



# *City Council Agenda*

City of Campbell, 70 North First Street, Campbell, California

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## **CAMPBELL CITY COUNCIL STUDY SESSION**

**Tuesday, September 6, 2016 - 6:00 p.m.**

**Council Chamber – 70 N. First Street**

**NOTE: No action may be taken on a matter under Study Session other than direction to staff to further review or prepare a report. Any proposed action regarding items on a Study Session must be agendized for a future Regular or Special City Council meeting.**

### **CALL TO ORDER, ROLL CALL**

### **NEW BUSINESS**

#### **1. Downtown Pedestrian and Bicycle Safety Improvements**

**Recommended Action: Conduct study session and provide direction to staff.**

### **PUBLIC COMMENT**

### **ADJOURN**

In compliance with the Americans with Disabilities Act, listening assistive devices are available for all meetings held in the City Council Chambers. If you require accommodation, please contact the City Clerk's Office, (408) 866-2117, at least one week in advance of the meeting.

**MEMORANDUM**

**City of Campbell**  
**Public Works Department**

**To:** Honorable Mayor and City Council **Date:** 9/6/2016  
**From:** Todd Capurso, Public Works Director  
**Via:** Mark Linder, City Manager  
**Subject:** Downtown Pedestrian and Bicycle Safety Improvements

**BACKGROUND**

On May 19, 2015 the City Council adopted resolution 11813 (see Attachment 1) authorizing the City Manager to execute the project fund agreement for the Transportation Improvement Plan for Campbell PDA Project and authorizing the City to provide \$13,000 in local matching funds for the Project.

The Transportation Improvement Plan for Campbell PDA (TIPC) Project is intended to develop a transportation improvement plan that forms the basis for Campbell to compete for future funding of infrastructure projects that support housing, employment, and services in Campbell's PDA, the Central Redevelopment Area. This project would 1) assess infrastructure needs, 2) recommend typical roadway cross-sections, and 3) develop project concepts and cost estimates. The plan would identify downtown pedestrian and bicycle safety improvements.

On April 20, 2016 the consultant, Community Design + Architecture (CD+A) and staff met with various stakeholders from the community to hear the public's ideas, concerns, and comments. The stakeholder groups that were represented included the Downtown Campbell Neighborhood Association, Downtown Campbell Business Association, Campbell Chamber of Commerce, City Library, and the Campbell Bicycle and Pedestrian Advisory Committee (BPAC).

The stakeholders were heard in groups of two or three during three consecutive one-hour sessions. Some themes were recurring such as:

- Locations that are confusing for pedestrians and motorists
- Walking patterns from the Downtown Campbell Light Rail Station
- Bike parking
- Barriers to walking and biking

CD+A's transportation subconsultant, Fehr and Peers, performed a thorough investigation of the project area's transportation facilities and will be providing recommendations. The consultant team has presented to staff proposed project

concepts to address identified needs. The project concepts were also presented to the BPAC in June.

## **DISCUSSION**

At the September 6<sup>th</sup> City Council meeting (study session), CD+A will summarize and present stakeholder and staff insights to the City Council. Ultimately, the final product will be a transportation improvement plan that includes a project list with preliminary cost estimates. The draft report is attached (see Attachment 2).

Table 1 in the report summarizes the stakeholders input and the consultant's recommendations. Table 2 describes proposed improvements and the report includes conceptual drawings of some potential measures that would address stakeholders' concerns and the consultant's recommendations.

Staff is concurrently beginning the procurement and installation of additional downtown bike parking facilities using the City's operating budget and will continue adding bike parking with Bike/Ped Traffic Safety Project funds or future Transportation Development Act (TDA) funds.

Staff also recently submitted a One Bay Area Grant (OBAG) grant application that would address the following.

- Campbell Avenue/Railway Avenue pedestrian improvements
  - New signalized crosswalks on north and west legs
  - New sidewalk area in front of "Historic Downtown" monument sign
- Shared lane markings ("sharrows") on both loop streets
- Improved pedestrian safety on loop streets including a flashing beacon system at Orchard City Drive/South Second Street
- Sidewalk realignment and bulb-outs on Orchard City Drive between Central Avenue and Downtown Campbell Light Rail Station
- New signalized crosswalk across Orchard City Drive just west of train tracks
- Ladder-type crosswalks at all unsignalized intersections
- New sidewalk on north side of Orchard City Drive between Second and Third Streets

## **NEXT STEPS**

Based on the City Council's feedback, the consultant team will prepare a Draft Plan with recommendations and a projects list.

Attachment 1 – May 19, 2015 Council Report

Attachment 2 – Campbell Transportation Improvement Plan: Progress Update

Exhibit A – April 21, 2015 Council Report



*City  
Council  
Report*

Item: 6.  
Category: Consent Calendar  
Meeting Date: May 19, 2015

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**TITLE: Authorization to Execute Fund Agreement for Transportation Improvement Plan for Campbell Priority Development Area (PDA) Project (Resolution/Roll Call Vote)**

**RECOMMENDATION**

That the City Council adopt the attached resolution:

1. Authorizing the City Manager to execute the fund agreement with the Santa Clara Valley Transportation Authority (VTA) for the Campbell Priority Development Area (PDA) Project.

**BACKGROUND**

In February 2014 VTA issued a call for projects for the Priority Development Area (PDA) Planning Grant Program. This grant program was funded with \$5.1 million in Federal Surface Transportation Program (STP) Planning Funds. The purpose of the grant program was to enable transit-oriented housing and employment growth in Santa Clara County's Priority Development Areas (PDAs) by funding preliminary planning projects (e.g., zoning changes, transportation plans), advanced planning projects (station area or specific plans), and policy planning (e.g., updates to parking requirements or parking policies in a PDA).

VTA hosted a PDA Planning Grant Workshop in March 2014 to provide member agencies with guidance on the goals and objectives of this grant program. For projects costing below \$500,000, VTA staff would be able to select consultants and process all federal paperwork. Project sponsors (i.e., member agencies like the City of Campbell) would execute a project agreement with VTA. With this arrangement (VTA as the managing agency), member agency staff salaries would be ineligible for grant funding since VTA could not ensure member agency staff's compliance with federal rules.

Staff submitted a PDA Planning grant application for the Transportation Improvement Plan for Campbell PDA Project in April 2014. At the time staff did not have time to attend the VTA workshop, comprehend the grant program, develop a project concept, and prepare and agendaize a council report ahead of the grant application deadline.

In August 2014 the VTA Board awarded a PDA grant for the Transportation Improvement Plan for Campbell PDA Project.

## **DISCUSSION**

### **Transportation Improvement Plan for Campbell PDA Project**

The purpose of the Transportation Improvement Plan for Campbell PDA Project is to develop a transportation improvement plan that forms the basis for Campbell to compete for future funding of infrastructure projects that support housing, employment, and services in Campbell's PDA, the Central Redevelopment Area. The project plan goals would be a safe, efficient, attractive transportation system that supports employment and housing near transit, enhances walking and bicycling, improves streetscape design, and encourages alternative transportation modes in the Campbell PDA. Project objectives would include:

1. Assess infrastructure needs (e.g., gaps in facilities)
2. Recommend typical roadway cross-sections (e.g., sidewalk and lane widths, landscaping, and amenities)
3. Develop project concepts and cost estimates.

In recent years the City has been receiving development applications for housing or mixed use developments on Railway Avenue (St. Anton Apartments), Dillon Avenue (Dillon Avenue Homes), East Campbell Avenue (e.g., Del Grande property), and South First Street (Water Tower Lofts). The City is also working on the Civic Center Master Plan. How customers, employees, and residents of these developments, city services (e.g., City Hall, Library), and Historic Downtown businesses are served would be mapped out with this transportation improvement plan.

For future grant applications involving capital improvement projects, the City would be able to cite the Transportation Improvement Plan for Campbell PDA to demonstrate that the plan and its projects were developed through a collaborative planning process with community stakeholders.

Some potential projects that could be included in the plan include:

- **Downtown Bicycle and Pedestrian Enhancements**
  - LED streetlights, street trees, sidewalks on loop streets and Central Avenue
  - Flashing beacons at crosswalks
  - Shared lane markings or "sharrows" on Downtown loop streets
- **Improved walkways (ADA sidewalks and driveways, street lighting)**
  - From First Street Garage to Downtown
  - From Railway Avenue to Downtown Campbell Light Rail Station
  - From Civic Center/City Hall to Downtown Campbell Light Rail Station via Central Avenue
- **Bike parking at Downtown Campbell Light Rail Station.**

### Project Schedule

On May 4, 2015, VTA requested that the City execute the project fund agreement between Campbell and the VTA. The terms of the fund agreement (see Attachment 3) include project scope; agreement term; and obligations of VTA and Campbell, respectively. VTA hopes to execute the agreement by the end of May, 2015.

The scope of the project anticipates meetings with the Campbell Bicycle and Pedestrian Advisory Committee, Planning Commission, and City Council. The tentative project schedule is as follows.

July-October 2015	Task #1: Data Collection and Field Reconnaissance Deliverable: Existing Conditions Technical Memorandum
Oct. 2015-Feb. 2016	Task #2: Visioning Deliverable: Visioning Technical Memorandum
February-April 2016	Task #3: Draft Plan, Recommendations and Projects List Deliverable: Draft Plan, Recommendations, Projects List
April-September 2016	Task #4: Public Meetings and Final Plan Deliverable: Final Plan
September 2016	Project Completion
September 2016	City Council Approval
October 2016	Project Close-out

### FISCAL IMPACT

The grant program requires a minimum \$100,000 grant request and an 11.47 percent local match. A \$113,000 project would meet the minimum grant request. The local match would be \$13,000. Therefore, staff requested the minimum \$100,000 grant that would require \$13,000 in local matching funds. Staff proposes that local matching funds come from Capital Improvement Program Reserves (CIPR).

### ALTERNATIVES

1. Do not execute project fund agreement.
2. Do not approve \$13,000 in local matching funds.

Prepared by:

  
Matthew Jue, Traffic Engineer

Reviewed by:

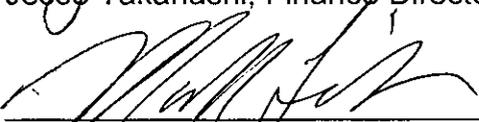
  
Todd Capurso, Public Works Director

**Authorize Execution of Fund Agreement with VTA for  
Transportation Improvement Plan for Campbell PDA Project  
May 19, 2015**

Reviewed by:

  
\_\_\_\_\_  
Jesse Takahashi, Finance Director

Approved by:

  
\_\_\_\_\_  
Mark Linder, City Manager

Attachments:

1. Resolution
2. Project Area Detail Map
3. Project Fund Agreement

RESOLUTION NO. 11813

**A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF CAMPBELL  
AUTHORIZING THE CITY MANAGER TO EXECUTE PROJECT FUND AGREEMENT FOR  
THE TRANSPORTATION IMPROVEMENT PLAN FOR CAMPBELL PRIORITY  
DEVELOPMENT AREA (PDA) PROJECT**

**WHEREAS**, in February 2014 the VTA issued a call for projects for the Priority Development Area (PDA) Planning Grant Program; and

**WHEREAS**, the PDA Planning Grant is funded with federal Surface Transportation Program (STP) planning funds; and

**WHEREAS**, in April 2014 staff submitted a PDA Planning Grant application for the Transportation Improvement Plan for Campbell PDA Project; and

**WHEREAS**, the Transportation Improvement Plan for Campbell PDA Project would 1) assess infrastructure needs (e.g., gaps in facilities), 2) recommend typical roadway cross-sections (e.g., sidewalk and lane widths, landscaping, and amenities), and 3) develop project concepts and cost estimates; and

**WHEREAS**, the minimum planning grant request is \$100,000; and

**WHEREAS**, the preliminary cost estimate to prepare this plan is \$113,000; and

**WHEREAS**, the PDA Planning Grant Program requires an 11.47 percent local match; and

**WHEREAS**, the Transportation Improvement Plan for Campbell PDA Project would require a local match of \$13,000; and

**WHEREAS**, the VTA requires that the City execute the project fund agreement by the end of May 2015.

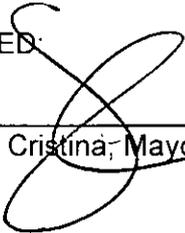
**NOW, THEREFORE, BE IT RESOLVED**, by the City Council of the City of Campbell that the City Manager is hereby authorized to execute the project fund agreement for the Transportation Improvement Plan for Campbell PDA Project.

