



PUBLIC WORKS DEPARTMENT

CITY HALL

10300 TORRE AVENUE • CUPERTINO, CA 95014-3255

TELEPHONE: (408) 777-3354 www.cupertino.org

CITY COUNCIL STAFF REPORT

Meeting: July 16, 2019

Subject

Presentation of FY 2019/20 Bicycle and Pedestrian Capital Improvement Program Projects (not including Regnart Creek Trail) and amendment of FY 2019/20 Capital Improvement Program budget.

Recommended Actions

- 1) Receive presentation and update on prioritized project lists of the adopted 2016 Bicycle Transportation Plan and adopted 2018 Pedestrian Transportation Plans; and
- 2) Adopt Resolution 19-XXX amending the FY 2019/20 Capital Improvement Program budget to include additional funding for bicycle and pedestrian projects as follows:
 - a. Approve an additional \$1,275,438 for the Orange & Byrne Ave Sidewalk project;
 - b. Approve an additional \$242,941 for the McClellan Road Bike Corridor: Byrne to Torre;
 - c. Approve an additional \$65,000 for the Bicycle Wayfinding Project;
 - d. Approve a new amount of \$595,500 for the Linda Vista Trail project

Background

The Cupertino Bicycle Transportation Plan (Bike Plan) was adopted by City Council in 2016, and is a long-range planning document designed to encourage bicycling as a safe, practical and healthy alternative to the motor vehicle. Similarly, the Cupertino Pedestrian Transportation Plan (Ped Plan) was adopted by City Council in 2018 and provides the blueprint for Cupertino to achieve its vision of an inviting, safe and connected pedestrian network that enhances the quality of life for all community members and visitors.

Within these Plans, a list of respective infrastructure improvements is provided, which have been evaluated with respect to numerous criteria and prioritized. The purpose of prioritizing projects is to provide guidance to decision makers and staff on implementation strategies for the improvements. This guidance is intended to be flexible and change over time. As stated in the 2016 Bicycle Transportation Plan, and applicable to both Plans, *"The project list and individual projects to be included in this Plan are flexible concepts that serve as a guideline. The high-priority project list, and perhaps the overall project list, may change over time as a result of*

changing walking and bicycling patterns, land use patterns, implementation constraints and opportunities, and the development of other transportation improvements.”

Additionally, Bicycle Plans and Pedestrians Plans are generally updated every five years, in order to stay current and to maintain eligibility for certain grant funding opportunities. As a result, staff anticipates beginning the process of moving forward on the next update to the 2016 Bicycle Transportation Plan in 2020. As the Bicycle Plan and the Pedestrian plan are overlapping and complimentary, it is possible that the two plans will merge when updated in 2021.

2016 Bicycle Transportation Plan Project Evaluation Criteria

Each project within the 2016 Bicycle Transportation Plan was evaluated and assigned up to 100 points with respect to seven criteria:

- Safety (20 points max): Address a location with a history of bicycle collisions
- Stress Test Analysis (5 points max): Projects identified along a high or medium-high stress route
- Travel Routes to/near Schools (20 points max): Connects to a school
- Network Connectivity (15 points max): Projects that close gaps in the bikeway network
- Low-Stress Network Improvements (20 points max): Projects that add or upgrade an existing bikeway facility to a low-stress facility
- Trip Generators and Attractors (10 points max): Connects to employment centers, retail/business centers, transit, community services, parks and recreation facilities and/or City facilities
- Feasibility/Ease of Implementation (10 points max): The ease of implementing the project within a five-year timeframe, taking into consideration outside agency approval

The scores were developed as a cooperative effort between City staff, the City retained consultant (Alta Planning+Design), and the Cupertino Bicycle Pedestrian Commission (BPC). The 2016 Bicycle Transportation Plan was approved by the BPC on April 21, 2016 and adopted by Council on June 21, 2016.

