



Frequently Asked Questions about the North Fremont Bicycle & Pedestrian Project:

Why the effort for a multi-modal corridor?

The North Fremont Bicycle and Pedestrian Project has been the “kick-off” to realize many of the goals outlined in the City’s Multi-Modal Plan “Monterey-on-the-Move”. The goal of this project is to make North Fremont a safer and more accessible place for people of all abilities and traffic modes. This is also a part of the vision for the North Fremont Specific Plan. For more information please see the North Fremont Specific Plan Website: <https://monterey.org/planningnorthfremont>

How was this funded?

This project is a major infrastructure project funded through the Caltrans Active Transportation Program (ATP) Grant, with matching funds from the Neighborhood Improvement Program (NIP), Measure P/Measure S, and Measure X. The purpose of an ATP Grant is to fund pedestrian and bicycle improvements.

Couldn’t these funds be used for other projects?

This project is a major infrastructure project funded through the Caltrans Active Transportation Program (ATP) Grant. The grant is very specific that the infrastructure project improves mobility, safety, and accessibility for pedestrians and bicycles as well as promote active transportation. If this project was not implemented, in its current form, the City would be required to return the money back to the state for a bicycle or pedestrian project elsewhere in the state. The intent of the ATP Grant is to build a facility that encourages people of all abilities to walk or bike.

What does this bike lane connect to?

No, this simply the start! The North Fremont bike lanes will connect to the Fort Ord Regional Trail & Greenway (FORTAG). NIP is currently funding the design of a connection from Casanova to Canyon Del Rey Boulevard. Additionally, there are minor connections to the neighborhoods as shown in the City’s Multi-Modal Mobility Plan “Monterey on the Move”.

For more information:

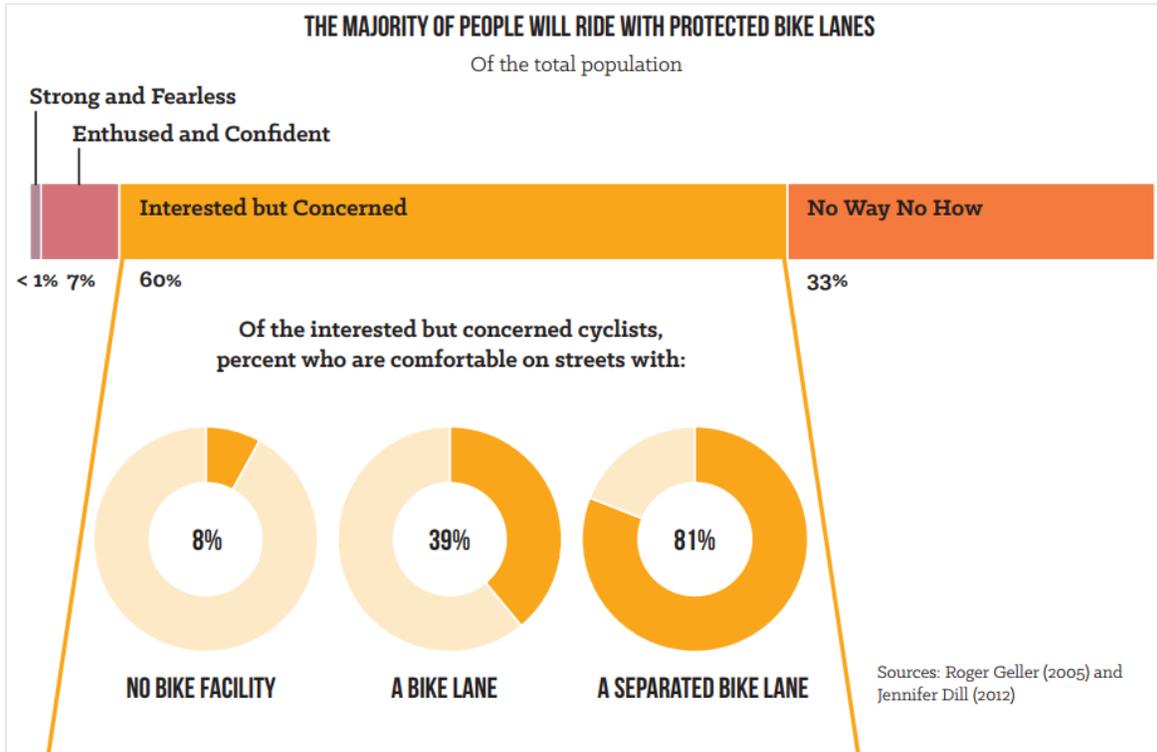
- **FORTAG**
<https://www.tamcmonterey.org/measure-x/programs-projects/fort-ord-regional-trail-greenway/>
- **2013 Multi-Modal Plan “Monterey on the Move”**
<https://monterey.org/Services/Community-Development/Planning/Planning-Projects/Monterey-on-the-Move>