**BE IT FURTHER RESOLVED** that the City of Campbell will provide \$13,000 in local matching funds for the Transportation Improvement Plan for Campbell PDA Project.

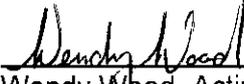
**PASSED AND ADOPTED** this 19th day of May, 2015, by the following roll call vote:

AYES:	COUNCILMEMBERS:	Gibbons, Resnikoff, Kotowski, Baker, Cristina
NOES:	COUNCILMEMBERS:	None
ABSENT:	COUNCILMEMBERS:	None

APPROVED:

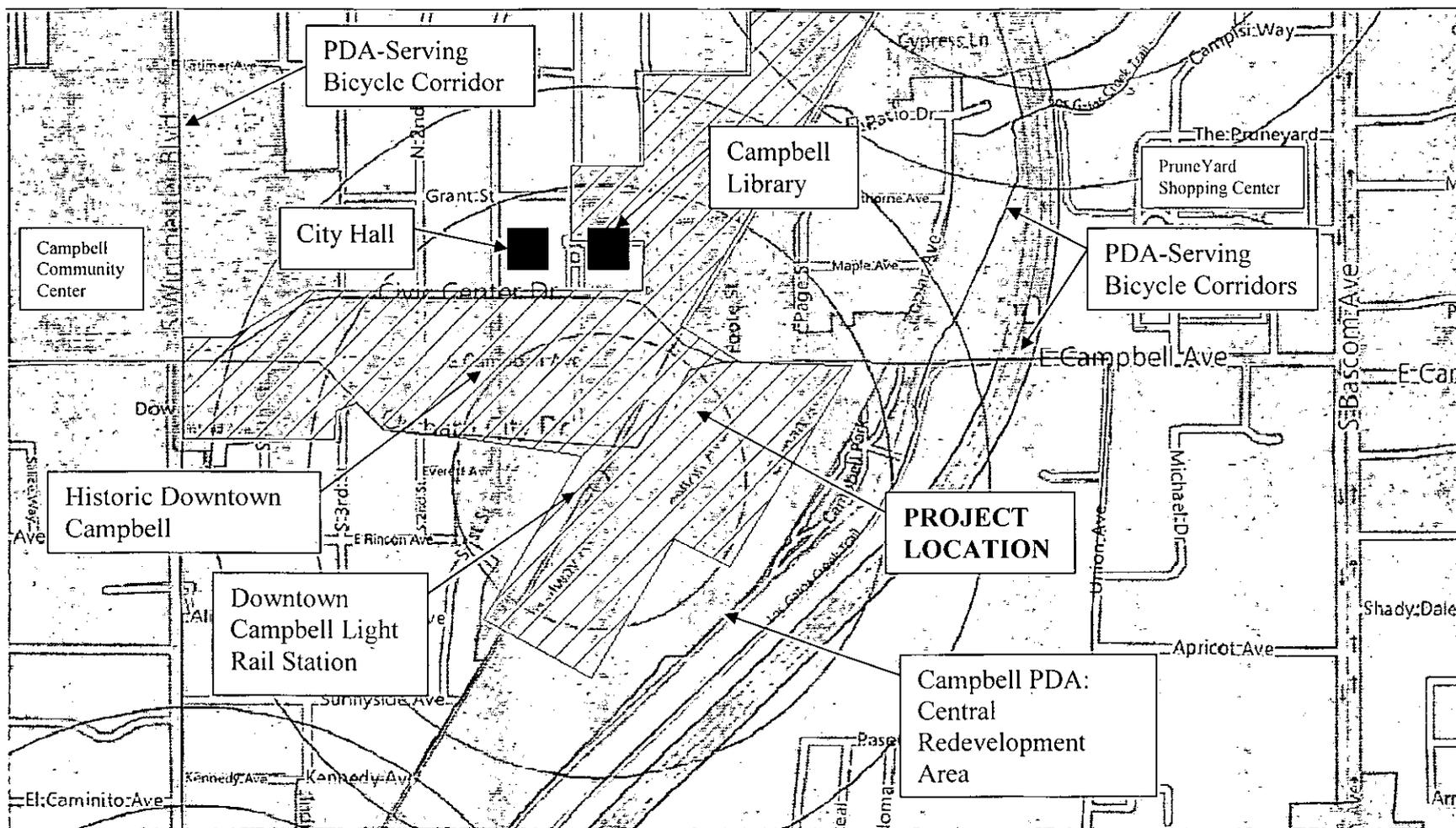
  
\_\_\_\_\_  
Jeffrey R. Cristina, Mayor

ATTEST:

  
\_\_\_\_\_  
Wendy Wood, Acting City Clerk

ATTACHMENT 2

PROJECT AREA DETAIL MAP – TRANSPORTATION IMPROVEMENT PLAN FOR CAMPBELL PDA PROJECT



**FUNDING AGREEMENT BETWEEN THE CITY OF CAMPBELL  
AND THE SANTA CLARA VALLEY TRANSPORTATION AUTHORITY  
REGARDING THE PDA PLANNING GRANT PROGRAM**

THIS AGREEMENT ("Agreement") entered into on this \_\_\_\_\_ day of \_\_\_\_\_, 2015 ("Effective Date") is between the CITY OF CAMPBELL, a municipal corporation of the State of California (hereinafter referred to as "CITY") and the SANTA CLARA VALLEY TRANSPORTATION AUTHORITY, a public agency (hereinafter referred to as "VTA") (collectively referred to as "Parties and individually referred to as a "Party").

**RECITALS**

1. **Whereas**, on February 6, 2014 the VTA Board of Directors adopted the Priority Development Area ("PDA") Planning Grant Program to emphasize and support growth in housing, employment, and transportation within Santa Clara County's PDAs.
2. **Whereas**, on February 11, 2014, VTA issued a call for PDA Planning Grant Program proposals, and CITY submitted a proposal (incorporated by reference herein and attached hereto as Exhibit A) to develop the Transportation Improvement Plan (hereinafter referred to as the "PROJECT"), which will:
  - (i) Develop a transportation improvement plan that articulates the vision for the transportation system within the Campbell PDA;
  - (ii) Identify transportation and streetscape deficiencies;
  - (iii) Recommend project concepts; and
  - (iv) Provide project cost estimates.
3. **Whereas**, on August 7, 2014, the VTA Board of Directors approved the programming of One Hundred Thousand Dollars (\$100,000.00) ("Maximum Grant Amount") to fund the PROJECT.
4. **Whereas**, VTA and the CITY desire to specify herein the terms and conditions under which the PROJECT is to be conducted and financed.

**NOW, THEREFORE** in consideration of the mutual promises contained in this Funding Agreement, the Parties agree as follows:

- I. **Scope.** VTA hereby agrees to contribute up to the Maximum Grant Amount towards the payment of the consulting fee in connection with the PROJECT in return for CITY'S agreement to implement PROJECT, as more fully described in Exhibit A.
- II. **Term.** The term of this Agreement shall commence \_\_\_\_\_, 2015 and shall continue until either the PROJECT is completed or terminated, or until the close of business on December 31, 2017.

- III. **VTA Obligations.** VTA's obligations under this Agreement are as follows:
- a. VTA hereby agrees to engage a consultant who shall serve as Project Manager for the PROJECT ("Consultant");
  - b. VTA will prepare the Consultant Scope of Work;
  - c. VTA will prepare the Request for Proposal ("RFP");
  - d. VTA will advertise the RFP;
  - e. VTA will review the proposals;
  - f. VTA will select the Consultant;
  - g. VTA will negotiate the contract; and
  - h. VTA will administer the contract.

- IV. **CITY Obligations.** The CITY's obligations under this Agreement are as follows:
- a. To monitor the progress of the PROJECT and provide quarterly project progress reports to VTA (via electronic document or in-person meeting), which shall include, at a minimum, the following:
    - i. Summary of the Consultant's completed work since the last progress report;
    - ii. Completed milestones;
    - iii. Upcoming milestones;
    - iv. Whether the Consultant is meeting the CITY's expectations; and
    - v. Any issues or obstacles to completion
  - b. To thoroughly review Consultant invoices and verify to VTA that the work as stated on the invoice was satisfactorily performed by the Consultant; and
  - c. To contribute a local match of Thirteen Thousand Dollars (\$13,000.00) towards the total PROJECT cost of One-Hundred Thirteen Thousand Dollars (\$113,000.00).

- V. **Invoicing and Payment.** The Consultant shall invoice VTA directly therefore no reimbursement to the CITY is necessary.

- VI. **Naming of Project Liaison.** Within thirty (30) calendar days from the Effective Date of this Agreement, CITY shall notify VTA of the name of the CITY's PROJECT "Liaison" and of the Liaison's address, telephone number, and email address. The Liaison shall be the liaison to VTA in connection with the implementation of this Agreement and shall be the contact person for information about the PROJECT. CITY shall notify VTA of any change of Liaison or Liaison's contact information no later than thirty (30) calendar days prior to the date of any change.

- VII. **Maintenance of Records.** CITY shall maintain PROJECT financial records, books, documents, papers, accounting records and other evidence pertaining to costs for three (3) years after the PROJECT's completion. CITY shall make such records available to VTA upon request for review and audit purposes. Financial audits will be performed at VTA's discretion. CITY will be contacted in writing in advance of any audit or other PROJECT review.

- VIII. **Credit of Funding Contribution.** CITY shall credit VTA's funding contribution on all signage, electronic, or printed materials related to the PROJECT that are distributed to the public. VTA shall provide a copy of VTA logos to CITY for use in complying with said obligation.
- IX. **Indemnities.**
- a. Neither VTA nor any officer or employee thereof shall be responsible for any damage or liability occurring by reason of anything done or omitted to be done by CITY under or in connection with any work, authority or jurisdiction delegated to VTA or CITY under this Agreement. Both Parties agree that pursuant to Government Code 895.4, CITY shall fully defend, indemnify, and save harmless VTA from all suits or actions of every name, kind and description brought on for or on account of injury (as defined in Government Code Section 810.8) occurring by reason of anything done or omitted to be done by CITY under or in connection with any work, authority or jurisdiction delegated to CITY under this Funding Agreement. This provision shall survive the termination of this Agreement.
  - b. Neither CITY nor any officer or employee thereof shall be responsible for any damage or liability occurring by reason of anything done or omitted to be done by VTA under or in connection with any work, authority or jurisdiction delegated to CITY or VTA under this Agreement. Both Parties agree that pursuant to Government Code 895.4, VTA shall fully defend, indemnify, and save harmless CITY from all suits or actions of every name, kind and description brought on for or on account of injury (as defined in Government Code Section 810.8) occurring by reason of anything done or omitted to be done by VTA under or in connection with any work, authority or jurisdiction delegated to VTA under this Agreement. This provision shall survive the termination of this Agreement.
- X. **Changes to Terms of Agreement.** No amendment, alteration or variation of the terms of this Agreement shall be valid unless made in writing and signed by both of the parties hereto and no oral understanding or agreement not incorporated herein shall be binding on any of the parties hereto.
- XI. **Entire Agreement.** This Funding Agreement contains the entire understanding between the VTA and CITY for the PROJECT. It supersedes any and all other agreements, which may have existed between the Parties.
- XII. **Binding on Successors and Assigns.** This Agreement shall be binding upon each Party, and any successors and/or assigns.
- XIII. **Notices.** Any notice which may be required under this Agreement shall be in writing, shall be effective when received, and shall be given by personal service, by the U.S. Postal Service or by certified mail, to the addresses set forth below, or to such addresses which may be specified in writing to the Parties hereto.