2018 Pedestrian Transportation Plan Project Evaluation Criteria

Each project within the 2018 Pedestrian Transportation Plan was evaluated and assigned up to 100 points with respect to four criteria:

- Schools (40 points max): Within close proximity or connects to a school
- Safety (20 points max): Projects identified along a high or medium-high stress route
- Destinations (25 points max): Within close proximity to a park, transit stop, or retail/business/employment center
- Connectivity (15 points max): Adds a new network connection

The scores were developed as a cooperative effort between City staff, the City retained consultant (Toole Design Group), and the BPC. The 2018 Pedestrian Transportation Plan was approved by the BPC on November 15, 2017 and adopted by Council on February 20, 2018.

Discussion

Progress on implementation of projects within the 2016 Bicycle and 2018 Pedestrian Transportation Plans have generally occurred in order of their priority listing within the respective plans. Where lower priority projects have been moved up, this has occurred due to one or more of the following reasons:

- *City Council direction.* The Carmen Road Bridge Feasibility Study was reprioritized by Council after the adoption of the 2016 Bike Plan. This occurred on March 6, 2018 when Council appropriated \$100,000 for this project as part of a 2017-18 mid-year budget adjustment.
- *Proximity of a project to an adjacent higher priority project.* Several high and lower priority projects were combined due to the following:
 - Close proximity to other higher priority projects.
 - Ease and efficiency of implementation or to complete a connection.
 - To form a more complete and geographically equitable network.

Projects combined included:

- Stevens Creek Blvd/Wolfe Road interchange reconfiguration.
- Greenleaf/Mariani wall reconfiguration
- Pacifica Drive Class II bike lanes
- Bandley/Mariani curb extensions
- Bike boulevards locations were combined into phases. Locations #4 and #8 were combined with bike boulevards #2, #5, #7 and #9. An informational presentation was provided to City Council on February 6, 2018, describing the active list of bike boulevard projects.
- *Outside funding availability.* Apple has donated funding for several higher-priority projects. These projects include:
 - McClellan Road Separated Bikeway Project (\$2,000,000)
 - De Anza/McClellan Signal Modification (\$160,000)
 - McClellan Road Sidewalk Improvement Project (\$2,465,000)
 - Junipero Serra Trail Design (\$1,800,000)

Apple has donated funding for two lower-priority projects:

- Mary Ave Class II bike lane (\$165,000)
- Bubb Road Class II bike lane (\$1,980,555)

Other external funding is occurring as follows:

- Homestead Road/Mary Ave intersection (funded by VERBS grant in partnership with the City of Sunnyvale; \$1,000,000 funded through grant, \$126,500 funded by City of Sunnyvale).

- McClellan Separated Bikeway Project (\$1,000,000 funded by VERBS grant, \$85,822 funded by Regional TFCA grant, \$55,000 by local TFCA grant, and \$157,237 development-in-lieu from De Anza Blvd/McClellan Road intersection)
- Bike Boulevard Project (\$52,537 funded by Regional TFCA grant, \$166,259 funded by TDA Article 3)
- Linda Vista Trail (land for trail proposed to be donated to City)

New Project Proposed for FY19-20

A new project proposed for FY19-20 is the Linda Vista Trail. The trail alignment consists of an old access parcel which runs between McClellan Road and Linda Vista Park, along the easterly boundary of Deep Cliff Golf Course. The parcel was recently acquired by a Cupertino resident who is willing to donate the property to the City for public trail purposes. The resident has requested, in return for the donation, that the City design, fund and approve the construction of a trail project by December 31, 2019. The proposed budget amount of \$595,500 will provide for grading and fencing to accommodate adjacent property owners' privacy concerns, fencing along the downhill slope, minor clean-up of the property and minor signage and safety enhancements where the trail intersects City property. These improvements will provide a footpath only with unpaved widths as narrow as eight feet, and does not include widened shoulders, retaining wall improvements, crossing improvements at McClellan Road or accessibility/bicycle enhancements.

