REPORT TO MAYOR AND COUNCIL NO: _____

Draft Report for Bicycle and Pedestrian Advisory Commission Review on August 30, 2012

Council Meeting: September 11, 2012

SUBJECT: Consideration of Pastoria Avenue Street Space Allocation Study

REPORT IN BRIEF

Pastoria Avenue is planned for consideration of bike lanes as part of the City's Bicycle Capital Improvement Program and is in the approved Bicycle Expenditure Program (BEP) of the Santa Clara Valley Transportation Plan 2035. Grant funding has been secured through the BEP to construct bike lanes on a segment of Pastoria Avenue from El Camino Real to Evelyn Avenue (project location map, Attachment A), connecting segments of Hollenbeck Avenue and Evelyn Avenue which currently feature bike lanes. The segment in question is a gap in the bike lane network.

This section of the road currently features one travel lane in each direction, parking on both sides of the street in the majority of areas, and sidewalks. Adjacent land uses are single family residential, the City Hall complex, the Stratford School, and Washington Park.

Consistent with the City's street space allocation policies, staff has conducted a technical analysis of options to meet minimum design standards for motor vehicles, bicycles and pedestrians. Staff has also conducted public outreach. Staff is presenting this information to Council for consideration on whether to change the existing accommodations. Staff is recommending that the Council support construction of a hybrid bicycle lane/bicycle boulevard project, although such a project configuration will require developing a new financing plan for the project.

BACKGROUND

In 2009, the Council adopted a *Policy on the Allocation of Street Space* (April 28, 2009 RTC 09-085), which was initiated by the City's Bicycle and Pedestrian Advisory Commission (BPAC). In July of 2011, Council amended the *Policy* into the General Plan's Chapter 3, *Land Use and Transportation* (July 26, 2011 RTC 11-157). The goal of the *Policy* was to provide direction on how to consider all modes of transportation when allocating roadway space, particularly in situations that could require the removal of travel lanes, on-street parking, or other roadway reconfigurations, or because of right-of-way constraints. Consideration of bike lanes was a particular intent of the street space allocation policy.

Pastoria Avenue is the current subject of a street space allocation study. Grant funding secured for bicycle lane construction triggered the completion of a study. A technical analysis of street space allocation options has been completed that considers bike facility options on Pastoria as well as alternative routes, as directed by the City Council.

DISCUSSION

Pastoria Avenue currently does not feature facilities for bicycles. Pastoria Avenue north of Sutter Avenue is a narrow street, with a 32' cross section generally. The roadway width does not currently meet standards for the existing configuration of two auto lanes and

parking on both sides of the street, which would require a minimum cross section of 38'. Providing bike lanes on the segment of Pastoria Avenue in question within the existing curb-to-curb width would require elimination of all on-street parking north of Sutter Avenue in order to meet minimum design standards and to maintain two way traffic flow. Providing bike lanes and retaining parking and auto lanes would require a minimum roadway cross section of 48' which would entail widening the road by 16'. There is not sufficient right-of-way behind the existing curb to widen the road for bike lanes and 16' feet of widening would be extremely costly and disruptive to adjacent land uses.

Also, between Olive Avenue and El Camino Real a right turn lane is proposed to be removed in the southbound direction in order to provide sufficient width to add bicycle lanes. It is not feasible to remove an auto through lane without causing congestion.

Staff has identified and studied four options for providing bike facilities. Two options focus on modifying Pastoria Avenue exclusively, while two options would provide alternate routes to portions of Pastoria for bicyclists. The roadways in question are described as four segments to address varying geometric conditions and study alternatives. The four study alternatives are summarized as follows and displayed graphically in Attachment B.

Option	Description
Option 1. Pastoria Avenue bicycle lanes	1. El Camino Real to Olive – removal of southbound right turn lane, four auto through lanes, one southbound left turn lane, provision of bike lanes 2. Olive to Sutter - No change to auto lanes or parking, provision of bike lanes 3. Sutter to Evelyn - One travel lane in each direction, bike lanes, no on-street parking on both sides of the street
Option 2. Pastoria Avenue bicycle boulevard	1. El Camino Real to Olive (same as Option 1) 2. Olive to Sutter (same as Option 1) 3. Sutter to Evelyn – No changes to auto lanes and parking, provision of bicycle boulevard features including gateway choker islands, a traffic circle at Pastoria/McKinley, shoulder striping, chicane at Stratford School, back-in parking at Washington Park, shared lane arrows, and bicycle boulevard signage.
Option 3. Sutter/Sunset alternate route	1. El Camino Real to Olive (same as Option 1) 2. Olive to Sutter (same as Option 1) 3. Sutter to Sunset to Evelyn - No change to auto lanes or parking, provision of shared lane arrows and bicycle directional signs on Sutter and Sunset
Option 4. Charles/Olive Avenue bicycle boulevard	1. El Camino Real to Olive (same as Option 1) 2. Olive Avenue from Pastoria to Charles – Two travel lanes in each direction, bike lanes, no on-street parking on one side of the street 3. Charles Street, Olive to Evelyn – provision of bicycle boulevard features including gateway choker islands, traffic circles at Charles/Iowa and Charles/McKinley, shoulder striping, stop control at side streets, shared lane arrows, and bicycle boulevard signage.

Staff evaluated roadway geometry, parking supply and demand, motor vehicle speeds, collision history, and motor vehicle volume and roadway capacity. A summary of findings is included as Attachment C. As a result of the evaluation, staff recommends that a Pastoria Avenue bicycle boulevard project be pursued.

