



Caltrans Bay Area Bike Highway Survey Summary Key Themes

Caltrans Bay Area is evaluating the implementation of bike highways in the Bay Area. From February 4 to March 5, 2021, the project team promoted a survey to stakeholders within the nine county Caltrans Bay Area (formerly D4) region. The goals of the survey were to:

- Solicit feedback on what features would make bike highways safe and easy to use for a broad level of bicyclists
- Understand current bicycling habits
- Understand barriers to bicycling
- Increase awareness of the Caltrans Bay Area Bike Highway Study

More than 5,800 responses were gathered in English (N=5,748) and Spanish (N=72). A summary of key themes that emerged surrounding people's bicycling habits and preferences, as well as design and safety features is provided below.

Key Takeaways

- The majority of respondents bicycled or used other forms of micromobility "often" or "always" both before and after Covid-19 restrictions were in place. This suggests that there is a large population who may be interested in using a bike highway within the Bay Area.
- The top two reasons respondents listed as to why respondents do not bicycle more often are 1) concerns about physical safety from traffic and 2) a lack of comfortable bikeways or roads connecting to desired destinations. Concerns were also raised that bike highways could provide a space for homeless encampments. These factors will be important to consider within the bike highway design process.
- The most favored design option is a bicycle highway that is separated from vehicular traffic. Thus, designs that separate users from vehicular traffic should be a priority.



- The majority of respondents felt that people walking, riding e-bikes/scooters, or using a mobility device should be allowed to use the bike highway when possible. However, in addition to creating a facility that is separate from traffic, separation between people walking/using a mobility device ranked as one of the most important design elements to respondents. Thus, design elements that separate users from vehicle traffic and accommodate different types of users should be a priority.
- It was important to respondents that the bike highway either improves an existing route or creates an entirely new one, providing bicycle access to areas where it previously was unavailable. Suggestions included creating a bike highway between San Mateo and downtown San Francisco, or from the East Bay to San Francisco.

Summary of Key Themes

Frequency and Purpose of Bicycle Trips

The majority of respondents bicycled or used other forms of micromobility “often” or “always” both before and after Covid-19 restrictions were in place. The majority of respondents said they would use a bike highway for multiple purposes, including to get somewhere, for fun, and for health/exercise. Additional reasons people bicycled included mental health/stress relief and the desire to reduce environmental impact. It was also noted that bicycling provided a way to avoid public transportation and potential COVID-19 risk.

Safety Concerns

Concerns about physical safety from traffic and a lack of comfortable bikeways or roads connecting to desired destinations were the top two reasons respondents said they don’t bicycle more often. When asked what safety concerns they had surrounding a bike highway, respondents similarly noted concerns about conflicts with car traffic and the speed of adjacent car traffic, in addition to a lack of safe access to a bike highway. Additional safety concerns included the presence of people walking and homeless encampments in and around bike trails, lack of secure bicycle parking at destinations, and fear of their bike being stolen. Suggestions for increasing safety included ensuring there is continued maintenance and security at the facility, such as through trail etiquette signs, having a patrol system, and installing security cameras and emergency phones.



Other Forms of Mobility

The majority of respondents felt that people walking or using a mobility device should be allowed to use the bike highway when possible, and that it should also be open to devices such as electric bicycles, electric scooters, and skateboards. While those who opposed allowing other forms of mobility were in the minority, common reasons respondents identified for opposition included differences in speed between different modes, which could increase the likelihood of collisions, other forms preventing bicyclists from travelling at higher speeds, and that people walking or using mobility devices can use the sidewalk. There was also some concern that e-bikes and other motorized forms of transit would travel too fast, and that they should use existing car lanes instead.