Improving the parcel to create a foot trail does complete some of the work necessary to construct a multi-use trail (minimum 8' paved width, shoulders and the necessary retaining walls), and thus would result in reduce costs to any future trail enhancements. If it is desired to improve the parcel to a multi-use trail at this time, the estimated cost is \$2.2M.

Proposed Change to Bicycle Boulevard Project Phase 1 & 2 Project

The Bicycle Boulevard Project Phase 1 & 2 project was originally funded at \$1,417,000. This project includes the construction of a variety of bicycle and pedestrian enhancements (raised curb bulb outs including any needed changes for drainage, speed tables, pavement markings, signage, etc.) at the following locations:

- Phase 1
 - North Portal Avenue from Stevens Creek Boulevard to Merritt Drive
 - Merritt Drive from Portal Avenue to western end
 - Greenleaf Drive from eastern end to Castine Avenue
 - Beardon Drive from Greenleaf Drive to Greenleaf Drive
 - Meteor Drive between Mary Ave and Castine Ave
 - Bandlely Drive at Mariani Avenue
 - Torre Avenue at Town Center Lane
- Phase 2
 - Calle de Barcelona, between Miller Ave and Finch Ave
 - Finch Ave, between Calle de Barcelona and Tilson Ave

- Tilson Ave, between Finch Ave and Wunderlich Dr
- Wunderlich Dr, between Tilson Ave and Barnhart Ave
- Barnhart Ave, between Wunderlich Dr and Sterling Blvd
- Intersection of Kim St. and Kirwin Ln
- Intersection of Meteor Dr. and Mary Ave.
- Phase 3
 - Linda Vista Drive between McClellan Road and Hyannisport Dr.
 - Hyannisport Dr between Linda Vista Dr and Bubb Rd
 - Fort Baker Dr between Presidio Dr and Hyannisport Dr
 - Santa Teresa Dr between Hyannisport Dr and Terrace Dr
 - Terrace Dr between Santa Teresa Dr and Bubb Rd

The first phase of this project was designed and advertised for construction. Two bids were received and the low bid was in the amount of \$1.69M. This amount was in excess of 13% above the engineers estimate. Consequently, on May 7, 2019, staff recommended and Council authorized rejecting all bids. As an interim measure, staff proposed constructing the Phase 1 project without raised curbs, making only minimal changes to drainage and instead placing temporary bollards. Staff is currently soliciting bids for a reduced scope of work that includes asphalt speed tables with City staff installing the temporary bollards. The total estimated cost for this work is \$300,000.

The second phase of this project is proposed to be constructed similar to the first phase (utilizing temporary bollards). The total estimated cost for the work is \$75,000.

The third phase of this project requires further public outreach in order to determine the scope of improvements which will both achieve the goals of the bike boulevard network and satisfy the concerns of local residents. Consequently, the scope of work for this phase has not been fully defined and no budget has been established.

The advantage of constructing this project utilizing a reduced scope (temporary bollards/minimal drainage improvements) is as follows:

- Not permanent – easily allows for changes if residents or others express a need for a change
- Evaluation – allows staff to evaluate effectiveness of devices and if more permanent improvements are warranted in the future
- Protection – provides designated area for cyclist and pedestrians
- Time – improvements can be completed this calendar year

Upon completing the Phase 1 & 2 and potentially Phase 3 improvements utilizing the reduced scope of work, it is anticipated that up to \$1M of remaining budget will be available in the future for permanent improvements. As costs of permanent improvements have increased, additional dollars will be needed to augment the remaining budget if this permanent work is recommended and authorized by the City Council to complete in the future.

Updated Existing Project Costs

The below table includes bicycle and pedestrian Capital Improvement Program Projects that require additional funding / budget adjustment in FY19-20 for completion.