Parking Analysis

Study of on and off-street parking shows a broad range of parking utilization (Attachment D). Morning, mid-afternoon, and nighttime surveys conducted during both weekday and weekend periods show that in two instances on the segment from Washington Avenue to Evelyn Avenue off-street unutilized supply would not be able to absorb the on-street demand, and during most study periods the combined demand for on and off-street parking in the Washington/Evelyn segment is from 70-93% of the off-street supply. The Iowa-McKinley segment also has high on and off-street total demand compared to off-street supply, exceeding 60% in two study periods and 70% in three others, and approaching 90% in the weekend nighttime period. The McKinley-Washington segment, on the east (residential) side of the street, has high weeknight and weekend parking demand, averaging 72% of off-street supply for all periods and exceeding the available off-street supply on weekend mornings.

It should be noted that correlating on-street parking demand to off-street parking capacity as done above cannot relate vehicle ownership to available off-street capacity. If there are four driveways with a total of four available off-street spaces and there are four vehicles parked on the street, it cannot be ascertained from a parking study if those four vehicles are owned by one property owner or spread amongst the four properties. This fact places more weight on the significance of the finding of a high ratio of on and off-street demand to available off-street supply.

Complicating the issue of determining the ability of off-street supply to meeting on and off-street demand is the configuration of single family driveways and the nature of land use on the street. Of the 50 residential properties on Pastoria between Sutter and Evelyn fronting on Pastoria, there are 47 single-loading driveways. Of these 50 residential properties, building records show 18 duplexes. Shifting the on-street parking demand to an off-street supply that consists almost exclusively of single-loading driveways in an area with a significant number of multi-family dwellings raises questions of parking logistics that extend beyond inconvenience to residents of managing multiple vehicles using single-loading driveways. The number of backing and entering maneuvers into and out of driveways will increase significantly, which would increase the likelihood of conflicts with moving vehicles, bicycles and pedestrians.

Another parking issue is the presence of unregulated parking facilities serving Washington Park and the Sunnyvale School District headquarters. While the intent of these facilities is to serve users of the Park and District office, staff observed that non-park users currently utilize the Washington Park lot and on-street spaces. It is likely that in the absence of any restriction or regulation that use of these facilities by residents would increase if on-street parking were removed, which could provoke conflict between residents and Park and School District patrons.

Staff concludes that elimination of on-street parking would cause a significant disruption to traffic operations and land use on Pastoria Avenue and the surrounding neighborhood.

Vehicle Speeds

Motor vehicle speeds are also a concern on Pastoria. The most current speed radar survey shows 85th percentile speeds of 32 MPH, which significantly exceeds the 25 MPH posted speed. Fifty-four percent of surveyed vehicles exceeded the posted speed. The current roadway condition presents narrow lanes and side friction from parking cars to the driver's perception, which typically results in slower travel speeds. However speeds on Pastoria are relatively high for conditions. The street is straight with good forward sight lines. Eliminating on-street parking and providing wider auto lanes with bike lanes may cause a further increase in auto travel speeds.

A bicycle boulevard treatment would require minor to no changes to auto lanes and parking. Bicycle boulevard features could include gateway choker islands, a traffic circle at Pastoria/McKinley, shoulder striping, a chicane, back-in parking at Washington Park, shared lane arrows, and bicycle boulevard signage. Shared lane markings ("sharrows") are a recognized bicycle facility by the California Manual of Uniform Traffic Control Devices (CA-MUTCD). They reduce the risk of "dooring" of cyclists by parked cars, alert road users of the location bicyclists are likely to occupy, encourage safe passing of bicyclists by motorists, and reduce the incidence of wrong-way bicycling. There is not official engineering guidance on other proposed bicycle boulevard treatments, but the proposed facilities are well tested in many locations nationally and internationally. The features suggested in this report do not constitute a final construction plan, and staff would conduct additional outreach to the BPAC and the neighborhood before recommending a project design.

In the El Camino Real to Olive section, all options assume removal of an existing southbound right turn lane to provide space to reconfigure the roadway with bike lanes. Volume studies show that volumes for the right turn are below the level necessitating an exclusive lane, and there would be no degradation of level of service at the intersection.

Two other options studied assumed constructing bicycle facilities on alternate, parallel facilities to Pastoria Avenue. This was at the BPAC's recommendation and City Council direction. Staff and the Bicycle and Pedestrian Advisory Commission (BPAC) believe that alternate routes do not provide any travel time or safety benefit to cyclists, and they do not provide accommodation of all modes on Pastoria Avenue, which is the objective of City policy.

A neighborhood meeting was held on February 29, 2012 to gather input from residents and property owners on Pastoria, Sutter, Sunset, and Olive Avenues. A summary of the proceedings is included as Attachment E. The meeting was well attended by residents who expressed concerns primarily about loss of on-street parking and bicycle and vehicle safety.

The Sunnyvale BPAC considered this item at its April 28, 2011 and August 30, 2012, meeting. The BPAC Minutes of these meetings are included as Attachments F and G.

EXISTING POLICY

General Plan, Chapter 3 *Land Use and Transportation:*

Sub-policy LT-5.5d Maximize the provision of bicycle and pedestrian facilities.

Policy LT-5.9 Appropriate accommodations for motor vehicles, bicycles and pedestrians shall be determined for City streets to increase the use of bicycles for transportation and to enhance the safety and efficiency of the overall street network for bicyclists, pedestrians, and motor vehicles.

Policy LT-5.10 All modes of transportation shall have safe access to City streets.

Policy LT-5.16 When decisions on the configuration of roadway space are made, staff shall present options, including at a minimum an option that meets minimum safety-related design standards for motor vehicles, bicycles and pedestrians. The City Council shall make the final decisions on roadway space reconfiguration when roadway reconfiguration will result in changes to existing accommodations.

FISCAL IMPACT

Funds from a Bay Area Air Quality Management District (BAAQMD) grant in capital project 829290 are sufficient to construct bike lanes (Option 1) on Pastoria Avenue. However, should the Council elect to pursue a bicycle boulevard project or other non-bike lane alternative (Options 2-4), the BAAQMD has indicated that the project emissions reductions calculations would need to be re-done using effectiveness values for a bicycle route. This would likely result in a reduction in funding of approximately 70%, which would be insufficient to construct any of the non-bicycle lane alternatives at this time.

