seeing BTWD posters at work, and $41 \%$ reported company executives participating in BTWD. In an earlier open-ended question about how they got BTWD information, $32 \%$ from the bicyclists' survey cited their employer; we see a higher percentage when asked here directly in a closed-ended question.

> 2011: I'm going to read you some statements regarding your employer's involvement in Bike to Work Day. For each one, please say if you agree or disagree with that statement.


## Team Bike Challenge Awareness and Participation

One in ten adult Alameda County residents (9\%) have heard about the Team Bike Challenge (TBC), and participation rates among the adult Alameda County population at-large in 2011 were small enough to have not registered on the telephone survey at all. In contrast, seventythree percent of the bicyclist web survey participants are aware of the Team Bike Challenge, and $30 \%$ report participating in 2011, up from $7 \%$ in 2010. The large difference in participation rates between 2010 and 2011 is (or is not) reflected in Team Bike Challenge sign-ups for these years.


Note that the 2010 survey asked "have you ever participated in the Team Bike Challenge in Alameda County," while the 2011 survey just asked "have you ever participated in the Team Bike Challenge." This small wording change may have had some effect on the increase in positive responses in 2011.

Team Bike Challenge awareness is consistent across the county amongst adult residents from the telephone survey. From the bicyclists' web survey, awareness is highest in Central (80\%) and South County (77\%), and lowest in East County (57\%). Participation rates in the TBC amongst bicyclists are highest in Central County, at 45\%, with the other three areas all showing a $25 \%-28 \%$ participation rate.

Nearly half (46\%) of cyclists who participated in the Team Bike Challenge did so because of their work environment or peer pressure. Fifteen percent (15\%) participated for fun, and 11\%
wanted to motivate their coworkers to ride more. For those who did not participate in the Challenge, but were aware of it, the top reason for non-participation was that they didn't have time or were too busy (22\%). Fifteen percent (15\%) reported difficulty finding a team, and 9\% were out of town or on vacation.
\(\left.\begin{array}{|ll|}\hline What would you say is the main reason you decided to participate in the 2011 Team Bike <br>

Challenge? (Bicyclists)\end{array}\right]\)| Work-sponsored/ Build coworker relationships/ Peer pressure | $\mathbf{4 6 \%}$ |
| :--- | :--- |
| For fun/ love to ride | $15 \%$ |
| To encourage/motivate coworkers to ride more regularly | $11 \%$ |
| Competition aspect/ Teamwork | $7 \%$ |
| To start biking more often | $3 \%$ |
| Join with friends | $3 \%$ |
| I would have biked anyway | $2 \%$ |
| To be an example to others | $2 \%$ |
| Raffle/ prizes | $2 \%$ |
| A challenge | $2 \%$ |
| Previous TBC were great | $1 \%$ |


| Why did you choose not to participate in the 2011 Team Bike Challenge? (Open- <br> ended) (Asked only of those who have heard of TBC but did not participate in <br> 2011) |  |
| :--- | :--- |
| Did not have time to organize a team/busy | $22 \%$ |
| Could not find teammates/not in a team | $15 \%$ |
| Out of town/vacation | $9 \%$ |
| Do not like event | $6 \%$ |
| Health reasons/injured | $6 \%$ |
| Telecommuter/works from home | $6 \%$ |
| Team forgot | $5 \%$ |
| Lack of involvement with a local organization | $5 \%$ |
| Company did not put team together | $3 \%$ |
| Too much effort | $3 \%$ |
| Changed rules/could not participate | $3 \%$ |
| BART not allowing bikes during rush hour | $3 \%$ |
| Unemployed | $3 \%$ |
| Unaware | $3 \%$ |
| Website too difficult to use/log in to | $3 \%$ |
|  | $3 \%$ |
| Other |  |
| Don't Know | 3 |

Looking at BTWD and TBC participants from the bicyclists' web survey, $27 \%$ of BTWD participants say they bicycle more after participating in BTWD (11\% a lot more), while $35 \%$ of TBC participants say they bicycle more after participating in TBC (9\% a lot more).

## 2011: Since participating in (BTWD/TBC), would you say you ride your bicycle... (Bicyclists)



## Walk \& Roll to School Day Awareness and Participation

Walk and Roll to School Day awareness and participation is remarkably consistent across residents from the telephone survey and bicyclists from the web survey. One in five adult Alameda County residents (21\%) reported having heard of Walk \& Roll to School Day, with awareness only slightly higher amongst those who took the bicyclist' survey (30\%). Walk and Roll to School Day participation is reasonably consistent across the two surveys as well, with $9 \%$ of residents in 2011 reporting participating (14\% in 2010) and 10\% of bicyclists in 2011 reporting participating (16\% in 2010).

Awareness of Walk and Roll to school day is significantly lower in Central County amongst adult residents (10\%) than in South (23\%), East (25\%) or North County (27\%); participation rates amongst adult residents show similar disparities ( $17 \%$ in the East, $12 \%$ in the South, $11 \%$ in the North, and 2\% in Central County).


## Targeting Future Promotion

In order to better understand who is already riding bicycles as a form of transportation, who is not and is unlikely to in the future, and who might be likely future bicyclists, the two adult population surveys were segmented to look for and understand these groups. In the 2010 survey, a combination of current bicycling habits and attitudes about barriers to bicycling was used to create the segments. In the 2011 survey a combination of their current driving behavior and self-reported ease of replacing a car trip with a bicycle trip were used to ferret out potential bicyclists. The segment creation and analysis details are below; note that even though the method to arrive at a target was completely different across the two years of surveys, the population and attitudes of the targeted group are remarkably similar.

## 2010 Segmentation Analysis



Using behavioral and attitudinal questions from throughout the 2010 telephone survey, residents were split into segments to look at who is already riding with frequency, who could be targeted to ride or ride more often, and who is unlikely to ride their bicycles as transportation. The telephone survey was used for this analysis because it is a random sample of adult residents, and can be projected over the entire county population.

The bicyclist segments were defined as follows:

- Committed Bicyclists (13\%): Currently ride a bicycle three or more times per week as transportation to a destination.
- Stronger Likely Bicyclists (9\%): Currently ride a bicycle one or two times per week as transportation to a destination.
- Weaker Likely Bicyclists (10\%): Currently ride a bicycle less often than once per week as transportation to a destination AND own a working bicycle AND ride a bicycle for health or recreation AND have relatively lower levels of concern about potential barriers to bicycling.
- Less Likely Bicyclists (12\%): Currently ride a bicycle less often than once per week as transportation to a destination AND own a working bicycle AND ride a bicycle for health or recreation AND have relatively higher levels of concern about potential barriers to bicycling.
- Unlikely Bicyclists (57\%): Do not own a working bicycle OR do own a bicycle BUT do not ride as transportation or for health or recreation.

A summary of demographic and attitudinal differences between the segments follows.

## 2010: Committed Bicyclists (13\%)

The goal for the Committed Bicyclists should be to continue to support good bicycling habits, and provide support to enable them to recruit others to join them.

This is the group that uses bicycles as a mode of transportation the most regularly. They are the most committed to bicycling, and the most likely to have participated in a past Bike to Work Day (53\% ever, 58\% in 2010), as well as plan on participating in Bike to Work Day 2011 (81\% likely). While most have access to a working bicycle, one-third do not have access to a car (the highest of all of the segments).