Project	Original Budget	Estimated New Budget	Increase/ <Decrease>	Outside Funding	Additional Required
Orange & Byrne Ave Sidewalk project	\$3,888,000	\$5,163,438	\$1,275,438	0	\$1,275,438
Linda Vista Trail	0	\$595,500	\$595,500	0	\$595,500
McClellan Road Bike Corridor: Byrne to Torre	\$5,289,000	\$8,830,000	\$3,541,000	\$3,298,059	\$242,941
Bicycle Wayfinding Project	\$50,000	\$115,000	\$65,000	0	\$65,000
				TOTAL	\$2,178,879

Orange & Byrne Ave Sidewalk Project

This project constructs City standard curb, gutter and sidewalk where there are currently gaps along Orange Avenue and Byrne Avenue between McClellan Road and Granada Avenue. As these improvements are proximate to the tri-school area, they rank 5th and 10th, both high priority Tier 1 projects, in the 2018 Pedestrian Plan. Each of these streets are about ½ mile long.

To have improvements consistent with the City's General Plan, right of way acquisition is necessary (requires appraisals, title work, working with individual lenders, and recordation of grant deeds). The donations of property are voluntary and the City offers a waiver of future reimbursement of the cost of improvements if the property is donated. For Byrne Avenue, preliminary design indicates ten right of way requests for donations. Additional design brought this number down to six. Of this six, one donated, four declined and one was non-responsive. For Orange Avenue, preliminary design indicates the need for fifteen property donations. To date, these property owners have not yet been approached.

This work was estimated to cost \$3,888,000 approximately five years ago. The project was subsequently split into two construction contracts and Byrne Avenue is currently being advertised. The engineer's estimate for this project is \$2.3M. Bids open on July 23, 2019.

Due primarily to cost escalation and an initial estimate that did not include adequate soft costs (design, project management), the anticipated total cost of constructing the improvements on both Byrne and Orange is expected to increase by \$1,275,438 for a total estimated cost of \$5,163,438.

As the improvements for this project are predominantly City standard sidewalk and curb/gutter improvements, there are no opportunities to reduce the cost of this project and still maintain effective drainage and accessibility requirements.

McClellan Road Bike Corridor: Byrne to Torre

This project constructs separated (Class IV) bike lanes along McClellan Road between Byrne Ave and De Anza Blvd, and along Pacifica Drive between De Anza Blvd and Torre Ave. The work also includes traffic signal modifications at the intersections of McClellan Road with Stelling Road, Bubb Road, and De Anza Blvd. As this is a primary east-west corridor and a critical route to several schools, the McClellan Road Class IV bikeway ranks as the #2 priority project in the 2016 Bike Plan. Bike Plan projects that have been included as part of the McClellan Road Bike Corridor project because of their location along the corridor include the reconfiguration of the McClellan Road/Stelling Road intersection, reconfiguration of the McClellan Road/Westacres Dr/Kim Street intersection, reconfiguration of the McClellan Road/De Anza Blvd intersection, and Class II bike lanes along Pacifica Drive. These projects ranked 5th, 8th, 14th, and 21st within the 2016 Bike Plan, respectively.

Right of way acquisition is necessary (similar to the Orange & Bryne Ave. Sidewalk Project) for several parcels within the Byrne-to-Imperial segment and the Stelling-to-De Anza segment. Right-of-way is also needed at the northwest corner of the De Anza Blvd intersection. Removal of on-street parking will be required between Stelling Road and De Anza Blvd, and likely between De Anza Blvd and Torre Ave.

This work was estimated to cost \$5,289,000 approximately four years ago. The project was subsequently split into five phases. Phases 1A & 1B are currently under construction.

Due primarily to cost escalation, an initial estimate that did not include adequate soft costs (design, project management) and estimated unit prices that varied greatly in the initial feasibility study, the anticipated total cost of constructing the improvements have increased by \$3,541,000 for a total estimated cost of \$8,830,000 (*Known costs for Phase 1A & 1B provided valuable information into calculating the new estimate*). Outside funding, including the \$2.16M donation from Apple, has significantly helped to offset the additional estimated dollars needed to complete this project.