Options to address the fiscal shortfall include replacing the reduced BAAQMD funding with funds from a City source, or rescinding the BAAQMD grant and pursuing other future funding sources. The Pastoria Avenue project is in the Valley Transportation Plan Bicycle Expenditure Program and could be eligible for other sources of funds through this Program that do not have emissions reductions criteria. Alternatively, the FY 12/13 Proposed Budget includes a Transportation Grant Matching Fund reserve for the purpose of providing matching funds for transportation grants. There is approximately $562,000 budgeted in the FY 12/13 budget for transportation grant matching purposes. Staff estimates the cost of a Pastoria Avenue Bicycle Boulevard project at $158,000, and the BAAQMD would provide an estimated $35,000 in grant funds after recalculating emissions cost effectiveness, so utilizing Transportation Grant Matching Fund reserve funds to fund the balance of the project cost would constitute a 78% local match.

PUBLIC CONTACT

Public contact was made by posting the Council agenda on the City's official-notice bulletin board outside City Hall, at the Sunnyvale Senior Center, Community Center and Department of Public Safety; and by making the agenda and report available at the Sunnyvale Public Library, the Office of the City Clerk and on the City's Web site.

A neighborhood meeting was held at the Washington Park building on February 29, 2012. The meeting was well attended by residents who expressed concerns primarily about loss of on-street parking and bicycle and vehicle safety (meeting summary,

Attachment D). Also, the Bicycle and Pedestrian Advisory Commission held public hearings on the Pastoria Bicycle Lanes Project on April 28, 2011, and on a draft Report to Council at its August 30, 2012 meeting. Notification of the Council hearing was mailed to residents, property owners, and other interested parties two weeks prior to the Council hearing.

ALTERNATIVES

1. Direct staff to implement Option 2 which allocates street space on Pastoria Avenue between El Camino Real and Olive Avenue by removing a southbound right turn lane and providing bike lanes; allocates street space on Pastoria Avenue between Olive Avenue and Sutter Avenue by reconfiguring existing roadway features to provide bike lanes; and allocates street space on Pastoria Avenue between Sutter Avenue and Evelyn Avenue in order to retain one auto lane in each direction, parking on both sides of the street and provides a bicycle boulevard treatment.

2. Direct staff to pursue outside grant funding sources for a Pastoria Avenue Bicycle Boulevard project to augment the loss of BAAQMD revenues because bike lanes will not be installed.

3. Direct staff to utilize transportation grant matching funds to supplant lost BAAQMD revenues.

4. Direct staff to allocate street space on Pastoria Avenue between El Camino Real and Evelyn Avenue in an alternative configuration as determined by Council.

5. Direct staff to make no changes from the existing configuration and take no further action.

RECOMMENDATION

Staff recommends Alternatives No. 1 and 2: Direct staff to implement Option 2 allocate street space on Pastoria Avenue between El Camino Real and Olive Avenue by removing a southbound right turn lane and providing bike lanes; allocate street space on Pastoria Avenue between Olive Avenue and Sutter Avenue by reconfiguring existing roadway features to provide bike lanes; and allocate street space on Pastoria Avenue between Sutter Avenue and Evelyn Avenue in order to retain one auto lane in each direction, parking on both sides of the street and provide a bicycle boulevard treatment.

Direct staff to pursue outside grant funding sources for a Pastoria Avenue Bicycle Boulevard project to augment the loss of BAAQMD revenues because bike lanes will not be installed.

Alternative 1 provides bike lanes for much of the distance of Pastoria Avenue between Evelyn and El Camino Real, and provides a widely accepted and implemented form of bicycle accommodation in the form of a bicycle boulevard between Sutter Avenue and Evelyn Avenue. Making improvements to Pastoria Avenue rather than alternative routes provides accommodation on the most direct route between Evelyn and El Camino Real, and is consistent with the objective of the City's Bicycle Capital Improvement Program to provide bicycle facilities on all arterial and collector streets. There are no impacts to the proposal on automobile service levels, and potential impacts from removing on-street

parking and shifting it to single-loading driveways is avoided. Exercising this alternative will result in a roadway cross section that accommodates all modes of travel.

Alternative 2 is consistent with past City practice to pursue bicycle improvement projects on a revenue dependent basis. While the BAAQMD would still provide a reduced level of funding for a bike boulevard project, it is insufficient to construct the project and the City would not be able to meet BAAQMD deadlines for project construction without an additional source of funds. Utilizing Transportation Grant Matching Funds would require a 78% local match, which is atypical for grant matching and constitutes almost full project funding from a source that is intended to leverage a higher level of outside funding.

Reviewed by:

Kent Steffens

Kent Steffens, Director, Public Works
Prepared by: Jack Witthaus, Transportation and Traffic Manager

Approved by:

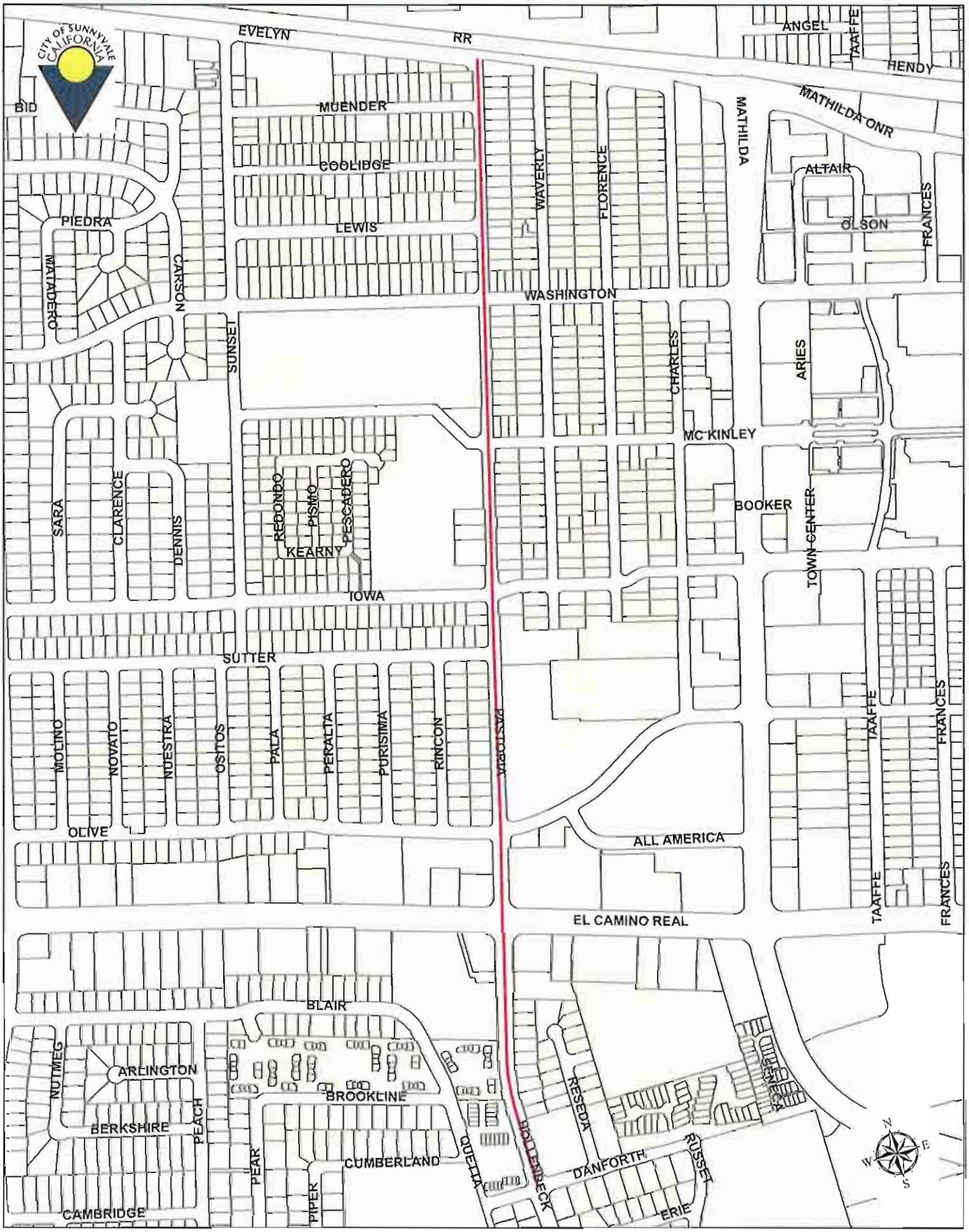
Gary M. Luebbers
City Manager

Attachments

A. Project Location Map
B. Project Options Map
C. Street Space Allocation Study Summary
D. Parking Occupancy Study
E. February 29, 2012 Neighborhood Meeting Summary
F. Bicycle and Pedestrian Advisory Commission Meeting Minutes of April 28, 2011
G. Draft Bicycle and Pedestrian Advisory Commission Meeting Minutes of August 30, 2012