This group is heavily made up of men from Northern Alameda County. More than half are between 18 and 29 or 40 and 49 , with very few seniors falling into this group ( $2 \%$ age 65 and up). Hispanics are overrepresented in this committed bicyclists group as compared with the overall county population. Over half of respondents in this group are not homeowners.

| Demographic | Adult County <br> residents | Committed Bicyclists (13\%) |
| :--- | :---: | :---: |
| Male | $49 \%$ | $\mathbf{6 5 \%}$ |
| Female | $51 \%$ | $35 \%$ |
| $18-29$ | $18 \%$ | $\mathbf{3 1 \%}$ |
| $30-39$ | $21 \%$ | $17 \%$ |
| $40-49$ | $19 \%$ | $24 \%$ |
| $50-64$ | $28 \%$ | $26 \%$ |
| $65+$ | $14 \%$ | $2 \%$ |
|  |  |  |
| Central | $28 \%$ | $23 \%$ |
| East | $12 \%$ | $8 \%$ |
| North | $43 \%$ | $67 \%$ |
| South | $17 \%$ | $2 \%$ |
|  |  |  |
| Have Kids Under 18 | $40 \%$ | $44 \%$ |
| Home Owner | $55 \%$ | $40 \%$ |
|  |  | $10 \%$ |
| African-American | $11 \%$ | $36 \%$ |
| White | $41 \%$ | $\mathbf{2 8 \%}$ |
| Hispanic | $17 \%$ | $11 \%$ |
| Asian | $19 \%$ | $14 \%$ |
| Other | $12 \%$ |  |

Committed Bicyclists are the second most likely group have a job where they work outside the home at least once a week ("Less Likely Bicyclists" are the most likely). They tend to work in North or Central Alameda County, and live closer to their workplaces than any other segment. Nine out of ten of work commuters say they bike to work at least once a week, and nearly half say they "usually" use a bicycle on their commute. Sixteen percent (16\%) of Committed Bicyclists report using only their bike to get to work, while $9 \%$ use a bike and public transit. Furthermore, $9 \%$ use a bike and a car to get to work, $7 \%$ use a combination of a bike, a car, and public transit, while 5\% use their bike and some other form of transportation.

The Committed Bicyclists segment has the highest percentage of students of all segments, with $35 \%$ saying they go to school at least once a week, and a majority of those going to either Alameda or Berkeley for school. Four out of five students within this target group say they bike to school at least once a week, and half say they "usually" ride a bicycle as part of their regular trip to school. One out of five ( $21 \%$ ) only use their bike to get to school, while $11 \%$ use their
bike plus public transit. Furthermore, $5 \%$ use a combination of biking, driving a car, and using public transit, while $16 \%$ use their bike and some other form of transportation.

Committed Bicyclists are the most frequent transit riders, in addition to being the most frequent bicyclists. About half ride BART or AC Transit at least once a week, and one in five a train or ferry. They are also the least likely to drive solo and the least likely to carpool, with two-thirds reporting at least weekly solo driving trips and four in five reporting at least weekly carpool trips.

| Demographic | Adult County <br> residents | Committed Bicyclists (13\%) |
| :--- | :---: | :---: |
| Rides a Bus at least once a week | $17 \%$ | $47 \%$ |
| Rides BART at least once a week | $24 \%$ | $48 \%$ |
|  |  | $66 \%$ |
| Drives a car alone at least once a week | $84 \%$ | $82 \%$ |
| Carpools at least once a week | $88 \%$ |  |

In an open-ended multiple response question about why people don't ride their bicycles more often as transportation, "difficult/lazy/takes, too much energy" and "safety issues/biking is unsafe/dangerous" tie for the top reasons, with $30 \%$ giving each of those reasons. One-quarter ( $27 \%$ ) believe the weather is one of the top reasons people don't bike more.

Not surprisingly, the top barriers to biking more for this group are the day-to-day logistics of bicycling. When read a list of possible barriers to themselves personally biking more often, the Committed Bicyclist segment ranks "Not enough bike lanes or bike safe streets on my route" number one, with $62 \%$ saying that's an important factor. Number two is "No safe place to park a bike at my destination," with $58 \%$ saying that is important, and "I have to carry a lot of stuff" ranks third, with $50 \%$ finding that an important factor. Confidence is not an issue for this group, with $74 \%$ each ranking lack of confidence in bike riding ability and not wanting to ride their bike alone as unimportant factors.

Importance of factors in choosing to not ride a bicycle (\% Rated Important)


Riding safety and bike security are top priorities for this group. The improvements the Committed Bicyclists segment are most interested in include more secure bike parking at transit stations ( $65 \%$ much more likely to ride), safety improvements at large intersections ( $62 \%$ much more likely to ride), more secure bike parking at the places they go ( $56 \%$ much more likely to ride), and more dedicated bike lanes ( $56 \%$ much more likely to ride).

Much more likely to ride my bicycle if there were...


## 2010: Stronger Likely Bicyclists (9\%)

The goal for the Stronger Likely Bicyclists group should be to convince them to ride their bicycles more often, and to integrate bicycling into their regular trip habits.

This group is made up of people who do ride their bicycles as transportation, but not as often as the Committed Bicyclists group. They are regular bicyclists, though much less likely to ride their bicycles to work or school than the Committed group. Many have participated in Bike to Work Day in the past (32\%) with only 6\% that participated in 2010. Nearly half say they intend to participate in 2011. Nearly $90 \%$ in this group have access to a car.

The Stronger Likely Bicyclists group, like Committed Bicyclists, is heavily made up of men from Northern Alameda County. Six out of ten are between the ages of 40 and 64, with very few
seniors falling into this group ( $4 \%$ age 65 and up). Whites are overrepresented in this target group as compared to the adult population of Alameda County.

| Demographic | Adult County <br> residents | Stronger Likely Bicyclists <br> $(9 \%)$ |
| :--- | :---: | :---: |
| Male | $49 \%$ | $63 \%$ |
| Female | $51 \%$ | $37 \%$ |
|  |  |  |
| $18-29$ | $18 \%$ | $19 \%$ |
| $30-39$ | $21 \%$ | $15 \%$ |
| $40-49$ | $19 \%$ | $30 \%$ |
| $50-64$ | $28 \%$ | $32 \%$ |
| $65+$ | $14 \%$ | $4 \%$ |
|  |  |  |
| Central | $28 \%$ | $15 \%$ |
| East | $12 \%$ | $17 \%$ |
| North | $43 \%$ | $51 \%$ |
| South | $17 \%$ | $17 \%$ |
|  |  |  |
| Have Kids Under 18 | $40 \%$ | $46 \%$ |
| Home Owner | $55 \%$ | $58 \%$ |
|  |  | $6 \%$ |
| African-American | $11 \%$ | $68 \%$ |
| White | $41 \%$ | $7 \%$ |
| Hispanic | $17 \%$ | $8 \%$ |
| Asian | $19 \%$ | $11 \%$ |
| Other | $12 \%$ |  |

Three-quarters of the Stronger Likely Bicyclists go to work outside the home at least once a week. A quarter of this group works outside of Alameda County. Nearly half of those who work weekly live 11 or more miles away from their workplace. A majority of the work commuters in this group drive there alone, while $21 \%$ take a carpool or vanpool. While $29 \%$ of the work commuters in this group say they bicycle to work once a week, just $10 \%$ say they "usually" use a bicycle on their commute. Seven percent (7\%) use their bike plus a car to get to work, while 4\% use their bike and another source of transportation.

One out of five members of the Stronger Likely Bicyclists segment go to school at least once a week, with a majority going to either Alameda or Berkeley for school. Nearly half of students say they bike to school at least once a week, and one third say they "usually" ride a bicycle as part of their regular trip to school. One-third say they use their bike plus a car to get to school.