How does this benefit me?

The project has many benefits to residents, businesses and visitors using North Fremont:

- Class IV Protected bike lanes
- Stormwater improvements
- New traffic signals and signal poles
- Audible Pedestrian Signals
- ADA ramps
- Bulb outs, shorter pedestrian crossings
- Traffic Signal Operation Improvements



As shown in the graphic above in addition to bicycle connectivity and accessibility, protected bicycle lanes like those in North Fremont median can increase in bicycle ridership, many people who have expressed interest in bicycling but are concerned with safety are more comfortable with a separated or protected bicycle lane. Most people do not feel comfortable riding next to traffic in bike lanes on a 35 mph corridor. Protected bike lanes can also improve bicyclist safety, increase in business traffic, increase in property values, and a decrease in bicycle collisions. Please visit our project website for more quick facts on the benefits of protected bike lanes at [Monterey.org/NFremontBikePed](https://monterey.org/NFremontBikePed).



North Fremont St



How can I get to the Recreation Trail?

There are several ways to get to the Monterey Peninsula Recreational Trail, two examples are via Casa Verde Way and via Casanova Ave. In the future there will be a more direct connection via FORTAG at the intersection of Canyon Del Rey and North Fremont.

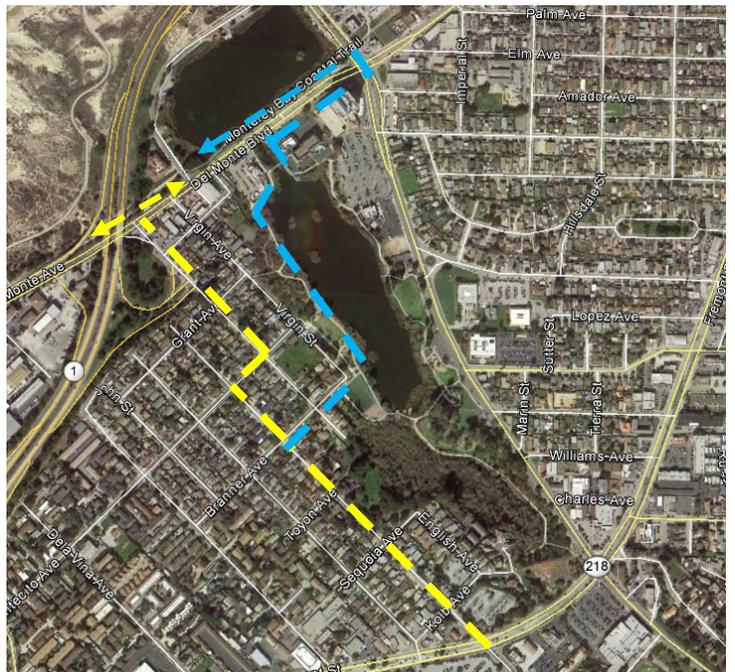
Via Casa Verde Way

- Exit at the end of the bike lanes, using the push button to trigger the bicycle signal.
- Use the “Cross Bikes” (aka Crosswalks for bicycles)
- Head North towards Del Monte, Casa Verde will be Class III Facility meaning you can bike in traffic as a vehicle or on the sidewalk, if you are more comfortable or bicycling with young children.
- Just north of the intersection of Del Monte and Casa Verde is the Recreational Trail.