To VTA: Marcella Rensi, Transportation Planning Manager  
Santa Clara Valley Transportation Authority –  
Programming and Grants  
3331 North First Street  
San Jose, CA 95134

To City of Campbell: Aki Snelling, Planning Manager  
Planning Division  
City of Campbell  
70 North First Street  
Campbell, CA 95008

- XIV. **Signature Authority.** Each Party to this Agreement represents and warrants that each person whose signature appears hereon has been duly authorized and has the full authority to execute this Agreement on behalf of the entity that is a party to this Agreement.
- XV. **Strict Performance.** The failure of either Party to insist upon the strict performance of any of the terms, covenant and conditions of this Agreement shall not be deemed a waiver of any right or remedy that either Party may have and shall not be deemed a waiver of a Party's right to require strict performance of all of the terms, covenants, and conditions thereafter.
- XVI. **Dispute Resolution.** If a question arises regarding interpretation of this Agreement or its performance, or the alleged failure of a Party to perform, the Party raising the question or making the allegation shall give written notice thereof to the other Party. The Parties shall promptly meet in an effort to resolve the issues raised. If the Parties fail to resolve the issues raised, alternative forms of dispute resolution, including mediation, may be pursued by mutual agreement. It is the intent of the Parties to the extent possible that litigation be avoided as a method of dispute resolution.
- XVII. **Choice of Law; Venue.** This Agreement shall be construed and its performance enforced under California law. In the event that suit shall be brought by either Party to this Agreement, the Parties agree that venue shall be exclusively vested in the State courts of the County of Santa Clara or, if federal jurisdiction is appropriate, exclusively in the United States District Court for the Northern District of California, in San José, California.
- XVIII. **Counterparts.** This Agreement may be executed in one or more counterparts, all of which taken together shall constitute one and the same instrument.

*Signature of Parties on following page.*

**CITY OF CAMPBELL  
(CITY)**

**SANTA CLARA VALLEY  
TRANSPORTATION AUTHORITY (VTA)**

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Mark Linder, City Manager

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Nuria I. Fernandez, General Manager

Date: \_\_\_\_\_

Date: \_\_\_\_\_

Approved as to Form and Legality:

Approved as to Form:

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Counsel

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Caroline Kim  
Assistant Counsel

## MEMORANDUM

**Date:** August 30, 2016

**To:** Todd Capurso and Matthew Jue, City of Campbell

**From:** Sarah Peters, Mingyang Li, and Jane Bierstedt (Fehr & Peers); Thomas Kronemeyer (Community Design + Architecture)

**Subject:** **Campbell Transportation Improvement Plan: Progress Update**

*SJ16-1649*

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This memorandum summarizes the analysis conducted to date for the Campbell Transportation Improvement Plan (TIP). The TIP is currently under development to identify future pedestrian and bicycle, and streetscape improvements for the portion of downtown Campbell located within the priority development area (PDA) identified in Plan Bay Area, the regional transportation plan prepared by the Metropolitan Transportation Commission (MTC). The study area is shown on **Figure 1**.

To date, Fehr & Peers (F&P) and Community Design + Architecture (CD+A) have engaged in stakeholder outreach, conducted field observations (F&P), and identified pedestrian and bicycle improvements throughout the study area (F&P with support from CD+A). Draft improvements were shared with the City of Campbell Bicycle Pedestrian Advisory Committee (BPAC) in June 2016 and revised per BPAC member input. This memorandum presents the results of stakeholder outreach, field observations, and presents an updated set of pedestrian and bicycle improvements.



 Study Area Boundaries



Figure 1  
Campbell Transportation Improvement Plan Study Area



## STAKEHOLDER OUTREACH

A stakeholder kick-off meeting was held on March 16, 2016, during which input for the Transportation Improvement Plan (TIP) was gathered from City of Campbell staff. Then, on April 20, 2016, three additional stakeholder meetings were held to gather further input for the preparation of the TIP from a wider range of stakeholders. Representatives from the City of Campbell Public Library, the Downtown Campbell Business Association, the Campbell Chamber of Commerce, and the Downtown Campbell Neighborhood Association attended the first two meetings. Representatives from the Campbell Bicycle and Pedestrian Advisory Committee (BPAC) attended the last meeting. The meetings were organized by the City of Campbell Public Works Department and held at City Hall. All three meetings were attended by CD+A. The last meeting was also attended by Fehr & Peers.

During the stakeholder meetings, participants noted key issues in the downtown area, including pedestrian safety, bicycle parking, and other pedestrian/bicyclist related issues. Specific issues by topic area are summarized in **Table 1**.

**TABLE 1: CAMPBELL TRANSPORTATION IMPROVEMENT PLAN  
 STAKEHOLDER INPUT SUMMARY**

Category	Issue
Pedestrian Crossings and Safety	<ul style="list-style-type: none"> <li>• In general, unsignalized pedestrian crossings along Civic Center Drive and Orchard City Drive are dangerous/difficult/awkward for pedestrians.</li> <li>• The unsignalized crossing at South 2nd Street/Orchard City Drive is particularly dangerous for pedestrians (especially around sunset) due to poor visibility and high vehicle speeds.</li> <li>• The Civic Center Drive/Harrison Avenue pedestrian crossing is awkward for pedestrians.</li> <li>• Jaywalking across Orchard City Drive between South Central Avenue and Railway Avenue is a safety concern.</li> <li>• The East Campbell Avenue/Railway Avenue is another intersection of concern:                         <ul style="list-style-type: none"> <li>○ Motorists are impatient with pedestrians.</li> <li>○ The walking/biking route is unclear for westbound pedestrians and bicyclists on the north side of the street.</li> <li>○ The pedestrian crossing demand is high on the west leg of this intersection east of the tracks, where no crosswalk is currently provided. No crosswalk is provided on Civic Center Drive.</li> <li>○ Striping and pavement legends are also confusing to drivers.</li> </ul> </li> <li>• The business at Orchard City Drive/South 3rd Street has a driveway exiting onto the crosswalk.</li> </ul>



**TABLE 1: CAMPBELL TRANSPORTATION IMPROVEMENT PLAN  
 STAKEHOLDER INPUT SUMMARY**

Category	Issue
Pedestrian and Bicycle Connections	<ul style="list-style-type: none"> <li>• Walking routes to be studied include: 1) LRT to Library, 2) LRT to Pruneyard, 3) LRT to Downtown via Railway Avenue.</li> <li>• Sidewalks within the downtown area need to be continuous; the sidewalk gap along Salmar Avenue needs to be eliminated.</li> <li>• There is increasing foot and bicycle travel between the downtown and Pruneyard Shopping Center and multi-family housing located along East Campbell Avenue east of the tracks.</li> <li>• Some stakeholders expressed interest in building "Bicycle Boulevard" in the downtown area to provide direct access and low stress facility for commuter bicyclists, families, and children. Sharrows and other more visible signs could also be added to the "Bicycle Boulevard".</li> <li>• The parking garage on South 1st Street needs to be better connected to the downtown; many people do not realize that parking is available when the garage on Civic Center Drive is full.</li> </ul>
Bicycle Parking	<ul style="list-style-type: none"> <li>• There is not enough bicycle parking, which is evidenced by bikes locked in odd places.</li> <li>• Bike racks need to be located at places where bicycles can be "kept an eye on" from adjacent businesses and restaurants.</li> <li>• Bicycle parking spaces should be dispersed throughout the downtown area.</li> <li>• More bicycle parking is needed for large events.</li> <li>• East Campbell Avenue should be considered to add bike rental facilities, bike station, and more bike parking.</li> <li>• Additional bicycle parking spaces could be located at Ainsley Park and in the alley behind Blue Line Pizza during business hours.</li> <li>• Additional bicycle parking spaces could also be located in parking lanes in the form of bike corrals.</li> </ul>
Vehicle Traffic and Parking	<ul style="list-style-type: none"> <li>• The signage directing drivers to available parking needs to be enhanced to minimize circulation for parking.</li> <li>• The scarcity of parking is impediment for people who want to drive to the downtown and then walk.</li> <li>• East Campbell Avenue turns into a parking lot after 4 PM when many people try to access parking, shops, services, and restaurants.</li> <li>• Some stakeholders expressed interest in closing East Campbell Avenue to traffic on weekends (except for emergency services and loading activities) to alleviate the congestion on weekends. The street closure strategy has been successful in the past, but local businesses may oppose.</li> </ul>

Source: Fehr & Peers 2016.

## FIELD VISITS AND OBSERVATIONS

The project team made site visits to Downtown Campbell in April 2016 to observe transportation facilities and operating conditions. Dedicated bicycle facilities (Class II bike lanes) are provided on East Campbell Avenue east of its intersection with Railway Avenue and Civic Center Drive, as shown on **Figure 6**.

The results of the field observations are summarized below.

### North 3<sup>rd</sup> Street / Civic Center Drive

Ladder crosswalks are provided to cross Civic Center Drive with yield markings and high-visibility pedestrian crossing signs. The northwest and northeast corners have large radii. Flexible bollards on the north leg divert northbound traffic from making left turns onto Civic Center Drive. Curb ramps at this intersection lack detectable warning strips and are not aligned to the crosswalks. High vehicle speeds were observed, and drivers were observed failing to yield to pedestrians who had stepped off the curb.

### North 2<sup>nd</sup> Street / Civic Center Drive

Ladder crosswalks are provided to cross Civic Center Drive with yield markings and high-visibility pedestrian crossing signs. High vehicle speeds were observed and recorded by the responsive speed sign shown in **Figure 2**. "SHARE THE ROAD" high-visibility signs are located on Civic Center Drive for the benefit of cyclists. Curb ramps on the northwest and northeast corners are not aligned to the crosswalks and lack detectable warning strips.. Curb extensions are located on the south-west and south-east corner. Drivers consistently yielded to pedestrians at the Civic Center Drive crossing.



**Figure 2: Signage at North 2<sup>nd</sup> Street/Civic Center Drive.**



### **North 1<sup>st</sup> Street / Civic Center Drive**

A curb extension is located at the southwest corner of this signalized intersection. Curb ramps at the northeast, northwest, and southeast corners are not aligned to the crosswalks and lack detectable warning strips.

### **North Central Avenue/ Civic Center Drive**

This is the northern end of an important pedestrian connection between the Civic Center area and the light rail station (per the Civic Center Master Plan). The current streetscape design does not fully reflect the importance of this connection. The curb ramps at this location lack detectable warning strips. A reconfiguration of the existing on-street parking near this intersection provides the opportunity to add a curb extension on the north side of Civic Center Drive, which would reduce pedestrian crossing distances and provide additional space for streetscape design elements.

### **South 3<sup>rd</sup> Street / Orchard City Drive**

Large landscaped pedestrian refuge/traffic diverters are located at this multi-leg intersection. Standard (2-stripe) crosswalks are provided on the west leg across Orchard City Drive. The driveway at Gridley Company exits onto the crosswalk on 3<sup>rd</sup> Street. High vehicle speeds were observed on Orchard City Drive.

### **Orchard City Drive between 3<sup>rd</sup> Street and 2<sup>nd</sup> Street**

There is a gap in the sidewalk on the north side of Orchard City Drive. High vehicle speeds were observed on Orchard City Drive; wide travel lanes may be contributory factors.

### South 2<sup>nd</sup> Street / Orchard City Drive

Ladder crosswalks are provided to cross Orchard City Drive with yield markings and high-visibility pedestrian crossing signs, as shown in **Figure 3**. The southwest and southeast corners have large radii. Curb ramps at this intersection are not fully ADA-compliant. High vehicle speeds, and drivers were observed failing to yield to pedestrians who had stepped off the curb. Pedestrian visibility is poor at the northwest corner of this intersection.