One-third of the Stronger Likely Bicyclists group (32\%) rides BART at least once a week, more likely than the overall population. Four out of five drive solo at least once a week, and 54\% drive solo five days a week or more. Nine in ten of the members of this group carpool at least once a week.

| Transportation Habits | Adult County <br> residents | Stronger Likely Bicyclists <br> $(9 \%)$ |
| :--- | :---: | :---: |
| Rides a Bus at least once a week | $17 \%$ | $18 \%$ |
| Rides BART at least once a week | $24 \%$ | $32 \%$ |
|  |  | $81 \%$ |
| Drives a car alone at least once a week | $84 \%$ | $92 \%$ |
| Carpools at least once a week | $88 \%$ |  |

In an open-ended multiple response question about why people don't ride their bicycles more as transportation, "safety issues/biking is unsafe/dangerous" comes out on top, with $42 \%$ citing it as a reason people don't bike more. This is followed by "difficult/lazy/takes too much energy," with $30 \%$, and "being protected from the weather" with $27 \%$ citing that as a reason people don't bike more.

The Stronger Likely Bicyclists group is more concerned about safe roads and riding conditions than the Committed Bicyclists group, but still the day-to-day riding issues, such as weather and showering, show up as top issues that keep this group from bicycling more. When read a list of possible barriers to personally biking more often, the Stronger Likely Bicyclists segment ranks both "Not enough bike lanes or bike safe streets on my route," along with "worried about cars on the road" number one, with $59 \%$ each saying those are important factors. "Fear of bad weather" ranks just behind those, with $54 \%$ saying that is an important factor, and "no place to shower at your destination" followed with $48 \%$. Bicycling alone is not a concern for this group, with $80 \%$ ranking that as an unimportant factor, followed by not knowing the best way to get to their destination (66\% not important).


Members of the Stronger Likely Bicyclists group are interested in some of the same improvements that interest the Committed Bicyclists segment - they are much more likely to ride if the bicycling conditions were safer and if there was more secure bicycle parking. These include more secure bike parking at the places they go ( $60 \%$ much more likely to ride), more dedicated bike lanes ( $58 \%$ much more likely to ride), more places to ride away from cars ( $57 \%$ much more likely to ride), and more secure bike parking at transit stations ( $56 \%$ much more likely to ride).


## 2010: Weaker Likely Bicyclists (10\%)

The goal for the Weaker Likely Bicyclists group, as with the Stronger Likely Bicyclists, should be to help them integrate bicycling into their regular travel habits, whether that's work or another destination. This group's biggest obstacle is feeling safe riding on the road with cars; classes with that focus may help encourage this group.

This group is made up of people who do own and ride bicycles with some regularity, but do not tend to use them as a way to get to places. They are largely recreational riders, $50 \%$ of whom ride one to two days per week. One-third say they have participated in Bike to Work Day at some point, with $6 \%$ participating in 2010. By definition, every member of this group has access to a working bicycle, but car access is nearly universal (97\%).

The Weaker Likely Bicyclists group has more than twice as many men as women, and is extremely geographically diverse, with an over-representation of group members from East Alameda County. Nearly forty percent of this group is between the ages of 50 and 64, with another quarter in the 30 to 39 age group ( 40 to 49 year olds are severely underrepresented here). Whites and Asians make up three-quarters of the Weaker Likely Bicyclists group, while there is close to no African-American representation.

| Demographic | Adult County residents | Weaker Likely Bicyclists (10\%) |
| :---: | :---: | :---: |
| Male | 49\% | 68\% |
| Female | 51\% | 32\% |
| 18-29 | 18\% | 12\% |
| 30-39 | 21\% | 27\% |
| 40-49 | 19\% | 10\% |
| 50-64 | 28\% | 38\% |
| 65+ | 14\% | 12\% |
|  |  |  |
| Central | 28\% | 25\% |
| East | 12\% | 20\% |
| North | 43\% | 34\% |
| South | 17\% | 20\% |
|  |  |  |
| Have Kids Under 18 | 40\% | 44\% |
| Home Owner | 55\% | 62\% |
|  |  |  |
| African-American | 11\% | 0\% |
| White | 41\% | 51\% |
| Hispanic | 17\% | 10\% |
| Asian | 19\% | 27\% |
| Other | 12\% | 12\% |

The Weaker Likely Bicyclists group is the least likely to go to work or school outside the home at least once a week. One in five in this group work in South Alameda County. Nearly all of the work and school commuters in this group drive there alone. Eighty-four percent (84\%) of those who work drive their car alone to get there (with an average distance of 11.53 miles to work), while $60 \%$ of those who go to school use their car to get there (average distance 9.16 miles).

This group is heavily made up of drivers, with nine in ten saying they drive solo at least once a week, and $75 \%$ driving solo five or more days a week. They are very likely to do some ridesharing as well, with $94 \%$ reporting weekly shared rides, and $23 \%$ sharing rides every day of the week. Very few in this group ride any form of transit with regularity, with $11 \%$ riding BART weekly, and $8 \%$ riding a bus weekly. Nearly two in five in this group say they ride a stationary bicycle or take a spinning class at least once a week, the highest percentage of all of the segments.

| Transportation Habits | Adult County <br> residents | Weaker Likely Bicyclists <br> $(10 \%)$ |
| :--- | :---: | :---: |
| Rides a Bus at least once a week | $17 \%$ | $8 \%$ |
| Rides BART at least once a week | $24 \%$ | $11 \%$ |
|  |  | $92 \%$ |
| Drives a car alone at least once a week | $84 \%$ | $94 \%$ |
| Carpools at least once a week | $88 \%$ |  |

In an open-ended multiple response question about why people don't ride their bicycles more as a form of transportation, distance, weather, and time come out as top reasons. "Too far of a distance to travel" is the response from $40 \%$ of Weaker Likely Bicyclists, followed by "being protected from the weather" (29\%), "time consuming" (22\%) and "difficult/lazy/takes too much energy" (21\%).

Fear of riding with cars is a big part of the reason this group does not bicycle more often. When read a list of possible barriers to personally biking more often, the Weaker Likely Bicyclists segment ranks "Worried about cars on the road" as the top reason by a wide margin, with $72 \%$ saying that's an important factor in their decision to ride a bicycle. "Fear of bad weather" and "The places I regularly go are too far away to ride" are tied for a distant second, with 58\% saying those are an important factor, followed by "Not enough bike lanes or bike safe streets on my route" ( $57 \%$ rate this an important factor). Bicycling alone is not a concern for this group, with $83 \%$ ranking that as an unimportant factor, nor is not knowing the best way to get to their destination ( $79 \%$ unimportant factor), fear of equipment failure or a flat tire ( $77 \%$ unimportant factor), or lack of confidence in bike riding abilities ( $76 \%$ unimportant factor).


More safe places to ride away from cars are the top factors in getting this group to ride more. Separating bikes from cars is the most attractive type of improvement for the Weaker Likely Bicyclists, with $65 \%$ saying they are much more likely to ride if that were in place. More dedicated bike lanes came in as a distant second, with 47\% saying they are much more likely to ride if those are completed.

Much more likely to ride my bicycle if there were...


## 2010: Less Likely Bicyclists (12\%)

The "Less Likely Bicyclists" group should not be explicitly targeted with advertising about biking as a commute mode, as their attitudes about cycling and riding habits would make them more difficult to convert than the primary and secondary targets to regular bicycle commuters. However, given that a large proportion of them take children to school, they may be susceptible to messaging about Walk and Roll to School events, and bike safety classes targeted to women and families may help reduce their perceived barriers.