Via Casanova Ave

- Exit at the end of the bike lanes, using the push button to trigger the bicycle signal.
- Use the “Cross Bikes” (aka Crosswalks for bicycles)
- Head North toward Montecito, turn right on Montecito, and left onto English Ave.
- The recreational trail is located just north of the intersection of Del Monte and English.
- Alternatively, you can turn right on Branner Ave, at the end of Branner is the Laguna Grande Regional Park.
- You can use the Laguna Grande park to cut through to Del Monte where you can connect to the recreational trail at the intersection of Del Monte and Canyon Del Rey.





Will the signals work differently than before?

The City is also implementing an adaptive signal system, or smart signal, to further improve signal operations along North Fremont, from Casa Verde to Casanova. The City hopes to collaborate with Caltrans and Seaside in the future to incorporate further signals, however these locations are outside of City jurisdiction.

Why are the free- right turn lanes being removed on Casanova and Airport?

Free-right turn lanes are being removed to improve pedestrian safety and visibility at corners. Free-Right Turns pose greater risk to pedestrians because it removes pedestrians from their main line of sight. Turning vehicles are focused on on-coming traffic not at the pedestrians to their right. Right turn movements are still permitted, they are now controlled by the signalized intersection. Drivers may make a right, after stopping at the red light – provided it is safe to do so.

For further information, please look at Designer’s memorandum on the subject of free-right turns.

Why is the right turn at Ramona staying if you are removing the other ones?

Ramona is a very skewed intersection, removing the right turn at this intersection would make it prohibitive for vehicles to make the sharp right turn. The geometry would not allow for right turns which would restrict access onto eastbound North Fremont from Ramona.

For further information, please look at Designer’s memorandum on the subject of free-right turns.

Why are the mid-block left turn lanes being removed at Hannon?

The mid-block left turn lanes were removed at Hannon to keep a consistent bike lane between Ramona and Casanova. If the mid-block left turns onto Hannon were kept it would significantly impact the design of the project, an additional signalized intersection would be required.

For further information, please look at Designer’s memorandum on the subject of mid-block left turns.

Why has North Fremont been under construction for so long?

Prior to the North Fremont Groundbreaking in June 2018, Cal-Am was making utility improvements along North Fremont and throughout the City of Monterey. The original FAQs posted in October 2018 estimated the date for construction to be complete was late September 2019.

Can we have waited longer between Cal-Am construction and the North Fremont Project construction?

If we had waited longer to start the North Fremont construction, we would have lost the grant funding potentially missing out on an amazing opportunity for Monterey.

MEMORANDUM

From: John Pulliam, P.E. and Frederik Venter, P.E., Kimley-Horn and Associates

To: Andrea Renny, City of Monterey

Date: September 19, 2018

Re: **North Fremont Project – Free Right Turn Removal**

The North Fremont Bike and Pedestrian Access and Safety Project is closing the free right turn access at the intersections of Casanova Avenue and Airport Road. The removal of the free right turns will require right turning vehicles to stop at the signalized intersection before the crosswalk, then proceed, when safe to do so. The ability to make the right turn is thus the same as with a free right turn, but at a lower speed, which significantly improves safety for vehicles, bicycles and pedestrians. Free right turns have a yield condition which can also cause confusion on who has the right of way when the light is green. Free right turns can encourage high speeds in close proximity to pedestrians, split driver attention between traffic and looking for pedestrians, increase the crossing distance and pedestrian phase timing, and force pedestrians to cross a vehicular yield control crossing.

The North Fremont project offers tremendous safety benefits for bicycles, pedestrians, and vehicles by providing separated bicycle facilities and improved pedestrian facilities. Eliminating the free right turns at the Airport and Casanova will further increase pedestrian safety along this busy corridor. Removing free-right turns improves the mobility of visually impaired pedestrians because all movements are controlled by signals and have audible pedestrian crossing.

The North Fremont Project scored high with the grant due to the increase safety for pedestrian on this corridor, this is directly linked with the elimination of free-right turns on North Fremont.

