



City of Sunnyvale

Agenda Item

24-0122

Agenda Date: 2/15/2024

2024 COUNCIL STUDY ISSUE

NUMBER

DPW 23-05

TITLE Vision Zero Redesign of Borregas Avenue

BACKGROUND

Lead Department: Department of Public Works

Support Departments: Office of the City Manager
Office of the City Attorney

Sponsor(s): Councilmembers: Mehlinger, Din, Cisneros, Sell, Klein

History: 1 year ago: Deferred by Council
2 years ago: N/A

SCOPE OF THE STUDY

What precipitated this Study?

Borregas Avenue is a two-lane residential collector between Maude Avenue and Ahwanee Avenue/US 101 and is located within the Sunnyvale Neighbors of Arbor, including the LaLinda (SNAIL) neighborhood. Between US 101/East Weddell Drive and Persian Drive/SR 237, Borregas Avenue is a two-lane local road in the Orchard Gardens Neighborhood. Between SR 237/Moffett Park Drive and Caribbean Drive, Borregas Avenue is a two-lane commercial/industrial collector street and falls within the Moffett Park Specific Plan (MPSP) area. There are two pedestrian/bicycle overcrossings along Borregas Avenue: one over US 101 and one over SR 237. Borregas Avenue is an important north-south corridor for bicyclists and pedestrians, connecting the Bay Trail and Moffett Park on the north, to Downtown Sunnyvale and El Camino Real commercial area via Sunnyvale Avenue. It is also a critical commute route for Bishop Elementary and Columbia Middle School students.

Under existing conditions, Borregas Avenue has a Class II (on-street, marked) bicycle lane between Maude Avenue and Caribbean Drive in both directions. In terms of pedestrian facilities, there are existing continuous sidewalks on both sides of the street between Maude Avenue and Ahwanee Avenue/US 101, and on the west side of the street between US 101/East Weddell Drive and Persian Drive/SR 237. North of SR 237/Moffett Park Drive, there is existing sidewalk on at least one side of the street, and as properties redevelop, the City will require developers to install new sidewalk along their project frontage.

In the City’s Active Transportation Plan (ATP), bicycle, pedestrian and safe routes to school improvements were identified throughout Sunnyvale. In the Bicycle Plan chapter, the proposed bicycle improvements on Borregas Avenue include upgrading the existing Class II bicycle lane to Class IIB buffered bicycle lane between Maude Avenue and Persian Drive/SR 237 and upgrading the existing Class II bicycle lane to Class IV separated bikeway between Moffett Park Drive/SR 237 and

Gibraltar Drive. The proposed bicycle network upgrades between Weddell Drive/SR 101 and Gibraltar Drive would require on-street parking removal; therefore, a parking study would be required to determine if the removal of the on-street parking would be feasible.

In the Pedestrian Plan chapter, the ATP identified potential intersection improvements on Borregas Avenue at Duane Avenue, Del Norte Avenue, Hemlock Avenue, and Ahwanee Avenue. These potential improvements include installing curb extension where feasible, ensuring that curb ramps meet Americans with Disabilities Act (ADA) standards, and evaluating intersection lighting and illumination.

In July 2019, the City Council adopted the Vision Zero Plan, with a goal of reducing traffic-related fatalities and serious injuries by 50% by 2029 and to continue improvement in traffic safety towards zero fatal and serious injury collisions in the ten years that follow. The Vision Zero Plan included a Countermeasure Toolbox, which are proven safety countermeasures as identified in national research reports. The items in the toolbox may be considered for implementation at any location throughout the city and can be implemented either singularly or as part of a larger project. The toolbox consists of improvements such as bulb-outs, curb extensions, lane reduction/road diet, enhanced pedestrian crossings, buffered bicycle lanes, protected bikeway, and other signs and markings, signal improvements, and speed control features.

The MPSP, including streetscape standards for bicycle and pedestrian improvements for the Plan area, was adopted by City Council in June 2023 and took effect in August 2023.

What are the key elements of the Study?

