



Save California Streets

2020 Outstanding Local Streets and Roads Project Awards Program

North Fremont Bike and Pedestrian Access and
Safety Improvements Project



Project Summary

The North Fremont Bike and Pedestrian Access and Safety Improvements Project transformed North Fremont Street in the City of Monterey (City) into a true multi-modal corridor, providing safe access to bicyclists and pedestrians on a vital link between residential, commercial, educational, and community facilities. This project is the first major transportation project to occur along North Fremont Street in over fifty years.

Construction of this \$9.4 million project involved the construction of the first Class IV-protected bicycle lanes adjacent to the median with bicycle signals and bike-protected intersections in California. This design is aimed at users of all ages and abilities. This project promotes a safe alternative to driving on a corridor that carries an average of 32,000 vehicles per day and has a posted speed limit of 35 mph.

The extensive pedestrian safety and accessibility improvements included new ADA complaint curb ramps, new Audible Pedestrian Signals and increased safety lighting. Long skewed crosswalks were eliminated by straightening and shortening the crosswalks through re-alignment. Consistent flooding on North Fremont was mitigated by storm drain improvements and the installation of storm chambers under existing sidewalk.

The bike and pedestrian improvements in this corridor also serves the existing Bus Rapid Transit line providing a last mile alternative and seamless integration to biking, walking and riding transit.

Another benefit of the project is the installation of fiber optic under the Class IV bike lanes which will connect all the signals and facilitate the installation of an Adaptive Signal System on this corridor.

The Monterey Peninsula is a highly sought-after destination for local and visiting cyclists. The North Fremont Project is a catalyst for the Monterey Bay Region's goal to connect and improve bicycle mobility. The project will provide a connection from the North Fremont Corridor to the Monterey Bay Sanctuary Scenic Trail, and the proposed FORTAG trail system to provide over 30 miles of bicycle network. In addition to regional connections, the North Fremont project provides bicycle connections to the Monterey County Fairgrounds, local neighborhoods and businesses along North Fremont Street.

All of the items above were accomplished without the loss of parking or travel lanes.

The project team included:

- City of Monterey, owner
- Harris & Associates Inc., construction manager/resident engineer and inspection
- Granite Construction Company, Inc., prime contractor
- Kimley-Horn & Associates, civil engineer
- Collins Electrical, electrical contractor
- Monterey Bay Engineers Inc., land surveyor
- VSCE, Inc., peak inspection
- Pacific Crest Engineering Inc., materials testing
- The Ingram Group, public outreach



Cyclists gathering together to use the new bike lanes.

Project Details

The project was first conceived in 2014 with the preliminary design to support a Caltrans Active Transportation Grant (ATP) proposal. In 2015, the City was awarded a grant of over 6 million dollars in the first cycle of the ATP program. Final design and outreach were completed in 2018. In May 2018, a contract was approved to commence the construction of the project.

A ribbon cutting ceremony was held 15 months later on September, 2019 and substantial completion was achieved on October, 2019.

To successfully implement this project the City, sought many sources of funding. The funding included:

- Caltrans Active Transportation Program (ATP) Grant
- Transportation Agency for Monterey County (TAMC) Regional Surface Transportation Program (RSTP) Grant
- Measure P/S
- Measure X
- City of Monterey Neighborhood Community Improvement Program (NCIP)



Cyclists using one of the new crosswalks.

Safety Features

Research has shown protected bicycles lanes are preferred, especially by the interested and concerned bicyclist group. The innovative aspect of this project comes from replacing proposed Class II bike lanes with the protected bicycle lanes adjacent to the median of the road, making it the first in the state of California. The advances in signal technology, provision of bike signal heads, and bike phasing allows for bicycle signals to be coordinated with traffic signals so that bicycles can enter and exit the median bicycle lanes in an efficient and safe manner. The median provides improved protection over typical Class II or Class IV facilities on the side of the travel lanes. By placing the bicycle lanes in the median, our project team was able to address the community's concerns around preserving parking, the current number of travel lanes, and apprehension about bicycling in Class II bike lanes next to high-speed traffic. This design also eliminated multiple driveway, right and left turn, and open door potential conflicts. Multiple potential conflict points were eliminated by providing safe access at the median and midblock. The City also implemented "CrossBikes" or crosswalks specifically designed for bicycles. These are for the easy transition of bicyclists entering and exiting the median bicycle lanes and eliminates bicycle and pedestrian conflicts.

A major cost savings to the project was elevating the bicycle lanes in the median. Not only did this provide area to run conduit to support the signal fiber in re-connect for traffic signal operations, but it also places bicyclists in better view of the vehicles where the higher curb between the street and the bike facility provide better protection for the cyclists. This also enables the Class IV Bike Lanes to drain towards the vegetated median. The City of Monterey is also planning to implement an Adaptive Signal System along the corridor, and the hardware is already set up for implementation which could be integrated with the bicycle signals.

Bicycle lanes were not the only improvement element of the project. Many ADA improvements and curb extensions were added to improve pedestrian safety and visibility. Pedestrian scale lighting through bollards allowed for the best placement of audible pedestrian signals and increased visibility at night. The community was hesitant around the very new and different idea of bicycle lanes in the median, however, the City strived to improve North Fremont so that it was accessible to "Users of all abilities".

Before and After



Before Construction



Before Construction



After Construction

During Construction



Crosswalks being painted



Paving crew at work



Traffic lights being installed



Aerial view of crew and machinery



Aerial view of extended curbs being constructed



Ground view of extended curbs being constructed



Infiltration basin installation for storm water improvements



36-inch pipe installation nearly finished

Post Construction



New Class IV-protected bicycle lanes adjacent to the medians of North Fremont



New bicycle signal and bike-protected intersection at North Fremont St. and Airport Rd.

Post Construction



City of Monterey Officials, City Staff, Consultants and project supporters



Clyde Roberson, Mayor of Monterey, delivering a speech



Crowd anticipating the opening of the new bike lanes



Cyclists in attendance



Hotel/Motel Tax funds helped to pay for this project

Post Construction



View of new crosswalks at the intersection of North Fremont St. and Airport Rd.



Project Team Photo that includes City Officials, City staff and consultants