Collisions

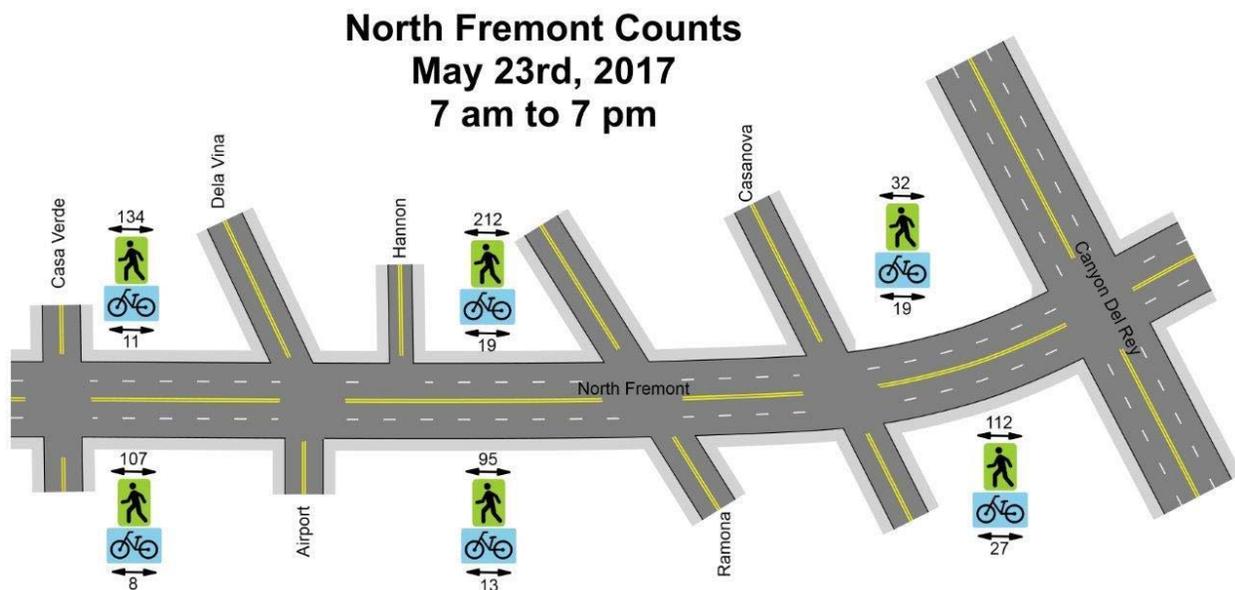
There have been 1 reported vehicle-pedestrian injury collision in the past 5 years that may have been preventable by the closure of the free right turn at North Fremont Street and Casanova Avenue. The incident involved a vehicle colliding with a pedestrian while making a right turn.

There have been 2 Vehicle/Bicycle Collisions and 5 Vehicle/Pedestrian Collisions at the intersections of North Fremont with Casanova, Ramona, and Airport/Dela Vina. this block in the past 8 years. Vehicle/Pedestrian collisions could potentially be reduced, by removing Free-Right turn facilities, tightening of curb radii, bulb outs, high visibility crosswalk striping and audible signal for bicycle in the roadway these include, bike signals, bike lanes, and bike boxes.

Traffic Counts

Pedestrian and bicycle counts were collected along North Fremont May 3rd, 2017 from 7 AM -7 PM. **Figure 1** shows the pedestrian and bicycle counts along North Fremont Street. Free-right turns were eliminated to enhance the pedestrian experience. The improved pedestrian and bicycle access will encourage more people to bike and walk along North Fremont.

Figure 1 – Pedestrian and bicycle counts along North Fremont Street.



Impact to Project Design

Bulb-outs (curb extensions) are being installed at most corners along the corridor. The purpose of these bulb-outs is to slow down right turn movements, shorten the crossing distance for pedestrians, and to also provide a refuge area that can accommodate both pedestrians and cyclists. This is a critical component of the overall bikeway design, as cyclists will use the bulb-out area to enter and exit the median bike lanes.

The project is currently under construction, so any change to the design at this point would also require a re-design and lead to an increase in project cost. Due to the grant conditions, changes in design would require Caltrans approval and jeopardize the project funding source. In addition, this would be the only intersection with a free right turn along the corridor.