**Figure 3: Orchard City Drive at 2nd Street.**

### South 1st Street / Orchard City Drive

Standard (2-stripe) crosswalks with pedestrian push buttons are provided on all four legs of this signalized intersection. Curb ramps at this intersection are not fully ADA-compliant.



### South Central Avenue / Orchard City Drive

As shown in **Figure 4**, ladder crosswalks are provided to cross Orchard City Drive to the west of this intersection with yield markings and high-visibility pedestrian crossing signs. A small hashed-out space is located on the southwest corner. Curb ramps are not fully ADA-compliant. The intersection and crosswalks can be blocked by vehicles queuing and waiting to cross the railway tracks. This is the southern end of

**Figure 4: Pedestrian crossing of Orchard Drive at South Central Avenue**

an important pedestrian connection between the light rail station, E. Campbell Avenue, and the Civic Center area. The alignment, visibility, and design of the pedestrian environment and its relationship to areas used by automobiles and buses make it difficult for pedestrians to identify a direct and safe path of travel between this intersection and the adjacent light rail station.

### Harrison Avenue / Salmar Avenue

Crosswalks are not marked at this intersection and curb ramps are missing on the southeast corner. A raised island is provided to guide the flow of traffic at this intersection.

### Salmar Avenue between Harrison Avenue and Hamilton Avenue

There is a gap in the sidewalk on the west side of Salmar Avenue. Complete sidewalks are provided to the north of 509 Salmar Avenue and to the south of 485 Salmar Avenue. Landscaping is provided along Salmar Avenue. High vehicle speeds and poor sight conditions were observed along the large curve near Harrison Street.

### Civic Center Drive between 1<sup>st</sup> Street and Central Avenue

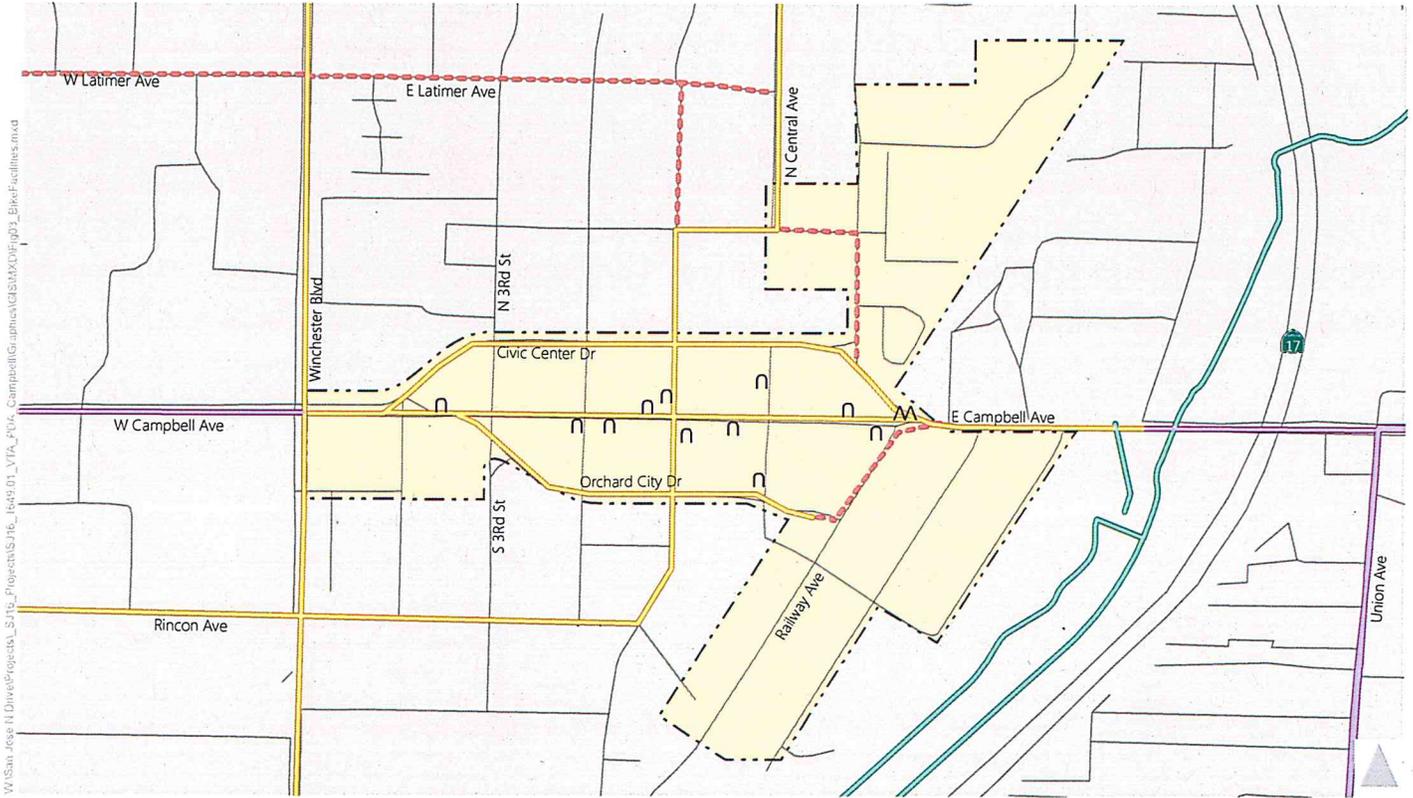
A meandering sidewalk is provided on the north side of Civic Center Drive.

### Railway Avenue / East Campbell Avenue / Civic Center Drive

Railroad tracks cross this intersection diagonally, crossing both the Civic Center Drive leg and the western East Campbell Avenue leg. Railroad crossing pavement legends are provided on the west leg. A driveway from the light rail station parking lot exits onto East Campbell Avenue between the railroad tracks and Railway Avenue. A "No Pedestrian Crossing" sign is located just to the east of the railroad tracks on East Campbell Avenue. Curb extensions and a ladder-striped crosswalk are provided on the east leg. As shown in **Figure 5**, a ladder-striped crosswalk is also provided on the south leg, where long pedestrian wait times were observed. Marked pedestrian crosswalks are missing on the north and west legs of the intersection. As shown in **Figure 6**, there is a gap in the bicycle lanes on East Campbell Avenue; bicyclists must mix with two lanes of traffic when approaching the intersection from the east, one lane from the west.



**Figure 5: Pedestrian Crossing of the south leg of the Railway/East Campbell intersection**



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Data Source: City of Campbell, Santa Clara County

- Bicycle Facilities**
- Class I - Multi-Use Path
  - Class II - Bike Lane
  - Class III - Bike Route
  - Proposed Bicycle Facility
  - U U-shape Bike Rack
  - M M-shape Bike Rack
  - Project Site



Figure 6  
Bicycle Facilities



## COLLISION ANALYSIS

Collision reports for 2012 through 2015 were obtained from the City of Campbell. The results are summarized on **Figure 7**. There were a total of 34 collisions. Approximately two thirds of the collisions were vehicle-vehicle or vehicle-object and one third were pedestrian-vehicle or bicyclist-vehicle. All of the collisions took place on dry road surfaces in clear or cloudy weather. Of the accidents involving pedestrians or bicyclists, 42 percent occurred in dark or dusk lighting.

Between 2012 and 2015, seven collisions involved pedestrians and five involved bicyclists. All but two of the pedestrian-vehicle and bicyclist-vehicle collisions were the fault of the driver. Five of the seven pedestrian-vehicle accidents occurred because the vehicle driver failed to yield the pedestrian right-of-way while pedestrians were in the crosswalk, one of the pedestrian-vehicle accidents occurred because the vehicle driver was driving under the influence and backed into a pedestrian, and one of the pedestrian-vehicle accidents occurred because the pedestrian did not use the crosswalk.

Of the five accidents involving bicycles, four were bicycle-vehicle accidents. Three of these accidents were the fault of the driver, two of which listed improper turning and unsafe speed as causes. The bicycle-bicycle accident was a rear end collision caused by alcohol consumption.

For vehicle-vehicle and vehicle-object collisions, approximately one-third were the result of right of way violations, one-fourth involved someone driving under the influence of alcohol and/or drugs (DUI), and one-third were caused by either unsafe speeds, unsafe lane changes, or improper turning.

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Sources: City of Campbell, Crossroads Software, Inc.

- Collision Type**
- Pedestrian involved
  - Bicyclist involved
  - Vehicle only
- ▭ Study Area



Figure 7  
Collisions, 2012-2015



## TRANSIT SERVICE

The Santa Clara Valley Transportation Authority (VTA) operates light rail transit and bus service in Santa Clara County. VTA local bus 60 runs along Winchester Boulevard with two stops within the study area, on Winchester at Campbell Avenue. Weekday frequencies (headways) are 15 minutes during morning peak hours, 17 minutes during evening peak hours, and approximately every 30 minutes during off-peak hours. There are six additional bus Route 60 stops near the downtown area.

VTA local bus 26 operates along Campbell Avenue, Civic Center Drive and Orchard City Drive with 6 stops within the study area. Eastbound and westbound stops are located at the following intersections:

- Campbell Avenue at Winchester Boulevard
- Orchard City Drive at Central Avenue
- Campbell Avenue at Gilman Avenue

Weekday frequencies (headways) are approximately every 18 minutes during peak AM and PM commute hours and approximately every 30 minutes during off-peak hours. There are two additional Route 26 stops near the downtown area.

Bus routes and stops are shown in **Figure 8**.



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Transit Data Source: VTA

- Transit Service**
- Local Bus Route
  - Light Rail: Mountain View-Winchester
  - Local Bus Stop
  - Downtown Campbell Light Rail Station
  - Project Site