Design Elements

The design elements respondents ranked as most important were creating a facility that was separate from traffic, and separation between people walking/using a mobility device. This preference for a fully-dedicated facility was evident across several questions. Similarly, when asked what would be most important to respondents if a bike highway was developed in their community, a facility that was fully separated from car traffic was also the top choice, followed by a facility that provides a direct route to and from key destinations. Additional comments included the preference for a fast, uninterrupted route, the ability to have enough room to pass travelers at other speeds, creating a facility not directly adjacent to highways or other roads with lots of road noise and pollution, offering well-designed entrances and exits to fit in with existing infrastructure, offering bathrooms and benches at pull outs, having a smooth, well-maintained path, and the presence of pullouts in case travelers need to stop. Through both free response and survey questions, it was evident that creating a facility with greenery and landscape or one that was pleasant to look at was a lower priority.

Connectivity and Accessibility

Several themes emerged from the free response questions about respondents' preferences for connectivity and accessibility. These included a preference for creating or improving bike routes, such as between San Mateo and downtown San Francisco, or from the East Bay to San Francisco, a desire to connect from bedroom communities to job centers, and providing connections to regional trail centers, public transit systems, and places that are hard to get to on a bicycle, such as shopping areas, big box stores, airports, marinas and parks. Overall, respondents



noted that a bike highway should provide a connection to both commercial and residential centers.

Environmental Justice

Through the free response section, several concerns were raised relating to environmental justice. It was noted that bike highways should not be “flyovers” for low-income communities, but should instead provide an opportunity to right historical wrongs by providing connections for communities that have previously been redlined. It was noted that access and connection to low income and disadvantaged communities should be prioritized, as should providing access to those without personal access to vehicles, and ensuring that communities of concern have ample opportunities to provide input on bike highways within their community.

Demographic Information

When possible, demographic information obtained during the survey was compared to demographics of the general population per 2019 U.S. Census Bureau American Community Survey (ACS) 5-Year Estimates Data Profiles.

Of respondents who responded to demographic questions, the majority were ages 35-54, identified as male, identified as white, and had a combined household income of \$150,000 or more.

Age

- People ages 18-34 were slightly overrepresented. 29% of respondents who provided their age group identified as 18-34 (people aged 18-34 comprise 21.7% of the nine-county Bay Area).
- People ages 35-54 were slightly overrepresented. 42% of respondents who provided their age group identified as 35-54 (people aged 35-54 comprise 27.9% of the nine-county Bay Area).
- People ages 55-74 were underrepresented. 27% of respondents who provided their age group identified as 55-74 (people aged 55-74 comprise 21.2% of the nine-county Bay Area).
- People ages 75 and above were underrepresented. 2% of respondents who provided their age group identified as 75 and above (people aged 75 and above comprise 6.3 % of the nine-county Bay Area).

Gender



- Men were overrepresented. 67% of respondents who provided their gender identified as men (men comprise 49.7% of the nine-county Bay Area) and 28% of respondents who provided their gender identified as women (women represent 50.4% of the Bay Area population).

Income

- 71% of respondents had a combined annual household income of \$75,000 and were slightly overrepresented in the survey. (Those with an average combined household income of \$75,000 or more represent 63.4% of the Bay Area population.)

Race/Ethnicity

- People who identify as Asian or Asian-American were underrepresented. 16% of respondents who provided their race/ethnicity identified as Asian or Asian-American (Asian or Asian-American people comprise 26.1% of the nine-county Bay Area).
- People who identify as American Indian or Alaska Native were appropriately represented. 1% of respondents who provided their race/ethnicity identified as American Indian or Alaska Native (American Indian or Alaska Native people comprise 0.2% of the nine-county Bay Area).
- People who identify as Black were significantly underrepresented. 2% of respondents who provided their race/ethnicity identified as Black (Black people comprise 5.8% of the nine-county Bay Area).
- People of Hispanic, Latino or Spanish origin, who make up 23.5% of the nine-county Bay Area, were underrepresented at 8%.
- People who identify as Native Hawaiian or other Pacific Islander were appropriately represented. 1% of respondents who provided their race/ethnicity identified as Native Hawaiian or other Pacific Islander (Native Hawaiian or other Pacific Islander people comprise 0.6% of the nine-county Bay Area).
- People who identify as non-Hispanic White were overrepresented. 71% of respondents who provided their race/ethnicity identified as non-Hispanic white (non-Hispanic White people comprise 39.3% of the nine-county Bay Area).