Continuing to allow free right turns will significantly impact the design of the North Fremont Bike and Pedestrian Access and Safety Project, reducing safety for pedestrians and cyclists. Allowing free right turns on Casanova Ave and Airport Rd contradicts the goals of the project, as it would significantly reduce pedestrian safety at these vehicular conflict points, and would

necessitate the redesign of this intersection, leading to increase construction costs, and potentially increase delay along the corridor.

If free right turn access were allowed, a new traffic signal would have to be installed at each intersection as the proposed signals would potentially need to be relocated and sized differently.

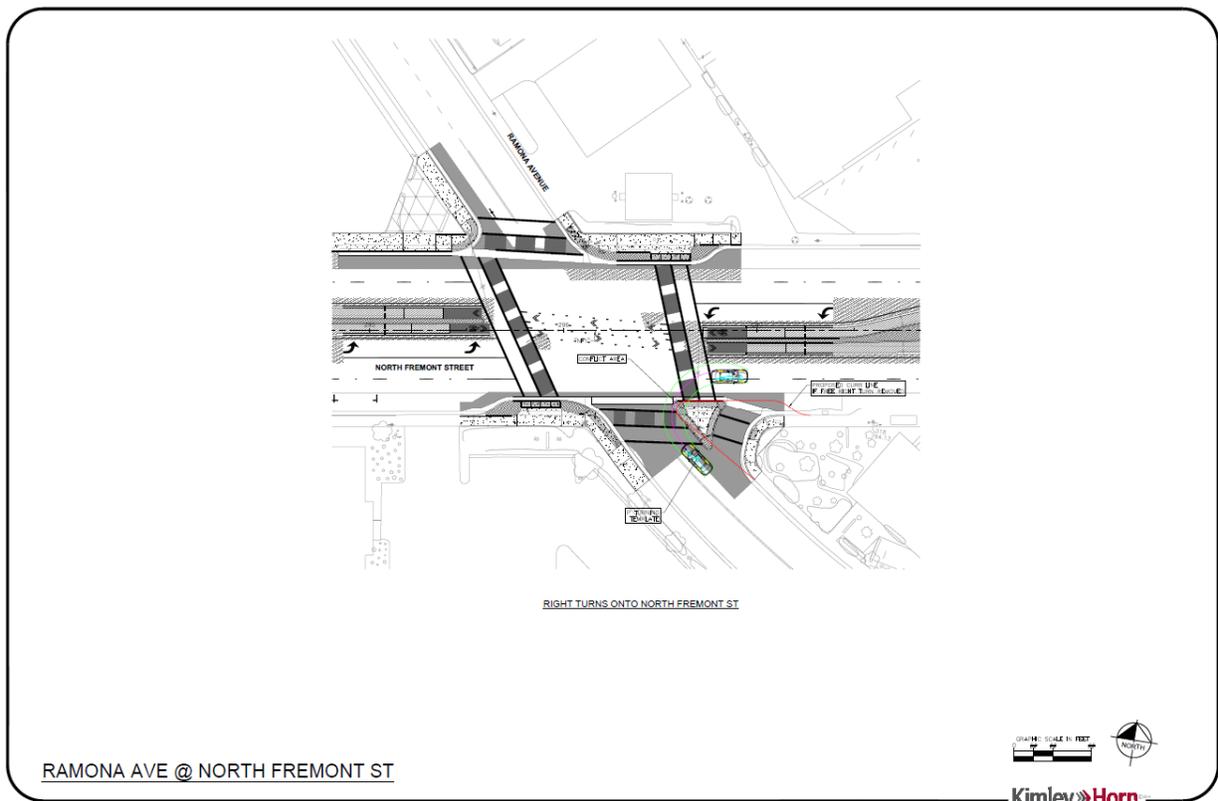
Intersection of North Fremont and Ramona

Due to skew at Ramona Avenue and North Fremont, it would be very difficult to turn right if the free right turn is eliminated, it would also be difficult to make the turn without mounting the curb causing a major safety concern for pedestrians and bicycle. This would essentially restrict the ability to turn right on Ramona.

The corner island is also necessary for the placement and orientation of the traffic signal mast arm.

Figure 2 shows the turning template of a passenger vehicle at Ramona Ave if the free right turn was eliminated.