Figure 8  
Transit Service

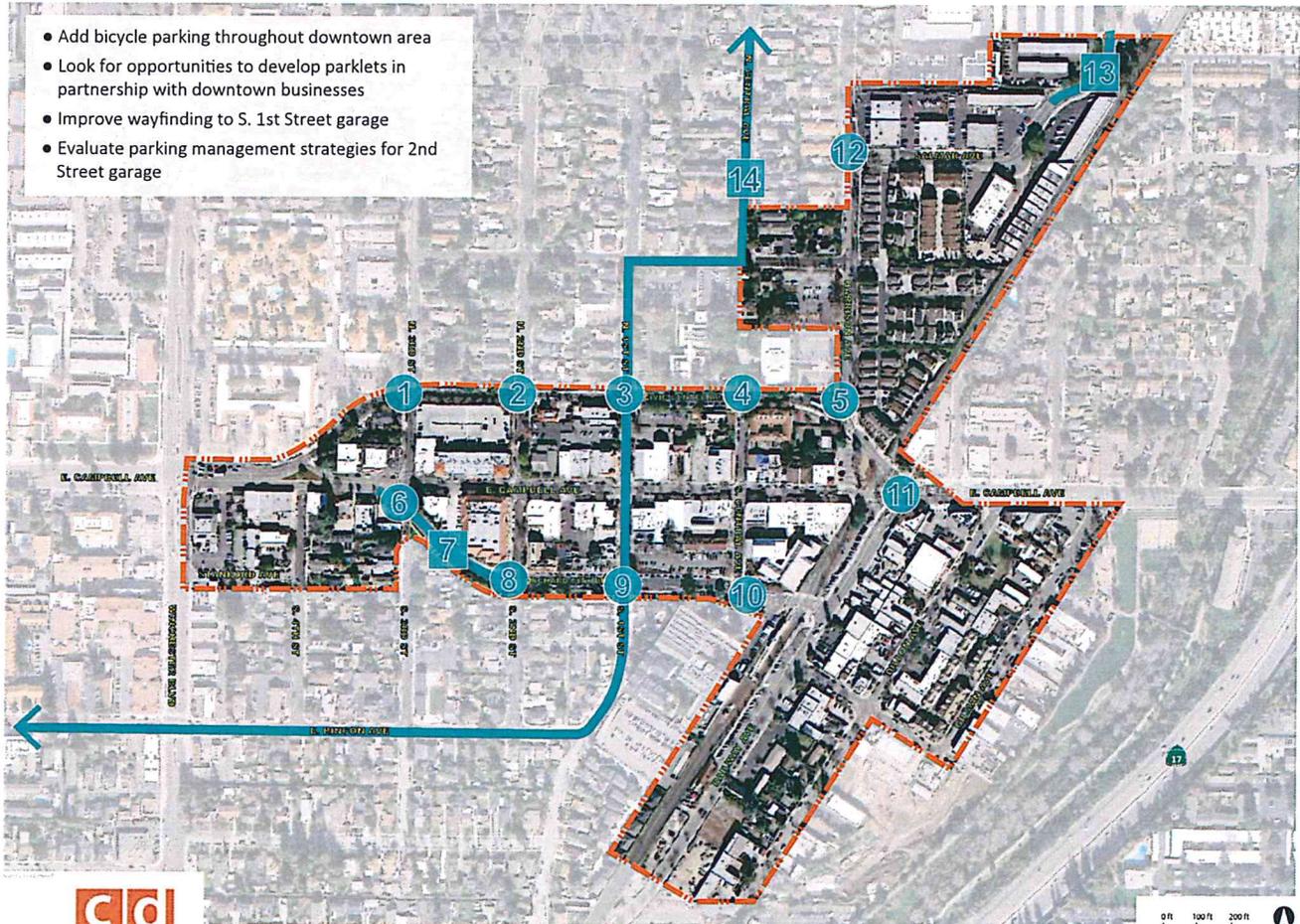


## RECOMMENDED IMPROVEMENTS

Recommended improvements in the study area were developed based on field observations, stakeholder outreach, and best practices used in the design of complete streets, and were presented to members of the City of Santa Clara BPAC in June 2016. A summary map of the recommended improvements is shown on **Figure 9**. The recommended improvements are summarized in **Table 2**, which also notes which improvements may be implemented on a short-term basis using low-cost “tactical” methods. Figures showing conceptual improvements have also been developed for the following intersections: Central Avenue and Civic Center Drive (**Figure 10**), Orchard City Drive and Third Street (**Figure 11**), Orchard City Drive and Central Avenue (**Figure 12**), the intersection of Campbell Avenue, Railway Avenue, and Civic Center Drive (**Figure 13**), and the intersection of Harrison Avenue and Civic Center Drive (**Figure 14**).

Recommended improvements at uncontrolled pedestrian crossings were developed using Xwalk+, a spreadsheet tool that can be used to identify appropriate crossing treatments at mid-block and signalized locations using data points including number of travel lanes, posted speed, and average daily traffic. The tool is based on research from the National Cooperative Highway Research Program, Federal Highway Administration and interviews with various cities throughout the country and provides guidance about the type of treatments appropriate on various streets and under various conditions.

- Add bicycle parking throughout downtown area
- Look for opportunities to develop parklets in partnership with downtown businesses
- Improve wayfinding to S. 1st Street garage
- Evaluate parking management strategies for 2nd Street garage



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Figure 9  
Map of Potential Improvement Locations



**TABLE 2: CAMPBELL TRANSPORTATION IMPROVEMENT PLAN  
 DRAFT LIST OF PROPOSED IMPROVEMENTS**

#	Location	Recommended Improvements	Tactical Treatment?
1	N. 3 <sup>rd</sup> Street / Civic Center Drive	<ul style="list-style-type: none"> <li>Reconstruct NW curb with curb extension and ADA-compliant curb ramps (directional ramps with detectable warning strips)</li> <li>Reconstruct NE, SW, SE curbs with ADA-compliant curb ramps (directional ramps with detectable warning strips)</li> <li>Stripe ladder crosswalks on 3<sup>rd</sup> St (N and S) legs</li> <li>Consider reconstructing existing traffic diverter at north leg, if reconstruction would still permit adequate access for vehicles entering and exiting driveway at NE corner (70 N. 3<sup>rd</sup> St)</li> <li>Suitable for Rectangular Rapid-Flash Beacon (RRFB) or Pedestrian Hybrid Beacon (PHB) installation per XWalk+ and existing volume data; noted in the April 21, 2015 City Council Report, Item 13: Downtown Pedestrian Safety</li> </ul>	Striping, painted curb extensions (potentially with movable planters)
2	N. 2 <sup>nd</sup> St / Civic Center Drive	<ul style="list-style-type: none"> <li>Reconstruct NE and NW curbs with ADA-compliant curb ramps (directional ramps with detectable warning strips)</li> <li>Consider curb extensions at NW and NE corners to shorten pedestrian crossing distance and reduce turning vehicle speeds</li> <li>Stripe ladder crosswalks on 2<sup>nd</sup> St (N and S) legs</li> <li>Suitable for RRFB or PHB installation per XWalk+ and existing volume data; noted in the April 21, 2015 City Council Report, Item 13: Downtown Pedestrian Safety</li> </ul>	Striping, painted curb extensions (potentially with movable planters)
3	N. 1 <sup>st</sup> St / Civic Center Drive	<ul style="list-style-type: none"> <li>Reconstruct NE, NW, and SE corners with ADA-compliant curb ramps (directional ramps with detectable warning strips)</li> <li>Consider curb extensions at NE, NW, and SE corners to shorten pedestrian crossing distance and reduce turning vehicle speeds</li> <li>Stripe ladder crosswalks on all legs to enhance pedestrian visibility and create continuous treatment along corridor</li> </ul>	Striping, painted curb extensions (potentially with movable planters)



**TABLE 2: CAMPBELL TRANSPORTATION IMPROVEMENT PLAN  
 DRAFT LIST OF PROPOSED IMPROVEMENTS**

#	Location	Recommended Improvements	Tactical Treatment?
4	Central Ave/ Civic Center Drive	<ul style="list-style-type: none"> <li>• Stripe ladder crosswalks on all legs to enhance pedestrian visibility and create continuous treatment along corridor</li> <li>• Reconstruct all corners with ADA-compliant curb ramps (directional ramps with detectable warning strips)</li> <li>• Consider curb extension along north side of T-intersection (requires relocation of parking from south east side of intersection to north side and restriping of lanes) to strengthen pedestrian link along Central Avenue between Civic Center and rail stop</li> <li>• Consider long-term project: regrading of Central Avenue to reduce driveway ramp angles</li> </ul>	Striping, painted curb extensions (potentially with movable planters)
5	Harrison Ave/ Civic Center Drive	<ul style="list-style-type: none"> <li>• Eliminate unsignalized leg of the pedestrian crossing across westbound Harrison</li> <li>• Replace existing two-stage crossing with consolidated crossing across Harrison and Civic Center Drive, provide expanded landscaping adjacent to housing and along parking lot frontage.</li> </ul>	N/A
6	S. 3 <sup>rd</sup> Street / Orchard City Drive	<ul style="list-style-type: none"> <li>• Add curb extension and parklet on existing southbound lane; maintain in/out access for existing business. Final design will be adjusted to incorporate vehicle turning templates to ensure access.</li> <li>• Add high-visibility crossing with signage on south leg</li> <li>• Reconstruct southbound lane in space currently occupied by pedestrian refuge</li> </ul>	N/A
7	Orchard City Drive between 3 <sup>rd</sup> Street and 2 <sup>nd</sup> Street	<ul style="list-style-type: none"> <li>• Traffic calming: curb extensions at 3rd Street to reduce turning vehicle speeds, narrow lanes</li> <li>• Add sidewalk on north side of street using existing ROW and extend line of pedestrian-scale lights along new sidewalk</li> <li>• Where sidewalk exists at NW corner of S. 2<sup>nd</sup> and Orchard City Drive, option to add planter strip, seating area, or parklet in unused ROW;</li> </ul>	Painted curb extensions with movable planters and trees



**TABLE 2: CAMPBELL TRANSPORTATION IMPROVEMENT PLAN  
 DRAFT LIST OF PROPOSED IMPROVEMENTS**

#	Location	Recommended Improvements	Tactical Treatment?
8	S. 2 <sup>nd</sup> Street / Orchard City Drive	<ul style="list-style-type: none"> <li>Reconstruct curbs with ADA-compliant curb ramps (directional ramps with detectable warning strips)</li> <li>Add curb extensions on all corners to reduce pedestrian crossing distance and turning vehicle speeds</li> <li>Add pedestrian-scale lighting to illuminate crossing (see <a href="http://www.pedbikeinfo.org/planning/facilities_streetscape_lighting.cfm">http://www.pedbikeinfo.org/planning/facilities_streetscape_lighting.cfm</a>)</li> <li>Suitable for RRFB or PHB installation per XWalk+ and existing volume data; noted in the April 21, 2015 City Council Report, Item 13: Downtown Pedestrian Safety</li> </ul>	Painted curb extensions (potentially with movable planters)
9	S. 1 <sup>st</sup> Street / Orchard City Drive	<ul style="list-style-type: none"> <li>Reconstruct corners with ADA-compliant curb ramps (directional ramps with detectable warning strips)</li> <li>Consider curb extensions at all corners to shorten pedestrian crossing distance and reduce turning vehicle speeds</li> <li>Stripe ladder crosswalks on all legs to enhance pedestrian visibility and create continuous treatment along corridor</li> <li>Add landscaping and pedestrian-scale lighting to 1<sup>st</sup> Street between Orchard City Drive and parking garage</li> </ul>	Striping, painted curb extensions (potentially with movable planters)



**TABLE 2: CAMPBELL TRANSPORTATION IMPROVEMENT PLAN  
 DRAFT LIST OF PROPOSED IMPROVEMENTS**

#	Location	Recommended Improvements	Tactical Treatment?
10	S. Central Avenue / Orchard City Drive	<ul style="list-style-type: none"> <li>• Reconstruct curbs with ADA-complaint curb ramps (directional ramps with detectable warning strips)</li> <li>• Align curb ramps to crosswalk</li> <li>• Consider widening sidewalk, reconstructing bus duck-out and Water Tower Plaza driveway on south side of street between S. Central Ave and rail tracks. Coordinate with VTA to determine feasibility.</li> <li>• Consider adding curb extension, landscaping to south side of street between Water Tower Plaza driveway and rail tracks.</li> <li>• Add curb extension, landscaping (i.e. street trees), potentially seating to SW corner to shorten crossing distance and expand pedestrian waiting area. Extension would replace existing hatched areas on pavement.</li> <li>• Add signalized crosswalk west of railway tracks across Orchard City Drive</li> <li>• Create clear pedestrian path across driveway on south side: complete sidewalk or add special paving treatment to emphasize potential presence of pedestrians</li> <li>• Consider crosswalk improvements across rail tracks using colored pavement and/or striping, as well as pedestrian gates (pedestrian gates planned by VTA)</li> </ul>	N/A



**TABLE 2: CAMPBELL TRANSPORTATION IMPROVEMENT PLAN  
 DRAFT LIST OF PROPOSED IMPROVEMENTS**

#	Location	Recommended Improvements	Tactical Treatment?
11	Railway Avenue/ E. Campbell Avenue/ Civic Center Drive	<ul style="list-style-type: none"> <li>• Stripe crosswalks on N and W legs of intersection south and east of rail tracks (per East Campbell Avenue Master Plan)</li> <li>• Consider adding two-tone crosswalk paving at all legs of intersection to create sense of place/gateway for downtown</li> <li>• Modify signal timing to provide pedestrian crossing on N and W legs of intersection (Civic Center Drive and E. Campbell Ave)</li> <li>• Add sidewalks (consistent with E. Campbell paving scheme) on NW corner between Civic Center Drive and E. Campbell Ave</li> <li>• Add pedestrian gates at new sidewalk crossings of rail tracks on north side of E. Campbell Ave</li> <li>• Create pedestrian waiting area on NW corner; relocate and redesign decorative landscaping at Downtown gateway sign and relocate sign (elevate/move back) if needed</li> <li>• Continue E. Campbell bike facility as lanes or sharrows. Added bicycle lanes may require removal of on-street parking and bulb-outs east of intersection. Bike facility design must accommodate turning radius of VTA buses.                             <ul style="list-style-type: none"> <li>○ If space permits, stripe sharrows through intersection and onto E. Campbell Ave W of intersection</li> </ul> </li> <li>• Consider adding green bike box on westbound approach to signal (across both lanes). (This treatment requires formal experimentation process.)</li> </ul>	N/A
12	Harrison Avenue / Salmar Avenue	<ul style="list-style-type: none"> <li>• Add marked crossing at Harrison/Salmar – use crossing at Harrison/Civic Center for reference</li> <li>• Add curb ramp to the southeast corner</li> <li>• Consider modest expansion of raised island and incorporation of streetscape elements to emphasize entry into Downtown area</li> </ul>	Striping