The Study will include the necessary elements to evaluate potential pedestrian and bicycle improvements that could be implemented along Borregas Avenue between Maude Avenue and Caribbean Drive within the existing right-of-way. These improvements would be based on inputs from the public, data collected, analysis performed, and the recommendations in the ATP, as well as countermeasures as identified in the Vision Zero Plan. The scope of work will include a review of existing adopted plans and policies, data collection, a topographic survey, traffic safety analysis, and parking study. The topographic survey will be used to obtain accurate roadway widths, surface elevations and utility locations for the development of the conceptual implementation plans.

The Study will have a public outreach component to gather input from the residents, property owners, employers, employees, and commuters on their traffic concerns along this corridor, and to evaluate public support for the project. The Study will also include design of conceptual improvement plans along Borregas Avenue to maximize safety and comfort for all users of the road, while reducing unsafe driving and addressing other issues raised by residents and other key stakeholders, in line with the principles of Vision Zero.

All recommendations will include conceptual drawings of the proposed modifications with a cost estimate and any identifiable constraints. The Study will also include possible funding sources and eligible grants for design and construction of the recommended improvements.

Estimated years to complete study: 2 years

FISCAL IMPACT

Cost to Conduct Study

Level of staff effort required (opportunity cost): Major
Funding Required for Non-Budgeted Costs: \$350,000
Funding Source: Will seek budget supplement

The cost associated with this Study would be for consultant services to perform the study as listed under the Key Elements of the Study. City staff will work with the consultant throughout the project process including the analysis and the development of recommendations, as well as the public outreach efforts.

Cost to Implement Study Results

Unknown. The Study would include assessment of potential costs, including capital and operating, as well as revenue/savings.

EXPECTED CITY COUNCIL, BOARD OR COMMISSION PARTICIPATION

Council-Approved Work Plan: No

Council Study Session: No

Reviewed by Boards/Commissions: Bicycle and Pedestrian Advisory Commission

STAFF RECOMMENDATION

Drop. This policy issue does not merit discussion at a future Study Issues Workshop.

City staff is currently working on several projects that are implementing roadway improvements along Borregas Avenue. In addition, various development projects are under construction in the Moffett Park Specific Plan area, which will include roadway improvements along their project frontage. Staff has also obtained federal earmark funding to implement improvements at various locations along Borregas Avenue. Lastly, Google LLC has proposed voluntary improvements along Borregas Avenue, which are currently under planning and review. These projects include:

- CIP 833850 Sunnyvale Safe Routes to School Improvements that includes:
 - Remove slip lane at the intersection of Borregas Avenue and Maude Avenue, which would reduce crossing distance.
 - Upgrade traffic signals.
 - Install ADA compliant pedestrian signals and infrared bike detection systems.Construction for this project started August 2023 and will be completed by Spring 2024.

- CIP 833000 Sunnyvale SNAIL Neighborhood Improvements that includes:
 - Intersection of Borregas Avenue and Ahwanee Avenue - install curb extensions and ADA compliant curb ramps at the southwest and southeast corners and advance limit lines.
 - Intersection of Borregas Avenue and Del Norte Avenue - install curb extensions and ADA compliant curb ramps at all four corners.
 - Borregas Avenue between Maude Avenue and Ahwanee Avenue/US 101 - upgrade existing Class II bike lane to Class IIB buffered bike lane through narrowing the vehicular travel lanes.

The construction contract was awarded by City Council on October 10, 2023 and started construction December 2023 with a projected construction completion by December 2024.

- Google LLC's Mass Timber Development Project at 1265 Borregas Avenue that includes:
 - Install sidewalk along project frontage along Borregas Avenue.
 - Remove on-street parking on the west side of Borregas Avenue between Gibraltar Court and Humboldt Court, and upgrade Class II bicycle lane to Class IIB buffered bicycle lane for the southbound direction.
 - Install curb extension at the intersection of Borregas Avenue and Gibraltar Court.
 - Install new Rectangular Rapid Flashing Beacon at the intersection of Borregas Avenue and Humboldt Court.

These improvements have recently been completed.