This group is made up of people who do own and ride bicycles with some regularity, but mostly for health and recreation, rather than to get to destinations. Like the Secondary Target group, they do ride their bicycles with some regularity for reasons other than transportation, but they are in the less likely group because they have more concerns (and higher levels of concern) about barriers to bicycling than the Weaker Likely Bicyclists group does. Those in the Less Likely Bicyclists group are much less likely to have participated in past Bike to Work Days, with just 9\% saying they have ever participated, and $2 \%$ saying they participated in 2010. By definition, every member of this group has access to a working bicycle, but car access is nearly universal (93\%).

The Less Likely Bicyclists group is nearly three-quarters women, and is the most likely group to have children under 18. They are located in all parts of the county, with more concentration in the Central and South County areas than the overall population distribution. This group's age distribution is similar to the overall population's, with a slight overrepresentation in the 40 to 49 age group. Minorities make up three-quarters of this group, with Asians and Hispanics comprising the majority. This is the most likely segment to be homeowners, with $71 \%$ saying they own or are buying a home.

| Demographic | Adult County residents | Less Likely Bicyclists (12\%) |
| :--- | :---: | :---: |
| Male | $49 \%$ | $28 \%$ |
| Female | $51 \%$ | $72 \%$ |
|  |  |  |
| $18-29$ | $18 \%$ | $15 \%$ |
| $30-39$ | $21 \%$ | $20 \%$ |
| $40-49$ | $19 \%$ | $30 \%$ |
| $50-64$ | $28 \%$ | $24 \%$ |
| $65+$ | $14 \%$ | $11 \%$ |
|  |  | $37 \%$ |
| Central | $28 \%$ | $15 \%$ |
| East | $12 \%$ | $20 \%$ |
| North | $43 \%$ | $29 \%$ |
| South | $17 \%$ |  |


|  |  |  |
| :--- | :---: | :---: |
| Have Kids Under 18 | $40 \%$ | $59 \%$ |
| Home Owner | $55 \%$ | $71 \%$ |
|  |  | $5 \%$ |
| African-American | $11 \%$ | $25 \%$ |
| White | $41 \%$ | $25 \%$ |
| Hispanic | $17 \%$ | $34 \%$ |
| Asian | $19 \%$ | $11 \%$ |
| Other | $12 \%$ |  |

Nearly all of the Less Likely Bicyclists group goes to work outside the home at least once a week, with most of those ( $88 \%$ ) driving in a car alone to get there. This group is the most likely to work in South Alameda County (34\%), and they live farthest from their workplaces on average of all of the segments (average distance from work 16.08 miles). Three-quarters use only their car to get to work, while 19\% use their car plus public transportation. One-quarter of this group goes to school at least once a week, with most driving in a car alone to get there (75\%).

This group is heavily made up of drivers, with almost all (97\%) saying they drive solo at least once a week, and $33 \%$ driving solo all seven days a week. They are very likely to do some ridesharing as well, with $94 \%$ reporting weekly shared rides. The ride sharing in this group, however, is likely in the form of driving children to school, as $60 \%$ of this group drives children to school at least once a week, with $30 \%$ doing so five days a week. A quarter in this group ride BART at least weekly, while $11 \%$ ride a bus weekly and $5 \%$ ride a train. A third in this group say they ride a stationary bicycle or take a spinning class at least once a week, the second highest percentage of all of the segments.

| Transportation Habits | Adult County <br> residents | Less Likely Bicyclists (12\%) |
| :--- | :---: | :---: |
| Rides a Bus at least once a week | $17 \%$ | $11 \%$ |
| Rides BART at least once a week | $24 \%$ | $24 \%$ |
|  |  | $97 \%$ |
| Drives a car alone at least once a week | $84 \%$ | $94 \%$ |
| Carpools at least once a week | $88 \%$ |  |

In an open-ended multiple response question about why people don't ride their bicycles more as transportation, distance, safety, and time come out as top reasons. "Too far of a distance to travel" is the response from $42 \%$ of this group, followed by "safety issues/biking is unsafe/dangerous" (33\%) and "time consuming" (24\%).

The barriers for this group are significantly different than the target groups. "Worried about my personal safety" is the top concern for the Less Likely Bicyclists ( $94 \%$ important factor). Tied for second, with 88\% apiece, are "Don't want to arrive at my destination sweaty" and "Worried about cars on the road," and third is "I have to carry a lot of stuff" ( $86 \%$ important factor). Access to a car when they need it is another priority concern for this group, with "Need to have access to a car at some point during the day" and "Worried about getting home quickly in an emergency" each rated as an important factor by $81 \%$. While it's not a top-rated factor, it should be noted that 61\% in this group worry that they are not confident in their bike-riding ability, and that they do share high levels of concern about bicycling safety and weather with the prior segments.


Given their perceptions of barriers to using bicycles as a form of transportation, this group would be more difficult to convert than the earlier groups. However, sixty-nine percent (69\%) say they are much more likely to ride their bikes if there are more places to ride away from cars, which is parallel with the earlier target groups.


## 2010: Unlikely Bicyclists (57\%)

This group should not be explicitly targeted with advertising, as they are very unlikely to adopt bicycling as a mode of transportation due to their current attitudes and practices.

This group is all of the people who did not end up in one of the prior groups. They are generally not bicycle owners (only 33\% have access to a working bike) and nearly none have participated in Bike to Work Day (7\% ever, less than 1\% in 2010). Car ownership is not universal in this group, however, with $88 \%$ having access to a car.

The Unlikely Bicyclists group is about half men and half women, with a geographic distribution that looks very similar to the way the overall adult population is distributed. They are less likely to have children at home (33\%) than the overall population, and have an age distribution and ethnic makeup similar to all adult residents.

| Demographic | Adult County <br> residents | Unlikely Bicyclists (57\%) |
| :--- | :---: | :---: |
| Male | $49 \%$ | $44 \%$ |
| Female | $51 \%$ | $56 \%$ |
|  |  |  |
| $18-29$ | $18 \%$ | $16 \%$ |
| $30-39$ | $21 \%$ | $22 \%$ |
| $40-49$ | $19 \%$ | $15 \%$ |
| $50-64$ | $28 \%$ | $28 \%$ |
| $65+$ | $14 \%$ | $19 \%$ |
|  |  |  |
| Central | $28 \%$ | $30 \%$ |
| East | $12 \%$ | $10 \%$ |
| North | $43 \%$ | $42 \%$ |
| South | $17 \%$ | $18 \%$ |
|  |  |  |
| Have Kids Under 18 | $40 \%$ | $33 \%$ |
| Home Owner | $55 \%$ | $54 \%$ |
|  |  |  |
| African-American | $11 \%$ | $15 \%$ |
| White | $41 \%$ | $39 \%$ |
| Hispanic | $17 \%$ | $15 \%$ |
| Asian | $19 \%$ | $18 \%$ |
| Other | $12 \%$ | $12 \%$ |

The Unlikely Bicyclists group is the least likely segment to work outside the home at least once a week (64\%), and most of those ( $78 \%$ ) drive in a car alone to get there. This group is the most likely to work outside of Alameda County (36\%), although more than half live within 10 miles of their workplace. Seventy-two percent ( $72 \%$ ) use only their car to get to work, while $19 \%$ use their car plus public transportation. One-quarter of this group goes to school at least once a week, with most driving in a car alone to get there (66\%).