**TABLE 2: CAMPBELL TRANSPORTATION IMPROVEMENT PLAN  
 DRAFT LIST OF PROPOSED IMPROVEMENTS**

#	Location	Recommended Improvements	Tactical Treatment?
13	Salmar Avenue between Harrison and Hamilton	<ul style="list-style-type: none"> <li>Narrow travel lanes south of Home Depot/Fry's entrances               <ul style="list-style-type: none"> <li>Striped center median; consider raised center median in locations that would not interfere with driveway access</li> </ul> </li> <li>Add sidewalks along the northwest side of street as properties redevelop – use sidewalks and landscaping at 485 Salmar for reference</li> </ul>	N/A
14	General – Limited bicycle parking downtown	<ul style="list-style-type: none"> <li>Add bicycle racks throughout downtown, located outside destinations               <ul style="list-style-type: none"> <li>Add bicycle racks to lawn area of Ainsley Park (corner of E. Campbell/Railway) or add bike corral in one parallel parking space</li> <li>Locate on curb bulbs; consider relocating benches if needed</li> </ul> </li> <li>Identify opportunities to convert 1-3 existing parking spaces to bicycle parking near intersections (bike corrals)</li> <li>Evaluate the possibility of local bicycle sharing program in downtown</li> </ul>	Add bicycle racks at existing curb extensions and at Ainslie Park
15	General – Lack of dedicated bicycle facilities	<ul style="list-style-type: none"> <li>Consider bike boulevard on East Rincon Avenue through downtown</li> <li>Improve existing north/south bicycle route on Central Avenue and 1<sup>st</sup> Street with green-back sharrows and more visible wayfinding signage</li> <li>Continue E. Campbell bicycle lanes as green-back sharrows through downtown center</li> </ul>	Striping and sharrows
16	General – Underutilized parking garages & parking on residential streets	<ul style="list-style-type: none"> <li>Improve wayfinding to S. 1<sup>st</sup> Street garage through signage, urban design features</li> <li>Manage parking demand and information:               <ul style="list-style-type: none"> <li>Introduce time limits (2-3 hours) on lower levels of 2nd/ Civic Center garage</li> <li>Add electronic signage with real-time parking occupancy data at entrances to downtown (e.g. Winchester/Campbell and Railway/Civic Center/E. Campbell)</li> </ul> </li> </ul>	N/A

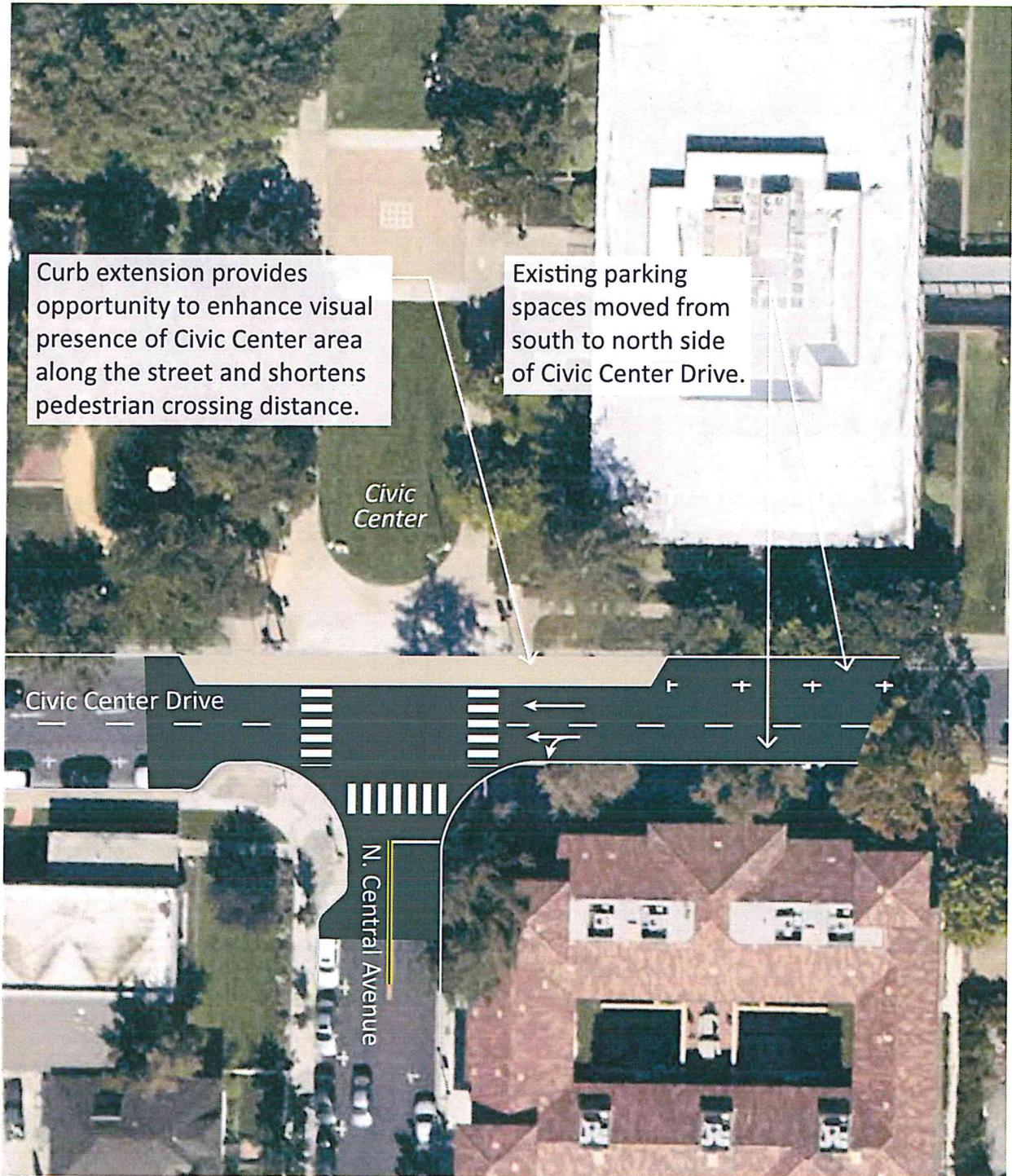


**TABLE 2: CAMPBELL TRANSPORTATION IMPROVEMENT PLAN  
 DRAFT LIST OF PROPOSED IMPROVEMENTS**

#	Location	Recommended Improvements	Tactical Treatment?
17	General – Crowded Sidewalks	<ul style="list-style-type: none"> <li>• Look for opportunities to widen sidewalks</li> <li>• Create pilot parklet program, similar to San Jose and San Francisco programs                             <ul style="list-style-type: none"> <li>○ Local businesses and residents can sponsor conversion of on-street parking spaces into public parklets</li> <li>○ Agreement with City to maintain parklets and provide them to all members of the public</li> </ul> </li> </ul>	N/A
18	General – Congestion along E. Campbell Avenue	<ul style="list-style-type: none"> <li>• Consider increased weekend closures for E. Campbell Avenue – pedestrian/ bicycle/emergency vehicle traffic only</li> </ul>	N/A

Source: Fehr and Peers and CD+A, 2016.

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North Central Avenue and Civic Center Drive Proposed Improvements

Figure 10



Figure 11  
Orchard City Drive and South 3rd Street Proposed Improvements

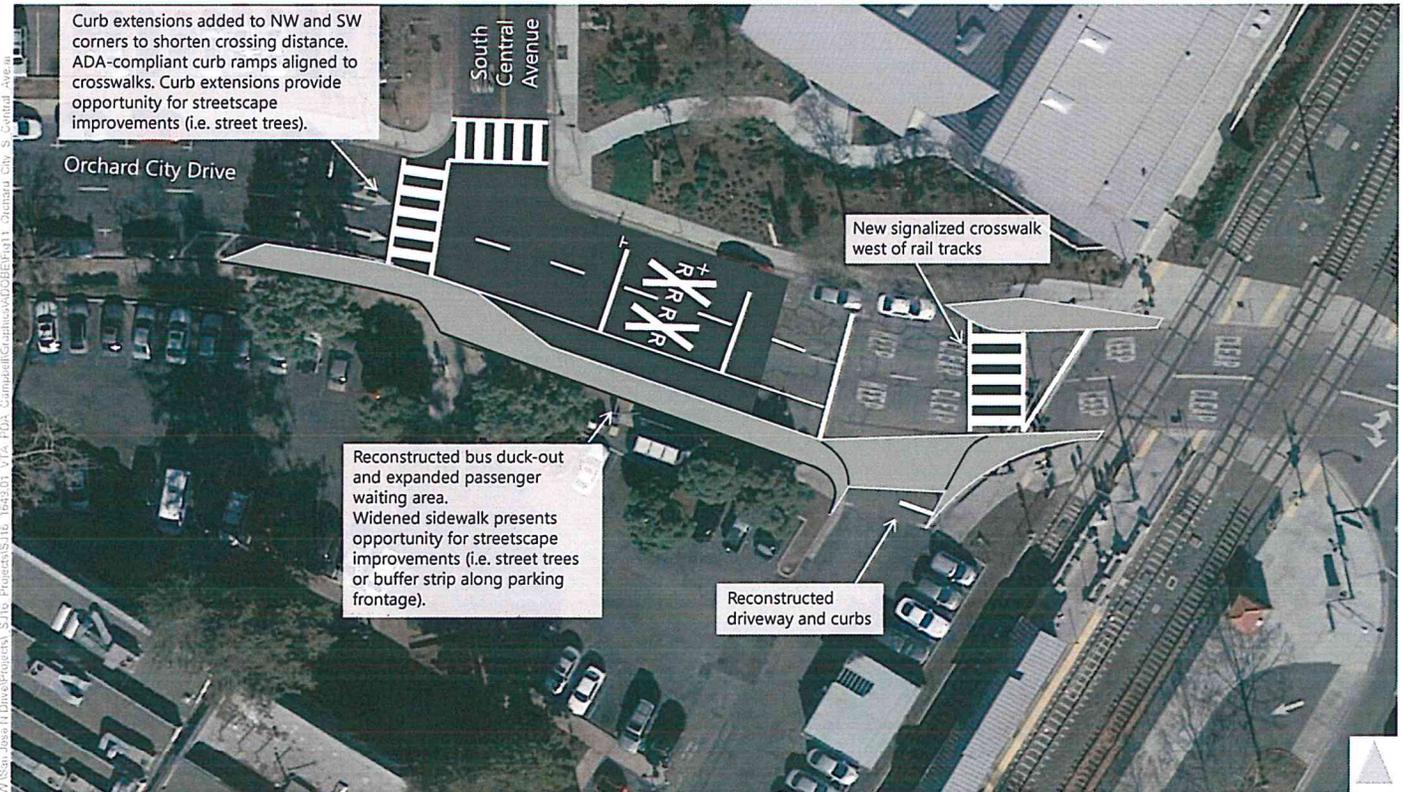
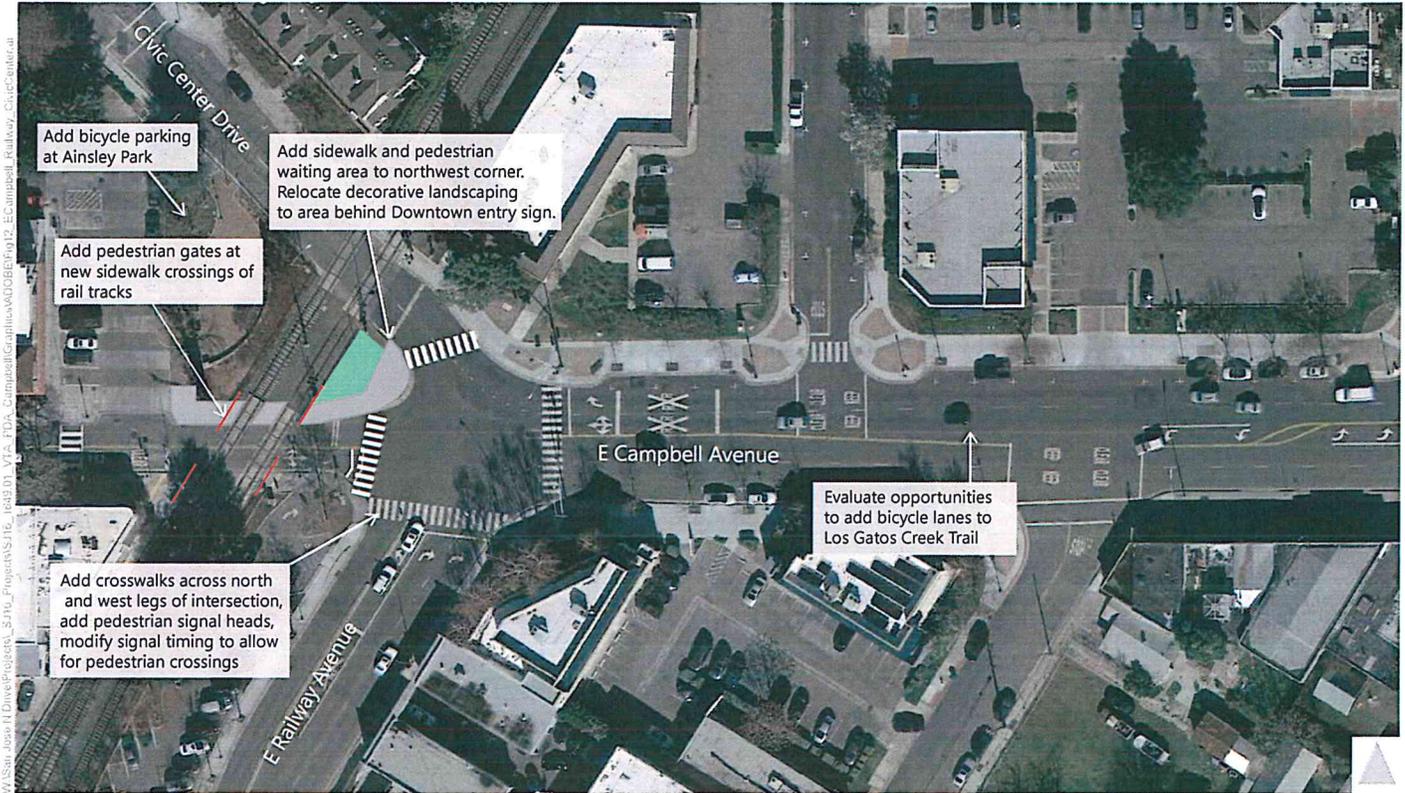