Figure 2 – Turning Template Ramona Ave



Summary

In summary, the removal of the free right turn provides enormous bicycle and pedestrian improvements for people in all abilities. Due to the skew of the intersection at Ramona and North Fremont the free right turn had to be kept for operational purposes.

In addition, any changes to the project would delay construction, require additional engineering and potentially remove some of the benefits of the project.

MEMORANDUM

From: John Pulliam, P.E. and Frederik Venter, P.E., Kimley-Horn and Associates

To: Andrea Renny, City of Monterey

Date: May 7, 2018

Re: **North Fremont Project – Mid-block Vehicle Access**

The North Fremont Bike and Pedestrian Access and Safety Project is proposing to close several mid-block left turns along the North Fremont Street Corridor, in order to provide space for and better accommodate a Class IV Bike lane in the median of North Fremont. One of these existing mid-block left turns that the project proposes to close is at Hannon Avenue. We understand that there is concern about the impacts of closing this mid-block crossing. While our team understands those concerns, we believe this is the best course of action because it allows for a better, safer bike lane design, and because there are short, alternative ways of reaching destinations other than using Hannon Avenue. The diversion of traffic to Casanova is minor (approximately 1 car a minute in the peak hour) which will have negligible effect on traffic operations.

The North Fremont project offers tremendous safety benefits for bicycles, pedestrians, and vehicles by providing separated bicycle facilities and improved pedestrian facilities. New Class IV bike lanes located in the median will provide cyclists with a separated facility, protected by a curb and a railing from traffic. Making changes to the Hannon intersection to accommodate left-turns would reduce the effectiveness and safety of the bicycle lanes, increase project cost, and negatively affect vehicular progression along North Fremont.

In addition, the closing of the center turn lane, like the left turn lane into and out of Hannon Ave provides benefits to motorists. Based on studies from the 2014 Study "Validation and Application of Highway Safety Manual (Part D) in Florida" the closure of a center turn lane to a median has shown to provide a 30-45% reduction in all crashes and the addition of bike lanes was shown to reduce vehicular/bicycle crashes by 50-60%.

Collisions

There have been 1 reported vehicle collision in the past 5 years that could be preventable by the closure of the midblock left turn at North Fremont Street and Hannon Avenue. The incident involved a vehicle colliding with an object while exiting left from Hannon Avenue.

There have been 2 Vehicle/Bicycle Collisions and 1 Vehicle/Pedestrian Collisions along this block in the past 16 years. Vehicle/Bicycle collisions could potentially be reduced, by providing facilities for bicycle in the roadway these include, bike signals, bike lanes, and bike boxes.

Existing Roadway Geometry

Existing conditions at Hannon Ave and N. Fremont St. consist of an unprotected left turn, where cars must wait for a gap in opposing traffic in order to complete their left turn. There are approximately 800-1,000 cars an hour, which can lead to a significant queuing time. Additionally, there is currently little to no space to queue, accelerate, or decelerate from in and out of the turn pockets.

Traffic Counts

Traffic Counts were collected at the intersection of Hannon Ave and Kolb Ave in November 2017 and at Fremont and Hannon in May 2018.

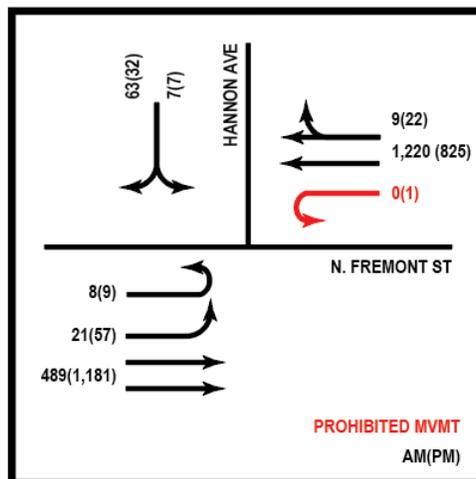
Table 1 – Peak Hour Traffic accessing Hannon Ave.