- Google LLC's Development Project at 212 Gibraltar Drive that includes:
 - Install sidewalk along project frontage along Borregas Avenue.
 - Implement crossing improvements on Borregas Avenue at Gibraltar Drive.

These improvements have recently been completed.

- Google LLC's Development Project at 360 Caribbean Drive that includes:
 - Install sidewalk along project frontage along Borregas Avenue.
 - Implement crossing improvements on Borregas Avenue at Caribbean Drive, including wide curb ramps and crosswalks for bicycle and pedestrian crossing and advance limit lines.

These improvements are currently under construction.

- Google LLC's Development Project at 1390 Borregas Avenue that includes:
 - Install sidewalk along project frontage along Borregas Avenue.
 - Implement crossing improvements on Borregas Avenue at Caribbean Drive, including wide curb ramps and crosswalks for bicycle and pedestrian crossing and advance limit lines.

These improvements are currently under construction.

- Pedestrian and Safe Routes to School Improvements in SNAIL and Braly Corners Neighborhoods.
 - Applied for Fiscal Year 22 Community Project Funding Requests through Congressman Ro Khanna's office.
 - Total project cost for construction is \$1,100,000, and City was awarded \$968,000 in construction funds.
 - Improvements include:
 - Intersection of Borregas Avenue and Duane Avenue - install enhanced crossing improvements on the north leg of the intersection, including a Rectangular Rapid Flashing Beacon and high visibility crosswalk, and curb extensions on the northwest and northeast corners.
 - Intersection of Borregas Avenue and Hemlock Avenue - install enhanced crossing improvements on the north leg of the intersection, including a Rectangular Rapid Flashing Beacon and high visibility crosswalk.

Currently staff has started with the environmental and design process and working with Caltrans to obligate the construction funds.

- Google LLC's Voluntarily Improvement Project - Midblock Crossing improvements on Borregas Avenue between Moffett Park Drive and Humboldt that include:
 - Install a new midblock crossing on Borregas Avenue with Rectangular Rapid Flashing Beacon and high visibility crosswalk, new ADA curb ramps, and pavement markings, signage and striping to support the new crosswalk.

Construction of the voluntarily improvements was completed in October 2023.

- Google LLC's Voluntarily Improvement Project - Greenlink Improvements on Borregas Avenue between Moffett Park Drive/SR 237 and Java Drive include:
 - Remove the sidewalk and Class II/Class IIB bicycle facility for southbound Borregas Avenue.
 - Install a Greenlink facility on the west side of Borregas Avenue, which includes a separated path for pedestrian, a two-way path for bicycles and micromobilities devices, streetlights, and wayfinding signs.

Staff is currently reviewing the conceptual design plans and is in coordination with Google LLC in further defining the concepts. When the conceptual plans are finished, staff will bring this item to City Council for consideration on the acceptance of the voluntarily improvements.

All the projects listed above would implement improvements along Borregas Avenue that would provide safer connectivity for bicyclists and pedestrians and are consistent with the improvements proposed by this Study.

In addition, City Council adopted the MPSP Update in July 2023, which includes bicycle and pedestrian improvement recommendations in the specific plan area. As future development projects in the specific plan area come forward they will implement bicycle and pedestrian improvements per the MPSP.

For the portion of Borregas Avenue between Weddell Drive/US 101 and Persian Drive/SR 237, the land use is mostly residential and there has not been any new developments along this segment in recent years; therefore, the vehicular volumes have remained constant over the years. The average daily traffic (ADT) on this segment of Borregas Avenue is approximately 1,800 vehicles. Comparing the ADT on Borregas Avenue between Maude Avenue and Ahwanee Avenue/US 101, where ADT is approximately 3,000 vehicles, and Borregas Avenue north of Moffett Park Drive/SR 237, where the ADT is approximately 5,600 vehicles, the middle segment has much lower vehicular volumes and therefore has less potential vehicular conflicts than the other two segments. The City currently does not have any planned projects for this segment; however, staff will look for funding opportunities to implement the proposed improvements as identified in the ATP, which includes conducting a parking study to evaluate the feasibility of on-street parking removal to upgrade the existing Class II bicycle lane to Class IIB buffered bicycle lane.

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