Figure 12  
Orchard City Drive/South Central Avenue Proposed Improvements



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Figure 13

Campbell Avenue/Railway Avenue/Civic Center Drive Proposed Improvements



Figure 14  
Harrison Avenue/Civic Center Drive Proposed Improvements



# City Council Report

Item: 13.  
Category: New Business  
Meeting Date: April 21, 2015

**TITLE: Downtown Pedestrian Safety**

## **RECOMMENDATION**

That the City Council receive staff's report regarding downtown pedestrian safety and provide direction on how staff should proceed.

## **BACKGROUND**

In May 2012, Downtown residents submitted to staff a petition requesting pedestrian safety measures along Civic Center Drive and Orchard City Drive, respectively. The intersections of Civic Center Drive at Second and Third Streets and Orchard City Drive at Second Street were mentioned. Some residents expressed a desire for traffic control devices like the flashing beacon system installed next to Stojanovich Family Park on Union Avenue. The petition also mentioned wrong-way drivers, frustration that motorists fail to yield the right-of-way to pedestrians at crosswalks, and that on Sundays during Farmers Market hours the Downtown is especially crowded with pedestrians who may be unfamiliar with the Downtown one-way streets.

In response to the petition, staff looked at the collision history at these locations. Between 2000 and 2011, there were no pedestrian or bicycle crashes on Orchard City Drive and one pedestrian-involved crash and one bicycle crash each on Civic Center Drive. Staff investigated each intersection on Orchard City Drive and Civic Center Drive to determine their conformance with the *California Manual on Uniform Traffic Control Devices* (CA MUTCD) in regards to turn restriction and "One Way" signs. Staff installed additional "One Way" signs in June 2012. The crosswalks were otherwise already well-marked with high-visibility ladder-type crosswalks, fluorescent pedestrian warning signs, and pavement arrows that mark the one-way streets.

On July 17, 2012, the City Council adopted Resolution No. 11439 authorizing staff to submit a federal Highway Safety Improvement Program (HSIP) grant application to install flashing beacon systems at various locations in the downtown. In October 2012 staff learned that Caltrans did not award an HSIP grant to the city for this project.

On January 15, 2013, the City Council adopted Resolution No. 11500 authorizing staff to submit a One Bay Area Grant Program (OBAG) grant application for the Loop Street Pedestrian Enhancements Project (later renamed the Downtown Bicycle and Pedestrian Enhancements Project). This project would have installed warning beacons at Civic Center Drive/Second Street, Civic Center Drive/Third Street, and Orchard City

Drive/Second Street. In May 2013 staff learned that this project did not receive an OBAG grant.

In April 2014 staff submitted a Priority Development Area (PDA) Planning Grant application for the Transportation Improvement Plan for Campbell PDA Project. This project would involve developing a transportation improvement plan that forms the basis for the City to compete for future funding of infrastructure projects that support housing, employment, and services in Campbell's PDA, the Central Redevelopment Area that includes the Historic Downtown. The installation of flashing beacon systems in the Downtown would be included in this plan. VTA staff would manage this project and City staff would support VTA's consultant team. In August 2014 a PDA Planning Grant was awarded for this planning project. This project is a proposed work plan item for Fiscal Year 2015/16.

In January 2015, Campbell Police met with the Downtown Campbell Neighborhood Association. Staff heard requests for more pavement markings and pedestrian warning signs at Civic Center Drive/Second Street and Orchard City Drive/Second Street. However, staff found these intersections to be well-marked with high-visibility crosswalks, pavement markings, and warning signs. Staff installed an additional fluorescent pedestrian warning sign on the northeast corner of Civic Center Drive/Second Street.

## **DISCUSSION**

On March 3, 2015, Mr. Justin Early appeared before the City Council during oral requests and submitted a petition with over 190 signatures and a letter requesting pedestrian safety improvements in the Downtown. Originally, the petition mentioned Civic Center Drive/Second Street and Orchard City Drive/Second Street, but the list of crossings grew as petition signers added other locations. Staff added Orchard City Drive/Central Avenue to the list due to its proximity to the Downtown Campbell light rail station and high pedestrian volume. The list of pedestrian crossings includes:

- Civic Center Drive/Second Street
- Civic Center Drive/Third Street
- Orchard City Drive/Second Street
- Orchard City Drive/Central Avenue
- West Campbell Avenue/Milton Avenue
- Harrison Avenue/Grant Street
- East Rincon Avenue/First Street
- Alley behind Blue Line Pizza (next to Ainsley Park)

Though petitioners included the alley behind Blue Line Pizza, staff elected not to investigate this location until staff completes its study on alleyway ownership and maintenance.

## **Field Observations**

The West Campbell Avenue/Milton Avenue intersection has a ladder-type crosswalk marked across the east leg of West Campbell Avenue and fluorescent pedestrian warning signs. The crosswalk is used by Campbell Middle School students. Two adult school crossing guards monitor the crosswalk during school admission and dismissal hours. The adult crossing guards tend to wait until there are gaps in traffic before allowing students to enter the crosswalk.

Pedestrian counts were collected during the Sunday (Farmers Market) midday peak hour for all intersections except Orchard City Drive/Central Avenue and the West Campbell Avenue/Milton Avenue intersection which was counted on a weekday during Campbell Middle School admission and after dismissal hours. In addition, on March 29, 2015, staff observed motorist and pedestrian behavior during the Sunday (Farmers Market) midday peak hour. Staff observed the following behaviors:

- Many motorists yield to pedestrians
- Some motorists fail to yield
  - When travel lanes are congested
  - Impatient in traffic congestion
- Most pedestrians exercise caution before crossing
- Some pedestrians
  - Are inattentive to motorists
  - Are unclear on whether they want to cross
  - Jaywalk

Based on these observations, both motorists and pedestrians bear some responsibility in obeying traffic laws.

## **Crosswalk Analysis**

To evaluate these crosswalks, staff referred to the Federal Highway Administration (FHWA) publication entitled *Safety Effects of Marked vs. Unmarked Crosswalks at Uncontrolled Locations*. The methodology in this publication provides an objective means of evaluating uncontrolled crosswalks based on the posted speed limit, number of roadway lanes, median type, and average daily traffic. Potential treatments include 1) no crosswalks, 2) marked crosswalks, 3) supplemental treatments in addition to marked crosswalks, or 4) substantial improvements (e.g., traffic signals). The methodology recommends that a minimum of 20 pedestrian crossings per peak hour (or 15 or more elderly or child pedestrian crossings) exist before placing a high priority on the installation of a marked crosswalk alone. This threshold helps to avoid the overuse of marked crosswalks.

Table 1 presents the analysis results. Table 1 shows the City already meets or exceeds the recommendations of the FHWA guidelines. Any additional improvements would further exceed the FHWA recommendations.

Location	FHWA Recommendation	Met or Exceeded?
Civic Center/Second	Marked crosswalks	Exceeded
Civic Center/Third	Marked crosswalks	Exceeded
Orchard City/Second	Marked crosswalks	Exceeded
Orchard City/Central	Marked crosswalks	Exceeded
Campbell/Milton	Marked crosswalk	Exceeded
Harrison/Grant	No crosswalks	Met
Rincon/First	No crosswalks	Met

Recommendations based on methodology found in *Safety Effects of Marked vs. Unmarked Crosswalks at Uncontrolled Locations* by Zegeer et al.

Table 2 summarizes the crash history at the study locations. In ten years (2005 through 2014), there have been three reported crashes involving pedestrians. None of the three crashes involved main-street traffic that collided with a pedestrian.

Location	Total No. of Crashes	No. of Pedestrian-Related Crashes	No. of Peak Hour Pedestrian Crossings	Remarks
Civic Center/Second	25	1	167*	Motorist failed to yield to pedestrian, hit vehicle instead
Civic Center/Third	11	1	227*	Left-turn from side-street hit pedestrian's dog
Orchard City/Second	10	0	120*	
Orchard City/Central	4	1	45**	DUI motorist backed onto sidewalk, knocked over sign which hit pedestrians
Campbell/Milton	8	0	90**	
Harrison/Grant	4	0	5*	
Rincon/First	0	0	7*	

\*Farmers Market Sunday  
\*\*Regular Weekday

Focusing on the intersections where crosswalks are recommended (and already exist), Table 3 summarizes the design challenges of each intersection. The challenge with Civic Center/Second, Civic Center/Third, and Orchard City/Second is where to place beacons (i.e., near-side crosswalk, far-side crosswalk, or both). Preliminary feedback

from one manufacturer is that one beacon would be on the near-side right-hand corner, and a second beacon would be on the far-side left-hand corner.

Orchard City/Second has the added challenge of a horizontal curve that is immediately upstream from the intersection. Pedestrians may be outside a motorist's view especially when they are entering the crosswalk from the north side of Orchard City Drive.