Direction	AM Peak Hour		PM Peak Hour	
	2017	2018	2017	2018
Exiting Hannon Ave	69	70	40	39
Entering Hannon Ave	48	30	74	79

Source Kimley-Horn, 2018

The counts collect May 2018 show 7 left turns exiting Hannon Ave onto North Fremont in the AM peak hour and 7 left turns in the pm peak hour. The counts also show 29 vehicles utilizing the mid-block left turn in AM peak hour and 66 left turns in the PM peak hour. It should also be noted that an U-turn occurred in the southbound direction, this movement is not permitted at Fremont and Hannon. **Figure 1** shows the turning movements at the North Fremont Street and Hannon Ave

Figure 1 – Peak Hour Traffic at North Fremont Street and Hannon Avenue.

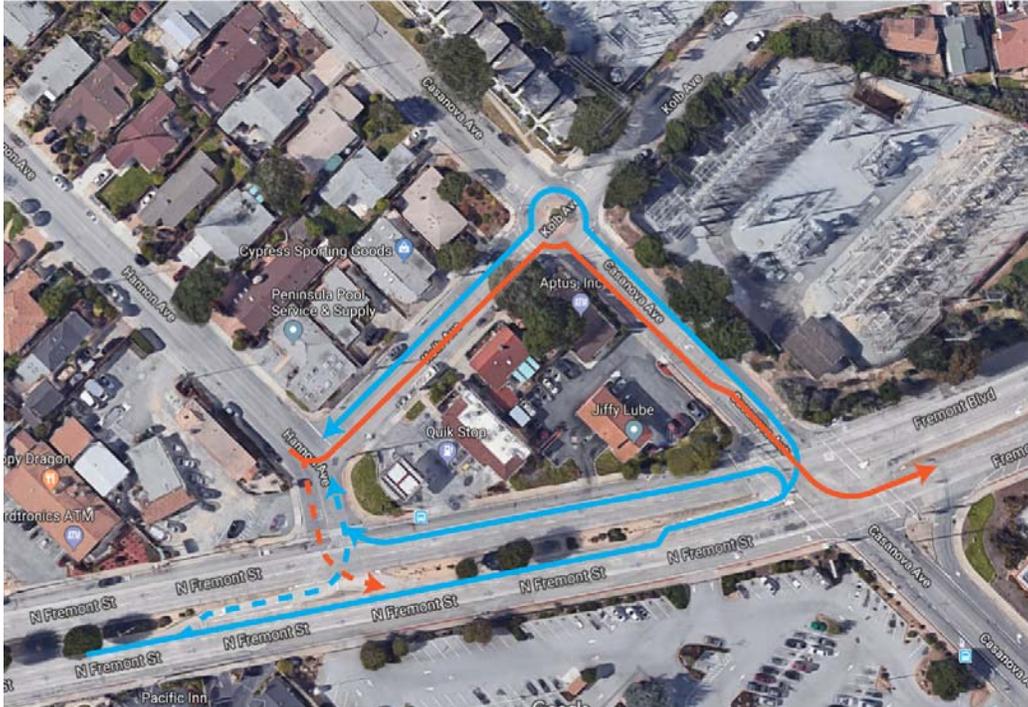


Source Kimley-Horn, 2018

Traffic Diversion

The diversion of traffic is shown in **Figure 2** below, the southbound left movement and the eastbound left and U-turn movement would be affected. Vehicles are permitted to make a U-turn at Casanova or alternatively make a series of lefts at Casanova Ave and Kolb Ave.

Figure 2 – Diversion of traffic at Hannon Avenue and Fremont Avenue



Source Kimley-Horn, 2018

Impact to Project Design

Allowing left-turns in and out of Hannon Ave would significantly impact the design of the North Fremont Bike and Pedestrian Access and Safety Project, reducing bicycle safety. Allowing left turns at Hannon Ave is antithetical to the goals of the project, as it would reintroduce conflict points with bicycles, necessitate the redesign of this intersection, increase costs, and potentially increase delay along the corridor.

If left turn access were allowed, a new traffic signal would have to be installed at Hannon Avenue, as it would be the only way to safely introduce a break in the median (and thereby a break in the bike lanes) and allow a left turn onto Hannon. The existing traffic volumes do not meet the CAMUTCD Peak Hour signal warrant, even if the 85th percentile speed was greater than 40 mph. If a signal were installed it may also introduce a new crossing opportunity for pedestrian and bicycles, increasing delay for all modes of transportation.