Eighty-four percent (84\%) the Unlikely Bicyclists group drive alone at least once a week, with $29 \%$ driving alone 7 days a week. One in five in this group rides BART at least weekly, while $13 \%$ ride a bus weekly. This group has the lowest percentage of stationary cyclists of all the segments, at $18 \%$.

| Transportation Habits | Adult County <br> residents | Unlikely Bicyclists (57\%) |
| :--- | :---: | :---: |
| Rides a Bus at least once a week | $17 \%$ | $13 \%$ |
| Rides BART at least once a week | $24 \%$ | $20 \%$ |
|  |  |  |
| Drives a car alone at least once a week | $84 \%$ | $84 \%$ |
| Carpools at least once a week | $88 \%$ | $86 \%$ |

In an open-ended multiple response question about why people don't ride their bicycles as transportation more, the same theme emerges as with some of the other segments: safety, distance, and weather. "Safety issues/biking is unsafe/dangerous" is the top response here, at $33 \%$, followed by "too far of a distance to travel" ( $25 \%$ ) and "being protected from the weather" (24\%).

The barriers for this group are more like the target groups than the Less Likely Bicyclists group. "Worried about cars on the road," is the top-ranked concern, with $78 \%$ saying it's an important factor, followed by "fear of bad weather" (73\% important factor) and "The places I regularly go are too far away to ride" ( $72 \%$ important factor). In general, their level of concern is higher than for the overall population, but not as high as the Less Likely Bicyclists.

Importance of factors in choosing to not ride a bicycle (\% Rated


This group is much less responsive to potential improvements than the other groups. The improvements rated the highest by this group are safety improvements at large intersections ( $53 \%$ much more likely to ride) and more places to ride away from cars ( $52 \%$ much more likely to ride). Although their perceptions of barriers aren't the highest, they are less willing than any other group to believe anything could make them ride more often.


## 2011 Segmentation Analysis

In the 2011 phone survey of adult Alameda County residents, a different approach was taken to identify a target group for increased ridership. This change in approach was driven by some questionnaire changes that allowed for inclusion of more questions on employer attitudes and commute behaviors (specifically, the removal of the set of questions about barriers), as well as a desire to approach the targeting from a more direct vehicle-trip-replacement angle.

In the 2011 telephone survey, after asking how often respondents drive a car, those who drive at least once a week were asked how difficult it would be to replace at least one of those car trips with a bicycle trip. Of the $79 \%$ who drive a car at least once a week, $25 \%$ said it would be either not very difficult or not at all difficult to do so. That group, which makes up approximately $21 \%$ of the adult Alameda County population, was used as the target for increased ridership for the 2011 research.
$\square$ Target: Drive a car at least once a week, not difficult to replace one trip with a bike trip Other


The first point to notice about the 2011 target and the target created in 2010 (which was based on current bicycle ridership and attitudes on a number of barriers to cycling) is that the two target groups are nearly identical in size, at about $20 \%$ of the adult population. The fact that nearly the same size target group resulted from two very distinct segmentation methods shows that there is some widespread receptivity to messaging about cycling as transportation with about one in five adults in Alameda County.

2011: Target (21\%)

The goal for this Target group should be to increase the number of trips they take by bicycle each week, focusing on replacing car trips with bike trips for the purposes of saving money, protecting the environment, and healthy living. Messaging that helps them understand it is not as difficult as they might think could convince this group to increase their cycling behaviors.

This group contains a number of people who do ride their bicycles as transportation with some regularity, but could be easily convinced that they could ride more often. Over half of this group (54\%) owns or has access to a working bicycle. One in five (19\%) in this group have participated in Bike to Work Day in the past, but only 7\% participated in 2011. Nearly half (48\%) say they intend to participate in 2011.

This Target group is largely made up of 40 to 64 year olds, with overrepresentation amongst Asians and African-Americans. As with the 2010 targets, members of this group are more likely to have children than the overall population; however, they much more closely resemble the countywide population distribution regionally than the 2010 target groups.

| Demographic | Adult County <br> residents | Target (21\%) |
| :--- | :---: | :---: |
| Male | $48 \%$ | $49 \%$ |
| Female | $52 \%$ | $51 \%$ |
|  |  |  |
| $18-29$ | $19 \%$ | $16 \%$ |
| $30-39$ | $21 \%$ | $17 \%$ |
| $40-49$ | $19 \%$ | $24 \%$ |
| $50-64$ | $26 \%$ | $30 \%$ |
| $65+$ | $14 \%$ | $12 \%$ |
| Central |  |  |
| East | $29 \%$ | $32 \%$ |
| North | $11 \%$ | $8 \%$ |
| South | $44 \%$ | $42 \%$ |
|  | $16 \%$ | $18 \%$ |
| Have Kids Under 18 |  |  |
| Home Owner | $35 \%$ | $43 \%$ |
|  | $56 \%$ | $58 \%$ |
| African-American |  |  |
| White | $11 \%$ | $18 \%$ |
| Hispanic | $41 \%$ | $34 \%$ |
| Asian | $17 \%$ | $17 \%$ |
| Other | $19 \%$ | $24 \%$ |

Seventy-one percent (71\%) of the Target group go to work outside the home at least once a week. Six in ten work in Alameda County, with over half living within 10 miles of their workplace. A majority of the work commuters in this group ( $85 \%$ ) drive there alone, while $13 \%$
take a carpool or vanpool. Eleven percent (11\%) of the work commuters in this group say they bicycle to work once a week, and $12 \%$ say they "usually" use a bicycle on their commute.

This group is made up of about one-quarter bicycle riders, with $23 \%$ saying they ride a bike at least once per week. They are not particularly frequent transit riders. Almost everyone in this group (92\%) drives solo in a car at least once a week, and $62 \%$ drive solo five days a week or more.

| Transportation Habits | Adult County <br> residents | Target (21\%) |
| :--- | :---: | :---: |
| Rides a bike at least once a week | $20 \%$ | $23 \%$ |
| Rides a bike for health/recreation at least once a <br> week | $21 \%$ | $23 \%$ |
| Rides a bike as transportation at least once a week | $14 \%$ | $24 \%$ |
|  | $15 \%$ | $7 \%$ |
| Rides a bus at least once a week | $25 \%$ | $26 \%$ |
| Rides BART at least once a week |  |  |
|  | $77 \%$ | $92 \%$ |
| Drives a car alone at least once a week | $83 \%$ | $84 \%$ |
| Carpools at least once a week |  |  |

Advertising awareness in this Target group is nearly identical to awareness amongst the entire adult population of the county. Just four percent (4\%) recall ads that say "Get Rolling" or "Ride Into Life," with $13 \%$ recalling the ads after being told their subject matter.

In an open-ended multiple response question about why people don't ride their bicycles more as transportation, safety concerns come out on top, with $37 \%$ citing it as a reason people don't bike more. This is followed closely by "difficult/lazy/takes too much energy," with $36 \%$, and the time and distance to ride, with $31 \%$ citing those as a reason people don't bike more.


When read a list of possible reasons people might ride their bikes as a form of transportation, the Target group is generally in agreement with adults in the county overall, but with somewhat higher intensity in their responses. Health, the environment, and saving money all top the list with this Target group.