The new estimated cost to complete this project inclusive of soft costs and reasonable escalation are as follows:

Project Location	Phase #	Design Cost	Construction Cost	Total Project Cost
Imperial to Stelling	1A	\$310,800	\$2,127,500	\$2,438,300
McClellan-Bubb McClellan-Stelling	1B		\$1,486,500	\$1,486,500
Stelling to Torre (W/O signal@ De Anza)	2	\$148,000	\$1,525,200	\$1,673,200
McClellan-De Anza Traffic Signal	3	\$247,000	\$1,914,000	\$2,161,000
Byrne to Imperial	4	\$130,000	\$941,000	\$1,071,000
TOTALS		\$835,800	\$7,994,200	\$8,830,000

As the improvements for this project predominantly include the relocation of curbs, gutter and sidewalk, the installation of physical concrete barriers to separate bicyclists from vehicles, and the modification of traffic signals, there are no opportunities to reduce cost while providing the desired level of safety and encouragement for bicyclists.

Bicycle Wayfinding Project

This project erects approximately 300 signs throughout the City to create a quality environment for cyclist and others to navigate. Bicycle wayfinding assists residents, tourists and visitors in finding key community destinations by bicycle. Signs will include “distance to” information, which displays mileage to community destinations. The implementation of a bicycle wayfinding program was a key recommendation within the 2016 Bike Plan as a way to support and promote bicycling in Cupertino.

The initial cost of \$50,000 was to hire a consultant, Alta Planning+Design, to complete a survey of the proposed bike routes, design a wayfinding brand, and prepare an inventory of signs and construction drawings for the installation of the signs throughout the City. The \$65,000 increase will allow staff to hire a sign fabricator and contractor to install the wayfinding signs citywide per the drawings.

Attachments

- Attachment A - contains a list of all projects within the 2016 Bicycle Transportation Plan in priority order, along with comments noting whether the particular project has been initiated and reason for initiation if not a Tier 1 project.

- Attachment B - contains a list of all projects within the 2018 Pedestrian Transportation Plan in priority order, along with comments noting whether the particular project has been initiated and reason for initiation if not a Tier 1 project.
- Attachment C - contains a list of all currently active bicycle and pedestrian projects, and the status and expected schedule for each project phase.
- Attachment D - contains a list of all projects that have been initiated, but includes a more detailed accounting of the following:
 - Current status and description of the project
 - Project cross-reference to projects as listed in Attachments A and B
 - Original estimated cost, amount currently budgeted, amount budgeted in previous years and funding proposed for FY 19/20
 - Current estimated project costs by phase
 - Sources of funding and funding status
 - Description of public outreach and public hearing events
- Attachment E - Resolution No. 19-XXX Amendment of the FY19-20 CIP Budget

Sustainability Impact

Bicycle and pedestrian improvement projects reduce single occupant vehicle miles traveled in Cupertino. As a result, there would be a reduction in greenhouse gases and a positive sustainability impact. Specific impacts to sustainability will vary depending on the specific project funded.

Fiscal Impact

From capital reserves, add:

- \$1,275,438 to account 270-90-958 for the Orange & Byrne Ave Sidewalk project
- \$242,941 to account 420-99-036 for the McClellan Road Bike Corridor: Byrne to Torre;; Phase 1 & 2 Permanent Improvements
- \$65,000 to account 420-99-036 for the Bicycle Wayfinding Project
- \$595,500 to the Linda Vista Trail Project (account number to be determined).

The balance in the capital reserve account, if each of these projects are funded, will be \$10,997,900.

Prepared by: David Stillman, Transportation Manager

Reviewed by: Roger Lee, Director of Public Works

Approved for Submission by: Deborah Feng, City Manager

Attachments:

- A – Bicycle Transportation Plan Projects by Tier
- B – Pedestrian Transportation Plan Projects by Tier
- C – Bicycle and Pedestrian Transportation Plan Project Schedule
- D – Budget & Other Detail
- E – Resolution No. 19-XXX Amendment of the FY19-20 CIP Budget