PROJECT LOCATION

ATTACHMENT A

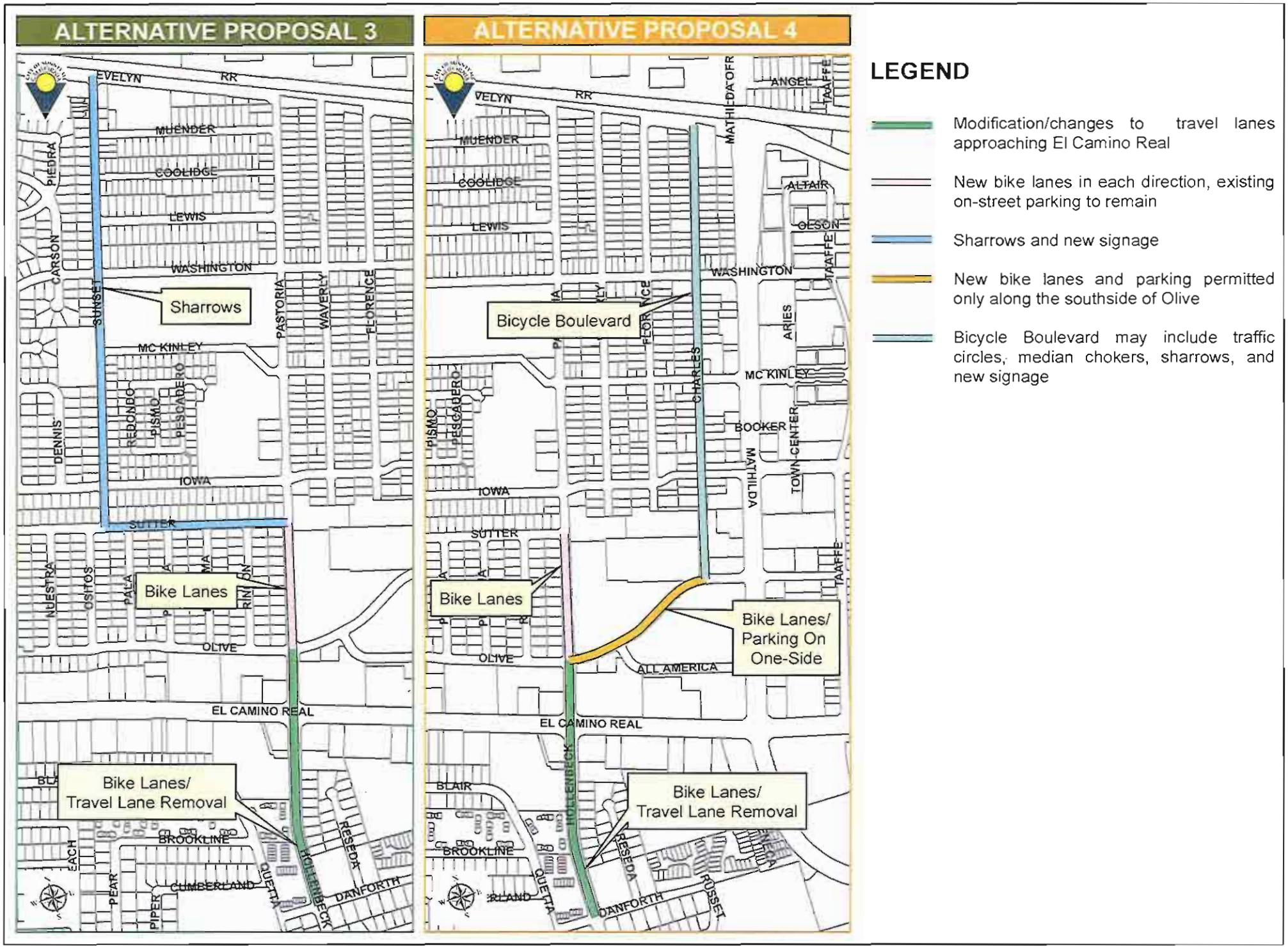


ATTACHMENT B: PROJECT OPTIONS MAP

LEGEND

- Modification/changes to travel lanes approaching El Camino Real
- New bike lanes in each direction, existing on-street parking to remain
- New bike lanes in each direction and removal of on-street parking between Sutter Ave to Evelyn Ave
- Bicycle Boulevard may include traffic circles, median chokers, sharrows, and new signage

ATTACHMENT B: PROJECT OPTIONS MAP



ATTACHMENT C – STREET SPACE ALLOCATION STUDY SUMMARY

Operational Feature	**Minimum Standard or Criterion**	**Existing**	**Alternative 1 Pastoria parking removal**	**Alternative 2 – Pastoria Bike Boulevard**	**Alternative 3 – Sutter/Sunset Bypass**	**Alternative 4 – Olive/Charles Bypass**
Vehicle travel lane width (typical)	10' travel	12'5" inside 11'6" outside	Segment 1 – 10'-12' Segment 2 – 11'-12' Segment 3 – 12'	Segment 1– 10'-12' Segment 2– 11'-12' Segment 3	Segment 1– 10'-12' Segment 2– 11'-12' Segment 3	Segment 1– 10'-12' Segment 2– 11'-12' Segment 3 Segment 4
Parking lane width	8' parking	8' parking	Segment 2 – 8'	Segment 2– 8' Segment 3	Segment 2– 8' Segment 3	Segment 2– 8' Segment 3 – 8' Segment 4 -
Bike lane width	3' asphalt, 4' total	Segment 1 – 5' All other segments – 0'	Segment 1 – 5' Segment 2 – 5'-6' Segment 3 – 5'	Segment 1 – 5' Segment 2 – 5' – 6' **Segment 3 – 0'**	Segment 1 – 5' Segment 2 – 5' – 6' **Segment 3 – 0'**	Segment 1 – 5' Segment 2 – 5' – 6' Segment 3 – 5' **Segment 4 – 0"**
AM Peak Hour Intersection level of service – El Camino Real/Pastoria	LOS "D" or above	D	D	D	D	D
PM peak hour Intersection level of service (El Camino Real/Pastoria)	LOS "D" or above	C	C	C	C	C
Roadway capacity	10,000 vpd/per lane	EB – 1870/1530 WB - 2375/2115	EB - 3740/3060 WB – 4750/4230	EB – 1870/1530 WB - 2375/2115	EB - 3740/3060 WB – 4750/4230	EB – 1870/1530 WB - 2375/2115
Sidewalks		yes	yes	yes	yes	yes
Crash	High =	3 bike collisions	Moderate	Moderate	Moderate	Moderate

reduction potential	incidence of bike collisions, pedestrian collisions	in five years near El Camino intersection				
Crosswalk installation potential	Low travel speeds, volumes		candidate	candidate	candidate	candidate
Speed compatibility and speed reduction potential		Hollenbeck btwn. Danforth, El Camino – 30 MPH Pastoria btwn. El Camino and Evelyn – 25 MPH Sutter – 25 MPH Sunset – 25 MPH Olive – 25 MPH Charles – 25 MPH	Increased side friction from Seg.1 travel lane removal, Seg. 2 bike lane striping could reduce speeds. Reduced side friction from parking removal could increase speeds	Increased side friction from Seg.1 travel lane removal, Seg. 2 bike lane striping could reduce speeds. Seg. 3 Bike boulevard treatments likely to reduce speeds	Increased side friction from Seg.1 travel lane removal, Seg. 2 bike lane striping could reduce speeds.	Increased side friction from Seg.1 travel lane removal, Seg. 2 and 3 bike lane striping could reduce speeds. Bike boulevard treatments likely to reduce speeds

Pastoria Avenue Bike Lanes Project
Street Space Allocation Study

Proposed Study Alternatives

1. Pastoria Avenue Bike Lanes

Bike lanes on Pastoria Avenue

- Elimination of one travel lane in each direction, Hollenbeck Drive from Danforth Avenue to the approach to El Camino Real
- Elimination of southbound RT lane @ El Camino, reconfiguration of remaining lanes to shift lanes east, move NB Pastoria 2 lanes to one merge to south of Olive Avenue intersection
- Shifting of center line east between Olive Avenue and Sutter Drive
- Elimination of on-street parking, Sutter Avenue to Evelyn Avenue