2011: I'm going to read you a list of reasons some people ride their bicycles as a form of transportation. After each one, on a scale of $\mathbf{1}$ to 7 please rate how convincing that reason is to ride a bicycle as a form of transportation, where 1 means not at a


## Regional Target Analysis

The target analysis for 2010 and 2011 yielded some important regional differences, likely in large part due to the method of target development. In 2010, when the target groups were identified largely using attitudes about specific barriers to cycling, East Alameda County had the largest target group representation, with $28 \%$ of East County residents in either the primary or secondary target group, followed by South County ( $20 \%$ in targets), North ( $18 \%$ ) and finally Central (14\%). In 2011, when the target was created based on their conclusion about likelihood to increase their cycling behavior, East County has the lowest target group representation (15\%), with South (24\%) and Central County (23\%) at the top, then North County (20\%).


## 2011 Target

Target: Drive a car at least once a week, not difficult to replace one trip with a bike trip Other


## Sub-Country Level Analysis

The sampling plan for the telephone surveys were constructed to allow for some analysis at the sub-county, or "Planning Area" level, in addition to countywide. This entailed setting disproportionate quotas by region, to ensure that the smaller regions had enough interviews to look at on their own. The table below shows the number of actual interviews completed in each Planning Area, the margin of error for that region, and the weighted percentage the region represents in the countywide data, all from the 2011 survey. Note that the margin of error at the Planning Area level is around plus or minus 10 points. The 2010 telephone survey sample plan and execution was nearly identical.

The Planning Areas are commonly used by Alameda CTC to analyze sub-county data and trends. They are defined as:

Central: Hayward, Unincorporated County (including Castro Valley, San Lorenzo), San Leandro

East: Dublin, Pleasanton, Livermore, Unincorporated Areas of East County
North: Oakland, Emeryville, Alameda, Piedmont, Berkeley, Albany
South: Fremont, Newark, Union City

| Region | Interviews | Margin of Error | Weighted <br> percentage |
| :---: | :---: | :---: | :---: |
| Central | 101 | $\pm 9.8$ percentage points | $29 \%$ |
| East | 75 | $\pm 11.3$ percentage <br> points | $11 \%$ |
| North | 151 | $\pm 8.0$ percentage points | $44 \%$ |
| South | 75 | $\pm 11.3$ percentage <br> points | $16 \%$ |

## "Get Rolling/Ride Into Life"

Initial recall of the Get Rolling/Ride Into Life advertising campaign is low across all regions, with the highest level at 5\% in North County. When read a brief description of the campaign's message, $17 \%$ in North County remember seeing the campaign, $10 \%$ in the South and East recall it, and $8 \%$ in Central County recall seeing it.

2011: Recall "Get Rolling/Ride Into Life"
No / Don't Know - Yes


## Bike to Work Day

Bike to Work Day participation varies across the county. North and Central County respondents were the most likely to say they had participated in Bike to Work Day, both ever and in 2011 specifically. East County residents are the least likely to have participated in BTWD, either ever or in 2011.

2011: BTWD Participation


## Travel Habits

East and South Alameda County residents are the most likely to have regular access to a car, with $94 \%$ and $90 \%$ reporting that they do. Four out of five residents of Central and North Alameda County have regular access to a car.

Residents of East Alameda County go to work outside the home with most frequency, with $72 \%$ going to work at least once a week. South and Central County residents have a somewhat lower rate of travel to work, with $68 \%$ and $67 \%$ respectively going to work outside the home at least once a week. North County residents are the least likely to go to work outside the home at least once a week, with $63 \%$ reporting that they do so.

East County commuters live the farthest from their workplaces, with a mean distance of nearly 20 miles. Central County residents are only a little closer, at nearly 18 miles from work, followed by South County residents at a little more than 16 miles. North County residents live closest to their workplaces on average, with a mean distance of 12.40 miles.

| Demographic | Residents |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| overall | Central <br> Alameda <br> Co. (29\%) | East <br> Alameda <br> Co. (11\%) | North <br> Alameda <br> Co. (44\%) | South <br> Alameda <br> Co. (16\%) |  |
| Access to a Car | $83 \%$ | $80 \%$ | $94 \%$ | $80 \%$ | $90 \%$ |
| Goes to Work | $66 \%$ | $67 \%$ | $72 \%$ | $63 \%$ | $68 \%$ |
| Outside Home |  |  |  |  |  |
| Mean: Distance to <br> Work | 15.47 mi. | 17.71 mi. | 19.58 mi. | 12.40 mi. | 16.07 mi. |
| Median: Distance to <br> Work | 12.00 mi. | 19.01 mi. | 13.91 mi. | 8.00 mi. | 15.00 mi. |
| Goes to School <br> Outside Home | $19 \%$ | $15 \%$ | $18 \%$ | $20 \%$ | $24 \%$ |
| Mean: Distance to <br> School | 12.52 mi. | 10.67 mi. | 10.29 mi. | 14.37 mi. | 10.75 mi. |
| Median: Distance to <br> School | 10.00 mi | 10.00 mi. | 5.00 mi. | 10.79 mi. | 3.90 mi. |

Residents of East Alameda County are the most frequent drivers, and the most frequent solo drivers. On average, East County residents drive a car 5.37 days per week, and they drive a car alone 4.38 days per week. South leads in number of days with a shared ride or carpool situation, with an average of 3.28 days per week.

Transit ridership is highest on average in North County, with a higher number of trips per week on BART, buses, and ferries than any other region. One-third of North County residents ride BART at least weekly, while $18 \%$ ride a bus at least once a week.

North Alameda County leads in bicycle riding for all purposes among adult residents. About a quarter of adult residents of North Alameda County ride a bicycle for any purpose at least once per week. North County also leads in bike riding for transportation, with $17 \%$ saying they ride for that purpose at least once per week (mean days per week .73). East County residents are most likely to ride a bicycle for health and recreation at least once per week (27\%), even though the overall mean days per week they ride for that purpose is lower than North County (mean .57 for East County; mean .82 for North County).

## Participants' Travel Habits (Average days per week SHOWN)

(Maximum: 7.0 days)

|  | Overall <br> $(100 \%)$ | Central <br> Alameda <br> Co. $(28 \%)$ | East <br> Alameda <br> Co. (12\%) | North <br> Alameda <br> Co. (43\%) | South <br> Alameda <br> Co. (17\%) |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Drive a car | 4.26 | 4.37 | 5.37 | 3.78 | 4.65 |
| Drive a car alone | 3.62 | 3.80 | 4.38 | 3.27 | 3.75 |
| Go to work outside of your home | 3.03 | 3.15 | 3.31 | 2.87 | 3.05 |
| Travel in a car with someone else, <br> whether you are the driver or a <br> passenger | 2.79 | 2.52 | 2.93 | 2.76 | 3.28 |
| Take your children to school | 1.00 | .69 | .88 | .69 | 1.77 |
| Ride BART | .71 | .78 | .36 | .86 | .39 |
| Go to school | .69 | .59 | .76 | .67 | .86 |
| Ride a bicycle for health/recreation | .60 | .39 | .54 | .78 | .53 |
| Ride a bicycle | .57 | .25 | .57 | .82 | .47 |
| Ride a bicycle as a way to get to a <br> destination | .47 | .26 | .21 | .73 | .31 |
| Ride a bus | .46 | .33 | .31 | .56 | .55 |
| Take a train other than BART | .12 | .12 | .15 | .10 | .14 |
| Take a ferry | .06 | .05 | .05 | .08 | .07 |

Frequency of biking as a way to get to a destination


## Bicycling Perceptions

In an open-ended multiple response question about why people don't ride their bicycles as transportation more, time and distance are the top response overall and across all regions of the county. Concern about time and distance are highest in South and East County.


