



**PUBLIC WORKS DEPARTMENT**

CITY HALL

10300 TORRE AVENUE • CUPERTINO, CA 95014-3255

TELEPHONE: (408) 777-3354 [www.cupertino.org](http://www.cupertino.org)

**CITY COUNCIL STAFF REPORT**

Meeting: February 7, 2017

Subject

Update on Status of 2016 Cupertino Bicycle Transportation Plan Implementation

Recommended Action

Receive update on status of 2016 Cupertino Bicycle Transportation Plan Implementation

Background

The 2016 Cupertino Bicycle Transportation Plan was adopted by the City Council in May, 2016. Included in the Plan is a list of proposed bikeway projects, ranked in priority order and separated into three Tiers, with Tier 1 being the highest priority projects. Council has approved \$2 million for implementation of these projects for the 2016/17 fiscal year.

Ranked #1 on the priority project list was the installation of Class IV bike lanes along the entire length of Stevens Creek Blvd. Bike lanes are classified as Class IV when there is a physical buffer, as opposed to just a striped buffer, separating the bike lane from the vehicle lanes. Installation of Class IV bike lanes along McClellan Road, between Byrne Ave and De Anza Blvd, was ranked #2. When City Council adopted the Bike Plan, staff was directed to evaluate and complete both the Stevens Creek Blvd and McClellan Road Class IV bike lane projects in parallel, i.e., ensure that an east-west route across Cupertino along McClellan Road for less-experienced bicyclists was available, who may not be comfortable riding along Stevens Creek Blvd even with the Class IV improvements. Because McClellan Road does not continue east of De Anza Blvd, a neighborhood network of streets would be chosen to continue a bike route or bicycle boulevard between De Anza Blvd and the eastern city limit, more or less parallel to Stevens Creek Blvd. This network would be consistent with proposed bike routes or bicycle boulevards identified in the Bike Plan within Tier 1. These alignments are shown in Exhibit A.

In response to direction provided by City Council, staff hired Toole Design Group to develop alternatives and conceptual designs for Class IV bike lanes along Stevens Creek Blvd and McClellan Road, and for a network of east-west bike routes and bike

boulevards south of Stevens Creek Blvd connecting McClellan Road to the eastern city limit.

### Discussion

#### *Stevens Creek Blvd*

The proposed Class IV bike lane along Stevens Creek Blvd (Exhibit B) would consist of a raised concrete buffer approximately two-feet wide separating the bike lane from the adjacent vehicle lanes. This buffer could be cast-in-place or pre-cast concrete, and would likely include appropriately-spaced vertical elements to highlight the buffer. Breaks in the buffer would be provided at all driveways, and additional striping provided within the bike lane at all driveway crossings to highlight the potential conflicts for both bicyclists and vehicles (Exhibit D).

A notable feature of the Class IV proposal relates to the bike lane treatment at signalized intersections (Exhibit C). In order to minimize conflicts between right-turning vehicles and bicyclists, at locations where there is a heavy volume of right-turning vehicles a separate bicycle signal phase and dedicated vehicle right-turn lane is recommended, that would require right-turning vehicles to stop while bicyclists are given a green light to proceed. The number of through lanes would be reduced to two. Because this special traffic signal phasing would be implemented only at intersections where right-turning volumes are heavy, there would be minimal impacts to vehicle level of service resulting from the reduction in through lanes, while bicyclist safety would be greatly enhanced.

The physical buffer between the bike lane and vehicle lanes would also require special treatment at bus stops (Exhibit D) to accommodate bus movements and passenger boarding. Staff is currently in discussions with VTA regarding these treatments and will develop designs that take into account the needs of VTA as well as providing the necessary level of protection for bicyclists.

#### *McClellan Road*

Due to the high density of residential driveways, constrained right-of-way and school-related traffic, implementation of Class IV bike lanes along McClellan is more challenging than along Stevens Creek Blvd, especially between Bubb Road and Byrne Ave (Exhibit E). Two concepts have been provided for protected lanes along this segment: one-way protected bike lanes on each side of the street (Concept 1, Exhibit E), and a separated two-way bike facility on the north side of the street (Concept 2, Exhibit E). A separated two-way facility on the south side of the street is also equally feasible.

All of these options will require acquiring right-of-way or easements from some property owners on the north side of the street, an effort which is currently underway by staff.

Pros and cons of these proposals are as follows:

	Pros	Cons
Two one-way facilities (Concept 1)	Maintains existing bike lane placement	Less room for bicyclists to pass
Two-way north side facility (Concept 2)	Potential conflicts at residential driveways are relatively infrequent	Multiple residential driveways Challenging access to and from schools on south side
Two-way south side facility	Direct access to schools Driveway conflicts only during school times	School driveways very busy at certain times

Between Stelling Road and De Anza Blvd, two one-way protected bike lanes are recommended, with the necessary removal of on-street parking. East of De Anza Blvd, where protected bike lanes aren't feasible due to the residential nature of the streets, traffic calming features will be developed and presented to the neighborhoods which would encourage bicycling and calm vehicle speeds. These "bike boulevard" treatments would complete the east-west cross-city connection of the McClellan bikeway.

A public workshop was held on January 25 in order to introduce the concepts and solicit feedback from the public. Overall support for all concepts was received from the public, with most comments restricted to design details that have yet to be completely worked out due to the preliminary nature of the concepts provided to date.

#### Sustainability Impact

There is no sustainability impact.

#### Fiscal Impact

City Council approved \$2 million in funding for the implementation of the 2016 Bicycle Transportation Plan for FY 2016-17. Approximately \$170,000 of this has been encumbered for the current Agreement with Toole Design Group for development of the Stevens Creek Blvd and McClellan Road conceptual designs. Once the conceptual

designs have been accepted by staff, staff will proceed with development of engineering design, cost estimating and construction of the improvements. This work will be funded using the \$2 million allocated by Council.

---

Prepared by: David Stillman, Senior Civil Engineer

Reviewed by: Timm Borden, Director of Public Works

Approved for Submission by: David Brandt, City Manager

Attachments:

A – Map of Area and Bikeway Locations

B – Stevens Creek Blvd Bikeway Concept and Buffer Treatment Options

C – Intersection and Signalization

D – Bus Stop and Driveway Treatments

E – McClellan Road Concepts and Buffer Treatment Options