2. Pastoria Avenue Bike Lanes/Bike Boulevard

Bike lanes on Hollenbeck and Pastoria Avenue from Danforth to Sutter, bike boulevard on Pastoria Avenue from Sutter to Evelyn

- Elimination of one travel lane in each direction, Hollenbeck Drive from Danforth Avenue to the approach to El Camino Real
- Elimination of southbound RT lane @ El Camino, reconfiguration of remaining lanes to shift lanes east, move NB Pastoria 2 lanes to one merge to south of Olive Avenue intersection
- Shifting of center line east between Olive Avenue and Sutter Drive
- Gateway islands at Sutter Drive
- Sharrows from Sutter Drive to Evelyn Avenue
- Mini-traffic circle at McKinley Drive
- Reverse in parking at Washington Park Pool
- Gateway islands at Evelyn Avenue
- Bike Boulevard signage, Sutter Drive to Evelyn Avenue

3. Pastoria Avenue Bike Lanes/Sutter-Sunset Alternative Bike Route

Bike lanes on Hollenbeck and Pastoria Avenue from Danforth to Suttter, Sutter/Sunset ByPass Route

- Elimination of one travel lane in each direction, Hollenbeck Drive from Danforth Avenue to the approach to El Camino Real
- Elimination of southbound RT lane @ El Camino, reconfiguration of remaining lanes to shift lanes east, move NB Pastoria 2 lanes to one merge to south of Olive Avenue intersection
- Shifting of center line east between Olive Avenue and Sutter Drive
- Guide signs and sharrows on Sutter from Pastoria to Sunset and on Sunset from Sutter to Evelyn

4. Pastoria Avenue/Olive Avenue Bike Lanes, Charles Street Bicycle Boulevard

Bike lanes on Hollenbeck and Pastoria Avenue from Danforth to Olive, bike lanes on Olive from Pastoria to Charles, Charles Street Bicycle Boulevard

- Elimination of one travel lane in each direction, Hollenbeck Drive from Danforth Avenue to the approach to El Camino Real
- Elimination of southbound RT lane @ El Camino, reconfiguration of remaining lanes to shift lanes east, move NB Pastoria 2 lanes to one merge to south of Olive Avenue intersection
- Shifting of center line east between Olive Avenue and Sutter Drive
- Elimination of parking on one side of the street on Olive Avenue, Pastoria to Charles
- Gateway islands, Charles at Pastoria
- Mini traffic circles, Charles at Iowa, McKinley, Washington
- Bike boulevard favoring stop signs, Charles at Iowa, McKinley, Washington
- Charles Ave. sharrows and bike boulevard signage, Olive to Evelyn
- Bicycle left turn pocket, Evelyn at Charles

ADT

Hollenbeck between Danforth and El Camino
Pastoria between Iowa and Washington
Pastoria between Washington and Evelyn
Sutter between Pastoria and Sunset
Sunset between Iowa and Washington
Charles between Olive and Iowa
Charles between Iowa and Washington
Washington at Charles
Iowa at Charles
McKinley at Charles

Intersection Turning Movement Counts

El Camino Real at Pastoria
Olive at Charles

ATTACHMENT D

PASTORIA AVE (NB/SB)

Weekday Parking Summary Date of Survey: 10/18/11 (Tuesday)

Street Segment	Capacity (spaces)	Parking Occupancy (parked cars) 8:00 AM to 9:30 AM No.	%	12:00 PM to 2:00 PM No.	%	9:00 PM to 10:00 PM No.	%
On-Street Parking							
Sutter to Iowa	9	0	0%	1	11%	1	11%
Iowa to Mckinley	31	9	29%	7	23%	11	35%
Mckinley to Washington	20	1	5%	1	5%	2	10%
Washington to Evelyn	64	22	34%	17	27%	29	45%
Total	**124**	**32**	**26%**	**26**	**21%**	**43**	**35%**

Street Segment	Capacity (spaces)	Parking Occupancy (parked cars) 8:00 AM to 9:30 AM No.	%	12:00 PM to 2:00 PM No.	%	9:00 PM to 10:00 PM No.	%
Off-Street Parking							
Sutter to Iowa	131	76	58%	90	69%	19	15%
Iowa to Mckinley	36	16	44%	15	42%	17	47%
Mckinley to Washington	86	30	35%	33	38%	26	30%
Washington to Evelyn	61	24	39%	21	34%	36	59%
Total	**314**	**146**	**46%**	**159**	**51%**	**98**	**31%**

Weekend Parking Summary Date of Survey: 10/22/11 (Saturday)

Street Segment	Capacity (spaces)	Parking Occupancy (parked cars) 10:00 AM to 11:00 AM No.	%	2:00 PM to 3:00 PM No.	%	9:00 PM to 10:00 PM No.	%
On-Street Parking							
Sutter to Iowa	9	7	78%	1	11%	0	0%
Iowa to Mckinley	31	4	13%	12	39%	13	42%
Mckinley to Washington	20	20	100%	1	5%	1	5%
Washington to Evelyn	64	34	53%	26	41%	28	44%
Total	**124**	**65**	**52%**	**40**	**32%**	**42**	**34%**

Street Segment	Capacity (spaces)	Parking Occupancy (parked cars) 10:00 AM to 11:00 AM No.	%	2:00 PM to 3:00 PM No.	%	9:00 PM to 10:00 PM No.	%
Off-Street Parking							
Sutter to Iowa	131	14	11%	34	26%	2	2%
Iowa to Mckinley	36	16	44%	12	33%	19	53%
Mckinley to Washington	86	28	33%	23	27%	24	28%
Washington to Evelyn	61	29	48%	27	44%	29	48%
Total	**314**	**87**	**28%**	**96**	**31%**	**74**	**24%**