When read a list of potential barriers to bicycling (in the 2010 survey) and asked how much each is a factor in their own bicycling decisions, fear of cars on the road is one of the top three reasons in every region of the county. In Central and South Alameda Counties, this is the top response, while it is second in East and North Counties. Lack of bike lanes and bike-safe streets tops the list in North County, and the top response in East County is fear of bad weather.

SCALE: 1 - Not at all important $\qquad$ -> 7 - Extremely Important

| Barrier | All participants in phone survey ( $\mathrm{n}=400$ ) | Central Alameda Co. <br> (28\%) | East Alameda Co. (12\%) | North Alameda Co. (43\%) | South Alameda Co. <br> (17\%) |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\mathrm{n}=400$ | $\mathrm{n}=112$ | $\mathrm{n}=48$ | $\mathrm{n}=171$ | $\mathrm{n}=68$ |
| 18. Worried about cars on the road | 5.33 * | 5.77 * | 5.34 * | 4.99 * | 5.44 * |
| 28. Fear of bad weather | 5.12 * | 5.54 * | 5.36 * | 4.88 | 4.89 |
| 21. The places you regularly go are too far away to ride | 5.01 * | 4.95 | 5.00 | 4.88 | 5.44 * |
| 25. Not enough bike lanes or bike-safe streets on your route | 5.01 * | 5.12 | 4.79 | 5.08 * | 4.83 |
| 31. Worried about my personal safety | 5.00 | 5.14 | 4.68 | 4.95 * | 5.11 |
| 30. Worried about getting home quickly in an emergency | 4.94 | 5.50 * | 5.11 | 4.33 | 5.42 |
| 20. You have to carry a lot of stuff | 4.80 | 4.94 | 5.29 * | 4.62 | 4.68 |
| 19. Need to have access to a car at some point during the day | 4.72 | 5.37 | 4.55 | 4.24 | 4.98 * |
| 23. Poor road and pavement conditions | 4.61 | 4.69 | 4.61 | 4.54 | 4.65 |
| 11. Don't want to arrive at your destination sweaty | 4.57 | 4.83 | 4.69 | 4.33 | 4.69 |
| 15. No safe place to park a bike at your destination | 4.48 | 4.71 | 3.51 | 4.55 | 4.59 |
| 29. Inability to take a bike on BART during commute hours | 4.18 | 4.43 | 3.92 | 4.25 | 3.74 |
| 26. Biking takes too much time | 4.09 | 4.26 | 4.04 | 3.87 | 4.38 |
| 13. Don't want to carry a change of clothes | 4.06 | 4.21 | 3.81 | 4.05 | 3.99 |
| 27. Fear of a flat tire or other equipment failure | 4.03 | 4.60 | 3.86 | 3.61 | 4.25 |
| 14. No place to shower at your destination | 3.97 | 4.23 | 3.86 | 3.83 | 3.94 |
| 17. Not in good enough shape | 3.85 | 4.32 | 3.62 | 3.69 | 3.65 |


| Barrier | All <br> participants <br> in phone <br> survey <br> $(n=400)$ | Central <br> Alameda <br> Co. <br> $(28 \%)$ | East <br> Alameda <br> Co. <br> $(12 \%)$ | North <br> Alameda <br> Co. (43\%) | South <br> Alameda <br> Co. <br> $(17 \%)$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 12. Don't want to arrive at your <br> destination with messy hair or <br> flat hair | 3.62 | 3.79 | 3.80 | 3.43 | 3.68 |
| 24. Don't know the best way to <br> get where you are going by bike | 3.47 | 3.80 | 3.06 | 3.29 | 3.68 |
| 16. Not confident in your bike <br> riding ability | 3.37 | 3.58 | 3.25 | 3.25 | 3.43 |
| 22. Don't want to ride your bike <br> alone | 3.22 | 3.76 | 3.05 | 2.96 | 3.12 |

*Top 3 responses
There is a lot of alignment across the county on what types of improvements would be best to encourage more bicycling as transportation (from the 2010 survey). With some variation in order, the top three in every region of the county are more places to ride away from cars, safety improvements at large intersections, and more secure bike parking at the places you go.

2010: Much more likely to ride my bicycle if there were...

|  | All <br> participants <br> in phone <br> survey <br> $(n=400)$ | Central <br> Alameda <br> Co. <br> $(28 \%)$ | East <br> Alameda <br> Co. <br> $(12 \%)$ | North <br> Alameda <br> Co. <br> $(43 \%)$ | South <br> Alameda <br> Co. (17\%) |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 34. More places to ride away <br> from cars, like on bike paths | $56 \%^{*}$ | $52 \%^{*}$ | $54 \%^{*}$ | $58 \%^{*}$ | $58 \%^{*}$ |
| 46. Safety improvements at <br> large intersections | $54 \%^{*}$ | $55 \%^{*}$ | $51 \%^{*}$ | $53 \%^{*}$ | $54 \%^{*}$ |
| 35. More secure bike parking <br> at the places you go | $51 \%^{*}$ | $53 \%^{*}$ | $47 \%^{*}$ | $51 \%^{*}$ | $52 \%^{*}$ |
| 32. More dedicated bike lanes | $49 \%$ | $50 \%$ | $47 \% *$ | $49 \%$ | $49 \%$ |
| 36. More secure bike parking <br> at transit stations | $47 \%$ | $50 \%$ | $40 \%$ | $47 \%$ | $44 \%$ |
| 33. Wider bike lanes | $45 \%$ | $41 \%$ | $43 \%$ | $47 \%$ | $47 \%$ |


|  | All <br> participants <br> in phone <br> survey <br> n=400) | Central <br> Alameda <br> Co. <br> $(28 \%)$ | East <br> Alameda <br> Co. <br> $(12 \%)$ | North <br> Alameda <br> Co. <br> $(43 \%)$ | South <br> Alameda <br> Co. (17\%) |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 42. Allowing bicycles on all <br> forms of public transit all the <br> time | $42 \%$ | $42 \%$ | $42 \%$ | $39 \%$ | $48 \%$ |
| 45. An easy way to find the <br> best bike route to the places <br> you go | $37 \%$ | $31 \%$ | $39 \%$ | $39 \%$ | $43 \%$ |
| 38. Access to a shared car at <br> your destination for use while <br> you are there | $37 \%$ | $36 \%$ | $40 \%$ | $33 \%$ | $45 \%$ |
| 41. Slower moving cars on the <br> streets | $32 \%$ | $32 \%$ | $27 \%$ | $33 \%$ | $33 \%$ |
| 40. Incentives from your work <br> or school, like contests or cash <br> giveaways | $29 \%$ | $33 \%$ | $28 \%$ | $26 \%$ | $33 \%$ |
| 37. A shower and changing <br> area at your destination | $28 \%$ | $23 \%$ | $28 \%$ | $31 \%$ | $30 \%$ |
| 43. Access to bicycle safety and <br> maintenance classes | $27 \%$ | $30 \%$ | $25 \%$ | $26 \%$ | $26 \%$ |
| 39. Organized bicycling groups <br> from near where you live to <br> your destination | $26 \%$ | $25 \%$ | $26 \%$ | $23 \%$ | $32 \%$ |
| 44. Access to information <br> about bicycle commuting <br> equipment | $24 \%$ | $27 \%$ | $19 \%$ | $20 \%$ | $33 \%$ |

*Top 3 responses
There are only minor regional differences in the reasons to cycle. North County is somewhat more compelled by environmental and energy conservation justifications for bicycling than the other regions.