Campbell/Milton has very limited right-of-way in which to provide space for infrastructure like above-ground poles and underground pole foundations. It is questionable whether flashing beacons should be used at Campbell/Milton since the City already uses adult school crossing guards during the pedestrian peak hours. Also, pedestrian volumes during non-school admission and dismissal hours are below the FHWA threshold of 20 crossings per hour. The limited right-of-way at this intersection would make it difficult to install any infrastructure (e.g., poles, foundations) needed to construct a flashing beacon system. For these reasons, staff does not recommend considering this intersection for further enhancements like flashing beacons at this time.

<b>Table 3 Design Challenges</b>		
<b>Location</b>	<b>Existing Traffic Control Devices</b>	<b>Design Challenges</b>
Civic Center/Second	<ul style="list-style-type: none"> <li>• Bulb-outs</li> <li>• Marked crosswalks</li> <li>• Fluorescent warning signs</li> <li>• Radar speed sign</li> <li>• Civic Center/First traffic signal meters traffic</li> </ul>	<ul style="list-style-type: none"> <li>• Two crosswalks</li> </ul>
Civic Center/Third	<ul style="list-style-type: none"> <li>• Bulb-outs</li> <li>• Marked crosswalks</li> <li>• Fluorescent warning signs</li> </ul>	<ul style="list-style-type: none"> <li>• Two crosswalks</li> </ul>
Orchard City/Second	<ul style="list-style-type: none"> <li>• Marked crosswalks</li> </ul>	<ul style="list-style-type: none"> <li>• Two crosswalks</li> <li>• Horizontal curve</li> </ul>
Orchard City/Central	<ul style="list-style-type: none"> <li>• Striped shoulder</li> <li>• Marked crosswalk with stamped concrete</li> <li>• Fluorescent warning signs</li> </ul>	<ul style="list-style-type: none"> <li>• Tree on south side blocks pedestrian sign visibility</li> </ul>
Campbell/Milton	<ul style="list-style-type: none"> <li>• Marked crosswalk</li> <li>• Fluorescent warning signs</li> <li>• Adult school crossing guards</li> </ul>	<ul style="list-style-type: none"> <li>• Limited right-of-way</li> </ul>

**Downtown Flashing Beacon Project**

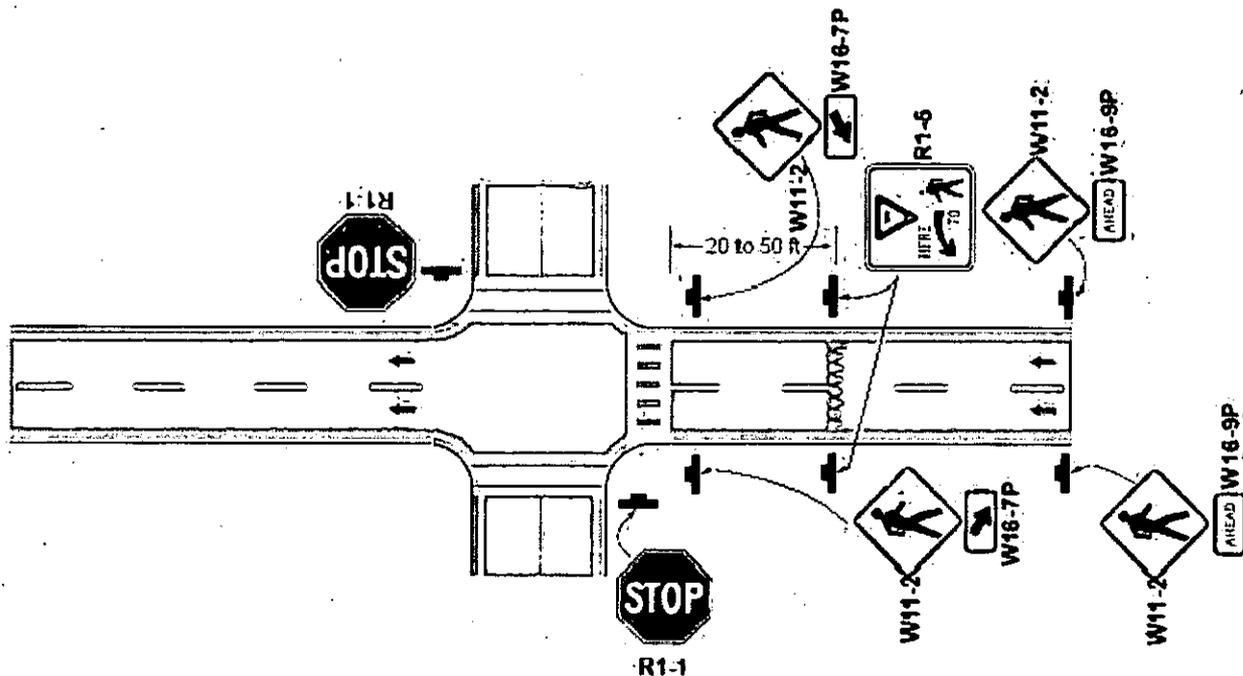
Based on the above, the existing signing and striping in the Downtown exceeds the FHWA recommendations. Should the City Council desire further enhancements, a Downtown Flashing Beacons Project could be designed and constructed to address the

intersections at Civic Center/Second, Civic Center/Third, Orchard City/Second, and Orchard City/Central. Circular flashing beacons are an option. Another option is the rectangular rapid-flashing beacons that resemble the beacon lights on emergency vehicles. For a visual demonstration of these beacons, see <https://www.youtube.com/watch?v=9Bibe3k1yWo>.

### Near-Term Options

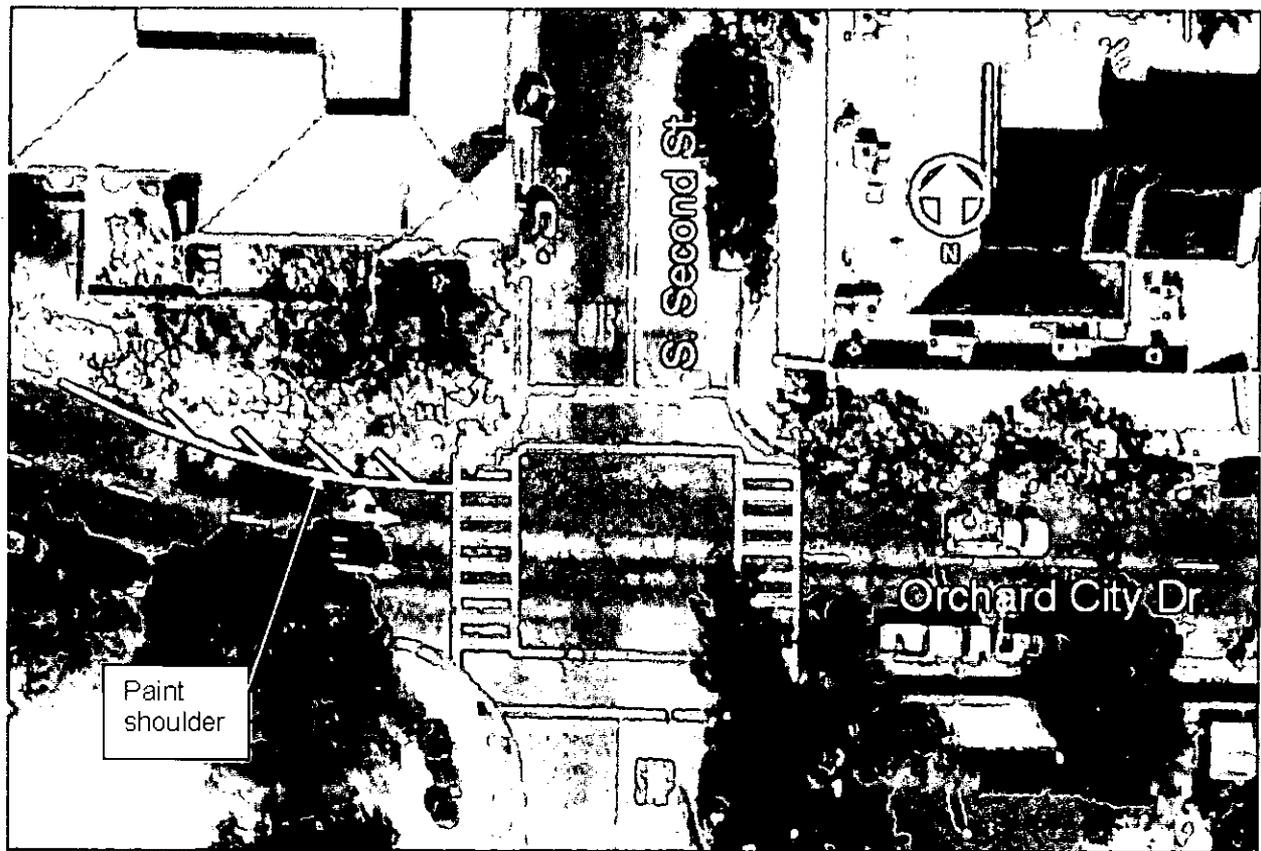
In the immediate near-term, staff will install “Yield Lines” and “Yield Here to Pedestrians” signs similar to what is used on Union Avenue in front of Stojanovich Family Park. Figure 1 below shows the yield lines and signs that would be installed in the near-term to supplement what already exists.

Figure 1  
Near-Term Recommended Improvements  
Yield Lines and “Yield Here to Pedestrians” Signs



Staff will also stripe the shoulder on the north side of Orchard City Drive west of Second Street. The striped shoulder will shift Orchard City Drive traffic to the south and may give pedestrians a striped buffer area from which to get a better view of oncoming traffic. See Figure 2 for a preliminary layout of the striped shoulder. This striping work would be installed in the near-term.

Figure 2  
Striped Shoulder on Orchard City Drive west of Second Street



### Recommendations

If the City Council desires to move forward with a Downtown Flashing Beacons Project, staff recommends moving forward with the design of this project so that the plans and specs are shovel-ready, should construction funds become available. Staff would recommend applying for the HSIP grant to construct the Downtown Flashing Beacons Project. The grant application process will be highly competitive and it is unknown how well this project would compete. The next call for projects for the federal HSIP grant is expected by the end of April. Applications for the 2015 grant cycle must be submitted to Caltrans by the end of June. Notification of award will be in October.

For Orchard City Drive/Second Street, a concrete spot island or bulb-out may be considered for the northwest corner. A concrete spot island is likely to cost approximately \$22,000 to construct and could be incorporated in the Downtown Flashing Beacons Project. A bulb-out would cost \$110,000 to construct. The cost of a bulb-out would decrease the cost-effectiveness of the project. The HSIP grant applications are evaluated based on benefit-to-cost ratios. More expensive projects may not score as well as more cost-effective projects. Staff recommends a spot island rather than a bulb out to minimize project costs.

Should the City Council desire staff to apply for the HSIP grant, staff will return by June with a staff report requesting authorization to submit an HSIP grant application for the project.

**FISCAL IMPACT**

The preliminary engineer's estimate to construct the Downtown Flashing Beacon Systems Project is \$242,000. The HSIP grant program requires a ten percent local match, requires a minimum \$100,000 project, and allows a maximum \$900,000 in federal funds per project. Should the City of Campbell apply for and be awarded an HSIP grant, the required Campbell local match would be \$24,200. Potential sources of funds have yet to be determined.

**QUESTIONS FOR THE CITY COUNCIL**

Staff is seeking input from the City Council for the following questions.

1. Does the City Council approve the concept of a Downtown Flashing Beacon Systems Project and the use of rectangular rapid flashing beacons?
2. Should staff proceed with the design of the Downtown Flashing Beacon Systems Project?
3. Should staff submit a Highway Safety Improvement Program grant application?

Prepared by:

  
Matthew Jue, Traffic Engineer

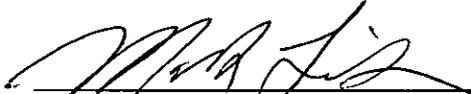
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