Pastoria Avenue Bicycle Corridor Project
Community Hearing
February 29, 2012
7:00PM-8:30PM

City Staff Attendance
Jack Witthaus, Transportation/Traffic Manager
Jerard Madrigal, Traffic Engineering Assistant II

Speaker Summary

- Jack Witthaus, Transportation/Traffic Manager, representing the Public Works Department for the City of Sunnyvale, presented four (4) proposed alternatives for the Pastoria Avenue Bicycle Corridor Project. The current project is in accordance with the City Bicycle Plan and Bay Area Quality in an effort to reduce pollution and create a more comprehensive network within the City. All four alternatives include removing travel lanes on Hollenbeck Ave and adding bike lanes on Hollenbeck/Pastoria Ave from Danforth Dr to south of Sutter Ave. The first alternative includes eliminating parking on Pastoria Ave north of Sutter Ave and installing bike lanes extending into Evelyn Ave. The second alternative proposes creating a bicycle boulevard along Pastoria Ave north of Sutter Ave with gateway features and signing/striping plans. The third alternative includes an alternative bike route with sharrows along Sutter Ave to Sunset Ave onto Evelyn Ave. The fourth alternative also includes an alternative bike route but with bicycle boulevard features through Olive Ave (east of Pastoria Ave) to Charles Ave onto Evelyn Ave. After introducing the four project alternatives, Mr. Witthaus opened the floor for a question and answer session. The following represents the community feedback of the proposed Pastoria Avenue Bicycle Corridor Project:

Community Feedback

- Alternative 1
  - Overall about 60%-70% of residents are **not** in favor of this proposal. Residents are heavily concerned that off-street parking demands will not meet on-street parking demand once on-street parking is removed.
  - Some residents mentioned that the City needs to consider that some properties on Pastoria Ave are tri- or duplexes which already have difficulty meeting existing parking demand.
  - Residents also expressed concerns that removing parking would adversely affect parking demand on nearby adjacent streets. One resident mentions that there is an existing "overflow" of on-street parking demand on Pastoria Ave from residents along Muender Ave, Coolidge Ave, & Lewis Ave. The City should, therefore, include within the technical study the potential

impacts on cross street parking demand/capacity east and west of Pastoria Ave.

- The effects of increase vehicle speeds and decrease in roadway safety were also another great concern to residents. Residents expressed that without tandem parking it will have the potential to aggrandize speeding along Pastoria Ave.
- Residents also discussed the potential for decrease property values with the removal of home-front parking. Residents would like the City Council to consider this factor heavily as well.
- One resident mentioned the convenience of having home-front parking rather than using the Caltrain designated parking for those that ride the Caltrain and walk to the station.
- Some residents suggested that the City consider an alternative option of restricting parking at certain hours rather than eliminating parking completely.

- Alternative 2
  - Some residents expressed concern over driveway safety with the installation of a shared roadway. Residents feel that with existing parking & narrow streets, a shared roadway would add a potential hazard to an already difficult travelway.
  - Some in favor of this proposal like the idea of having a bicycle boulevard in order to slow traffic with gateway features such as chokers, traffic circles, & stop signs.
  - Some residents question the frequency of use with the installation of a bike route on Pastoria Ave. The City should perform a bicycle count study.

- Alternative 3 & 4
  - Residents feel these two alternatives have the least impact.
  - Some in favor of this proposal like the idea of having a bicycle boulevard in order to slow traffic with gateway features such as chokers, traffic circles, & stop signs.
  - Some residents believe that with a designated bike route bicyclists will take alternatives routes regardless. Several bicycle riders raised their opinion stating that riders will use designated bike routes because of added bicycle features on the road.

- Alternative X
  - Has the City considered combining both Alternative 3 & 4?
  - Has the City considered restricting parking for certain hours rather than eliminating parking on Pastoria completely?
  - Has the City considered closing Pastoria at Evelyn?
  - The City should consider Mathilda Ave as an alternative route.

- The City should consider also Waverly St or Florence St as an alternative route.

- Side Notes
  - If the City is to consider eliminating parking the technical study (i.e. parking study) should include an analysis of impacted cross streets along the bicycle corridor.
  - The technical study should also include a Caltrain parking demand analysis and initial bicycle volume count study.
  - Report to council needs to include cost of maintenance for each type of alternative proposal.
  - Residents would like the City to expand the community outreach to residents 2 or 3 blocks east and west of the proposed bicycle corridor; in addition, inform any surrounding schools like Straford Elementary. One resident requested to implement a community panel or a door-to-door campaign using City volunteers.

FINAL

SUNNYVALE BICYCLE AND PEDESTRIAN ADVISORY COMMISSION
Special Meeting Minutes – April 28, 2011

The Sunnyvale Bicycle and Pedestrian Advisory Commission met at 6:30 p.m. on April 28, 2011 with Commission Chair Patrick Walz presiding. The meeting was held in the Garden Conference Room, City Hall, 456 West Olive Avenue, Sunnyvale.

ROLL CALL/CONSIDERATION OF ABSENCES

Members Present: Andrea Stawitcke
Angela Rausch
Cathy Switzer
David Gandrud
James Manitakos
Patrick Walz
Ralph Durham

Members Absent: None

Staff Present: Jack Witthaus, Transportation and Traffic Manager, PW Department
Heba El-Guendy, Senior Transportation Planner, PW Department

SCHEDULED PRESENTATION

None.

PUBLIC ANNOUNCEMENTS

Kevin Jackson noted that a representative of the Moffett Park Business Group, Ms. Kerry Haywood, is seeking volunteers to staff energizer stations on the Bike to Work Day. The Horizon 2035 Committee discussed a draft list of transportation policies, and each member had the opportunity to select her/his ten highest and ten lowest priority policies. Believes that not all members knew that the Street Space Allocation policies already exist, and these policies were listed individually which used up Mr. Jackson's high priority selections.