## 2011: How convincing is each as a reason to ride a bicycle as a form of transportation?

Mean response where $1=$ not at all convincing \& 7 = very convincing



## Bicycling Behaviors and Barriers by Ethnic Group

Bicycling behaviors are fairly consistent across ethnic groups in the telephone survey. About one in five in all groups ride a bike at least once a week for any purpose. Hispanics are the most likely to ride to work or to school, with $10 \%$ of Hispanic respondents saying they do so at least once per week. Although they are the group most likely to recall the advertising campaign, African-Americans are the least likely to ride to work or school.

| Behavior | All <br> adults | African- <br> American <br> $(n=44)$ | Caucasian <br> $(n=164)$ | Hispanic <br> $(n=69)$ | Asian <br> $(\mathrm{n}=77)$ | Other/Ref <br> $(\mathrm{n}=48)$ |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Ride a bike at least once a week | $20 \%$ | $21 \%$ | $20 \%$ | $17 \%$ | $23 \%$ | $14 \%$ |
| Work outside home at least <br> once/week | $64 \%$ | $55 \%$ | $62 \%$ | $61 \%$ | $71 \%$ | $70 \%$ |
| Ride a bike to work at least once <br> a week | $7 \%$ | $2 \%$ | $7 \%$ | $10 \%$ | $8 \%$ | $5 \%$ |
| Go to school at least once/week | $18 \%$ | $11 \%$ | $16 \%$ | $19 \%$ | $20 \%$ | $24 \%$ |
| Ride a bike to school at least <br> once a week | $4 \%$ | - | $3 \%$ | $10 \%$ | $5 \%$ | $2 \%$ |
| Seen Get Rolling/Ride into Life <br> ads | $4 \%$ | $7 \%$ | $4 \%$ | - | $3 \%$ | $8 \%$ |
| Participated in BTWD 2011 | $2 \%$ | - | $3 \%$ | - | $1 \%$ | $7 \%$ |
| Ever participated in Walk \& Roll <br> to School Day | $9 \%$ | $9 \%$ | $7 \%$ | $10 \%$ | $13 \%$ | $10 \%$ |

In a closed-ended question about obstacles to riding a bicycle more often, top responses showed some variation by ethnic group. Amongst African-Americans, the top concerns were concern about personal safety and getting home quickly in an emergency, followed by concern about cars on the road and back weather. For Hispanics, lack of bike lanes and personal safety were the top concerns, then the amount of stuff they had to transport. And for Asians, the three concerns that essentially shared the top spot were fear of bad weather, worry about cars on the road, and worry about getting home quickly in an emergency.

## 2010: How important is each factor in considering riding a bicycle? (percent who rate barrier as important)

|  | All adults | AfricanAmerican $(n=45)$ | Caucasian ( $\mathrm{n}=162$ ) | Hispanic $(n=67)$ | $\begin{aligned} & \text { Asian } \\ & (n=76) \end{aligned}$ | $\begin{aligned} & \text { Other/Ref } \\ & (n=49) \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Worried about cars on road | 72\% | 78\% | 69\% | 73\% | 69\% | 82\% |
| Fear of bad weather | 66\% | 78\% | 62\% | 69\% | 70\% | 62\% |
| Not enough bike lanes/bikesafe streets | 65\% | 71\% | 60\% | 78\% | 62\% | 64\% |
| Places you go are too far to ride | 65\% | 64\% | 62\% | 71\% | 67\% | 67\% |
| Worried about personal safety | 64\% | 81\% | 53\% | 78\% | 64\% | 70\% |
| Worried about getting home quickly in emergency | 63\% | 80\% | 51\% | 71\% | 69\% | 65\% |
| Have to carry a lot of stuff | 61\% | 67\% | 54\% | 72\% | 61\% | 66\% |
| Need access to car | 60\% | 65\% | 53\% | 64\% | 66\% | 64\% |
| Don't want to arrive sweaty | 58\% | 74\% | 52\% | 62\% | 60\% | 52\% |
| No safe place to park bike | 58\% | 69\% | 47\% | 69\% | 61\% | 63\% |
| Poor road/pavement conditions | 57\% | 70\% | 51\% | 57\% | 59\% | 61\% |
| Inability to take bike on BART | 47\% | 71\% | 35\% | 56\% | 49\% | 54\% |
| Takes too much time | 47\% | 53\% | 43\% | 52\% | 50\% | 45\% |
| Not in good enough shape | 44\% | 68\% | 30\% | 55\% | 48\% | 49\% |
| Fear of equipment failure | 44\% | 50\% | 32\% | 63\% | 55\% | 39\% |
| Don't want to carry change of clothes | 43\% | 55\% | 37\% | 43\% | 48\% | 45\% |
| No place to shower | 43\% | 50\% | 38\% | 62\% | 36\% | 42\% |
| Don't know best route | 39\% | 42\% | 28\% | 49\% | 55\% | 34\% |
| Not confident in riding ability | 37\% | 50\% | 33\% | 39\% | 42\% | 28\% |
| Don't want to arrive with messy/flat hair | 36\% | 55\% | 31\% | 35\% | 37\% | 40\% |
| Don't want to ride alone | 32\% | 38\% | 24\% | 42\% | 40\% | 24\% |

(Bold indicates top three responses per group)

Reasons to bicycle showed some variation across ethnic group as well, although for some of the differences it appears to be more a matter of phrasing than different driving forces. For example, for the overall population, and for Caucasians, Asians, and other non-Hispanic and non-African-American respondents, the fact that biking is good for your health was the most convincing reason to ride. For African-Americans and Hispanics, the more specific message of helping to manage your weight was more compelling. Similarly, mentioning that biking is good for the environment was in the top three responses for Caucasians and Hispanics, while improving air quality and reducing greenhouse gas emissions were more resonant for Asians, and reducing gas and energy usage was more compelling for African-Americans.

## 2011: How convincing is each reason in thinking about riding a bicycle as a form of transportation? (percent who rate reason as convincing)

|  | All adults | African- <br> American $(n=44)$ | Caucasian $(n=164)$ | Hispanic ( $\mathrm{n}=69$ ) | $\begin{gathered} \text { Asian } \\ (n=77) \end{gathered}$ | Other/Ref $(n=48)$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Good for your health | 88\% | 83\% | 91\% | 85\% | 90\% | 83\% |
| Better for environment | 84\% | 88\% | 85\% | 88\% | 80\% | 81\% |
| Improves air quality | 81\% | 80\% | 79\% | 83\% | 87\% | 78\% |
| Saves money | 81\% | 100\% | 74\% | 92\% | 79\% | 75\% |
| Reduces gas \& energy usage | 80\% | 89\% | 77\% | 78\% | 83\% | 79\% |
| Helps manage weight | 79\% | 91\% | 75\% | 89\% | 72\% | 76\% |
| Allows you to be outdoors | 76\% | 81\% | 74\% | 82\% | 76\% | 70\% |
| Reduces greenhouse gas emissions | 76\% | 76\% | 71\% | 79\% | 85\% | 76\% |
| Reduces dependence on foreign oil | 71\% | 87\% | 69\% | 74\% | 62\% | 70\% |
| Reduces stress level | 64\% | 76\% | 63\% | 79\% | 58\% | 49\% |
| Reduces traffic congestion | 63\% | 78\% | 51\% | 73\% | 74\% | 58\% |
| Sets a good example | 59\% | 60\% | 55\% | 80\% | 53\% | 53\% |
| Saves time by avoiding traffic | 40\% | 61\% | 32\% | 57\% | 31\% | 39\% |

