



City of Santa Barbara Transportation & Circulation Committee *Staff Report*

DATE: May 31, 2018

TO: Transportation & Circulation Committee (TCC) Members

FROM: Dan Gullett, Supervising Transportation Planner, and
Derrick Bailey, Principal Traffic Engineer

SUBJECT: East Cabrillo Boulevard Safety Improvements, Buffered Bike Lanes,
and Beach Access Parking Concept

RECOMMENDATION

That the Committee review the concept design for the Project and recommend that City Council approve it.

CONCEPT DESIGN

With the slurry seal of East Cabrillo scheduled for this fall, City staff will be including striping for new on-street (Class 2) bike lanes east of Milpas Street, as approved in the Bicycle Master Plan. The project in the Bicycle Master Plan included elimination of one westbound traffic lane to accommodate bike lanes. The attached concept design includes elimination of one eastbound lane and one westbound lane to provide additional safety elements that address collision history, as directed by the adopted Vision Zero Policy.

The concept design provides the following benefits:

- Safety improvements for all users consistent with the City's Vision Zero Policy
- New bike lanes on Cabrillo consistent with the Bicycle Master Plan
- Additional beach access parking consistent with the pending Coastal Land Use Plan update

Vision Zero

Subsequent to adopting the Bicycle Master Plan in 2016, City Council adopted a Vision Zero Policy with a goal to eliminate all severe and fatal collisions by 2030 and prioritize transportation safety. Cabrillo Boulevard is a Vision Zero Priority Corridor due to its collision history. The collision pattern identified involves single vehicle collisions through the "S" turn adjacent to the Andre Clark Bird Refuge, suggesting unsafe speeds. In February 2017, a collision between a motorcycle and a vehicle making a U-turn from the on-street parking next to the East Beach volleyball courts killed the motorcycle driver.

The concept design provides a new approach to the project to implement Council's Vision Zero policy. The concept design addresses collision patterns by reducing vehicle lanes from

four to two east of Ninos Drive, reconfiguring the street parking, and adding buffered bike lanes.

Buffered Bike Lanes

Buffered bike lanes are conventional on-street bike lanes with designated buffer space separating the bike lane from the adjacent vehicle travel lane. Although the Bicycle Master Plan project for Cabrillo Boulevard does not include buffered bike lanes, Bicycle Master Plan Implementation Strategy 4.1.4 encourages “best practices” where contextually appropriate, including buffered bike lanes.

Buffered bike lanes provide multiple benefits:

- Greater shy distance between motor vehicles and bicyclists
- Space for bicyclists to pass other bicyclists without encroaching into the vehicle lane
- Space for bicyclists to move away from on-street parking activity
- Provides additional space for bicycling without making a bike lane appear so wide that it might be mistaken for a travel lane or a parking lane
- Appeals to a wider cross-section of bicycle users
- Encourages bicycling by contributing to the perception of safety among users of the bicycle network

Reverse Angle Parking

This design provides a unique opportunity for additional beach access parking. Construction of new parking lots on the ocean side of Cabrillo Boulevard is prohibited by the Municipal Code (SBMC 15.16.110) and Coastal Policy. The pending Coastal Land Use Plan identifies the on-street parking adjacent to the East Beach volleyball courts as “Key Public Access Parking” providing public access to coastal resources and recreation and calls for increasing the City’s parking supply for coastal access and providing additional ADA-compliant parking. Approximately 60 parallel parking spaces are currently provided adjacent to the East Beach volleyball courts. The proposal would increase this parking supply to approximately 95, including ADA-compliant parking.

Implementation of traditional head-in, angled parking would create additional safety concerns because of sudden backing into the bike lane and unsafe U-turns with a lack of driver visibility. As a result, the proposed concept parking configuration is reverse angle parking. Although reverse angled parking is used widely in the United States, including Downtown Ventura, this would be the first reverse angled parking in the City. The City of Goleta is currently considering reverse angled parking on Hollister Avenue in Old Town.

Reverse angled parking provides multiple advantages over parallel parking:

- Improved visibility and increased field of vision due to the position of the driver. When exiting a parking space, the driver can better see bicyclists and oncoming traffic, decreasing the risk of collisions.
- Improved loading and unloading. Since driver side car doors will open toward the beach, and not into traffic, loading and unloading can take place with pedestrian

- safety in mind. The orientation of the vehicle also makes the trunk safer to access for loading and unloading beach gear.
- The vehicle orientation allows for westbound drivers to make a safer U-turn on Cabrillo when exiting because of increased visibility.

Cabrillo Boulevard and Ninos Drive Intersection

To safely transition to one lane in each direction adjacent to the East Beach volleyball courts, the concept design includes conversion of the intersection of Cabrillo Boulevard at Ninos Drive from traffic signal control to all-way stop control. And an all-way stop allows for an easy merge of the two eastbound lanes due to the lower speeds.

Recent experience at the intersection has demonstrated that it will perform well as an all-way stop. In 2016, the traffic signal was in all-red flash for several months while a new mast arm pole was on order to replace the old severely corroded pole. A study was performed at the time, and found that delay decreased for side street (Ninos Drive) traffic, left turning traffic, and pedestrians, while eastbound and westbound through movements experienced a slight increase in delay. Measuring overall intersection delay, all-way stop control is expected be comparable to traffic signal control.

Delay Calculations (seconds), Average Weekday

	Traffic Signal	All-Way Stop
AM Peak	8.5s	7.7s
Mid Day	10.6s	8.5s
PM Peak	10s	9.4s

Delay Calculations (seconds), Sunny Summer Day

	Traffic Signal	All-Way Stop
AM Peak	10.6s	8.7s
Mid Day	13.2s	11.6s
PM Peak	12.4s	15.2s

NEXT STEP

This concept will be reviewed by Council for approval of the changes from the Bicycle Master Plan project. Staff is asking that the TCC provide a recommendation in support of this concept plan that implements the Council’s Vision Zero Policy, the Bicycle Master Plan, as well as increasing access to East beach for all users.

ATTACHMENT: Concept design