Chair Walz noted that he will staff an energizer station at El Camino Real/Wolfe Road on behalf of Leadership Sunnyvale, and requested volunteers and contributions towards the supplies.

CONSENT CALENDAR

1.A) Approval of Draft Minutes of the March 17, 2011 Meeting
1.B) Approval of the 2011 BPAC Calendar Update

Commissioner Durham moved and Commissioner Stawitcke seconded the motion to approve Consent Calendar items 1.A) and 1.B).

Motion passed: 6-0.

Commissioner Rausch arrived at 6:55 PM due to the change in meeting location.

PUBLIC COMMENTS

Kevin Jackson noted with regard to one of the e-mail messages contained in the agenda packet that the travel lanes along Tasman Drive are substandard and that cyclists have the right to use full width of the lanes.

PUBLIC HEARINGS/GENERAL BUSINESS

4. DISCUSSION: VTA BEP Funding Awards

David Simons (member of the VTA BPAC) noted that the Transportation Funds for Clean Air (TFCA) program was undersubscribed. Bike/pedestrian projects applying for TFCA must meet the cost effectiveness criteria and be ready for implementation. Concerned that the list of projects applying for Bicycle Expenditure Program (BEP) funds were initially shared with the VTA BPAC as a discussion, and not action item.

2. DISCUSSION: Mary Avenue Bike Lanes – Central Expressway to Maude Avenue

BPAC members reiterated their preference for a road diet along this roadway segment due to:

- Mary Avenue is expected to be the main north-south cycling route through the City, and is a cost effective route in terms of implementation;
- Allow the provision of wider six-foot bike lanes all along the length of the road segment. This wider bike lane width would also exclude the side gutter, relative to the other alternative that generally offers the standard five-foot bike lane including the typical two-foot gutter which narrows the effective width of the bike lane;
- Enhance good safety conditions and encourage cycling through the provision of wider bike lanes. The wider bike lanes will also better accommodate tricycles and baby trailers;
- The provision of wider 12-foot vehicular travel lanes is not expected to significantly increase speeds, and will allow some room for drivers' error;
- Allow for break down and maintenance space on the sides of the road; and,
- Somewhat reduce construction cost relative to other alternatives.

3. DISCUSSION: Grand Boulevard Concept Planning

Chair Walz noted that VTA may form a citizen advisory committee for the Bus Rapid Transit (BRT) project on El Camino Real and encouraged having a cycling activist from the individual cities along the corridor to be a member of such committee. Clarified the need for providing continued bike lanes along El Camino Real as the corridor travels through the different municipalities.

Staff will plan for a future presentation by VTA on the BRT project and invite Council member Moylan who presents Sunnyvale on the project's Policy Advisory Committee.

5. DISCUSSION: Utility Bill Stuffer Concepts

BPAC members selected two photos to be utilized for drafting the 2011 utility bill stuffer, and the photos will be e-mailed to staff.

6. DISCUSSION: Pastoria Avenue Bike Lanes Project

Chair Walz informed the BPAC and public members of his potential professional conflict with the project and left at 8:00 p.m.

Staff stated that the City received a grant to establish bike lanes on Pastoria Avenue possibly between Danforth Drive and Evelyn Avenue. Clarified that due to the narrow pavement width on Pastoria Avenue, the provision of bike lanes is likely to require eliminating vehicular parking and provided alternative cross-sections for possible future changes. Noted that this is an older neighborhood and the project may become controversial, and asked BPAC members for early feedback.

The BPAC members discussed the project and indicated their preference to proceed according to the City's Street Space Allocation policy. Pastoria Avenue serves a considerable amount of bicycle traffic, and observations showed aggressive driving possibly due to the narrow vehicular travel lanes.

Commissioner Simons (VTA BPAC) suggested converting the street to one way vehicular travel lane, bike lanes, and curb-side parking.

Staff noted the lack of a couplet and the possibility of diverting vehicular traffic to other neighborhood streets.

Art Schwartz suggested replacing the existing head-on angle parking with tail-end angle parking to improve visibility in the area adjacent to the community's swimming pool.

Kevin Jackson indicated that majority of the homes along Pastoria Avenue have at least three off-street parking spaces including garages and driveways. There is also curb-side parking on side streets. According to the City's policy, the minimum standards need to be met for all transportation users and currently even the auto lanes are substandard. Parking is stationary, and moving vehicles should have higher priority according to the policy. Noted that San Jose has issues with one-way couplet streets.

NON-AGENDA ITEMS AND COMMENTS

- BOARD MEMBERS OR COMMISSIONERS ORAL COMMENTS

Commissioner Switzer asked for BPAC volunteers to assist her and Chair Walz during the Health and Safety Fair.

Commissioner Stawitcke noted the ongoing work on the Stevens Creek overpass on the Sunnyvale/Mountain View side.

Commissioner Gandrud indicated the need for marking the bike detectors at the intersection of Maude Avenue/Sunnyvale Avenue, and at Caribbean Drive/Twin Creeks.

Commissioner Manitakos asked if there is a plan to apply pavement markings on Sunnyvale Avenue.

Commissioner Durham noted that the travel lanes on Tasman Drive are substandard and cyclists have to use the full width of the lanes. Consequently, requested that the existing "Share the Road" signs be replaced with "Bikes Allowed Full Use of Lane" signs.

- STAFF ORAL COMMENTS

None.

INFORMATION ONLY ITEMS

7. Sunnyvale Family Fun Bike Ride – VERBS Kick-off Event

8. BPAC E-mail messages and/or letters since circulation of the agenda packet of the March 17th meeting.

9. BPAC Active Items List.

Accepted as submitted in the agenda packet.

ADJOURNMENT

Meeting adjourned at 8:40 P.M.

Respectfully submitted by:

Heba El-Guendy
Senior Transportation Planner

Attachment G

Forthcoming