Recommendation
Staff recommends that the City Council accept the El Camino Real Corridor Study and consider the following actions:
- Identify a preferred alternative
- Advance recommended east-west connectivity improvements into design and environmental clearance phase
- Reallocation of construction funds for the additional northbound through-lane at Ravenswood Avenue to the balance of the Transportation Impact Fee (TIF) fund to be used for future projects identified by the City Council.

Policy Issues
As part of the 2013-2014 Capital Improvement Plan (CIP), the City Council directed staff to accelerate the El Camino Real Corridor Study (Corridor Study) to provide alternatives for potential modifications to El Camino Real consistent with the City’s General Plan Circulation Element and El Camino Real/Downtown Specific Plan.

Background
The Request for Proposals (RFP) for this project was approved by the City Council on October 15, 2013. The RFP summarized the goals, objectives, and expectations for the Corridor Study, including a set of givens adopted by the City Council that provide a framework for the Corridor Study:
- Infrastructure and streetscape modifications to El Camino Real between Sand Hill Road and Encinal Avenue will be evaluated as part of this study and, as necessary for connectivity, side-street approaches to El Camino Real within this area. Modifications to side-streets will be considered between the western side of the Caltrain tracks and the eastern side of Curtis Street-Hoover Street-Alto Lane.
- All proposed modifications should be consistent with the El Camino Real/Downtown Specific Plan.
- Only surface improvements will be considered (i.e., grade separation, such as tunneling, is prohibitively expensive for purposes of this study).
- Impacts (both beneficial and adverse) to all modes of travel will be considered in this study.
- It is expected that Caltrans will continue ownership of El Camino Real in the reasonably foreseeable
future; thus, ultimate design and implementation of modifications to El Camino Real will need to meet Caltrans requirements and standards. Caltrans representatives will be invited to participate as interested stakeholders as part of this process.

On January 28, 2014, the City Council awarded a contract to a team led by Whitlock & Weinberger Transportation Consultants (W-Trans) after reviewing proposals from three consultant teams. The W-Trans team was unanimously recommended by a panel, including City staff representing the Public Works and Community Development departments, and two appointed members from each of the Transportation and Bicycle Commissions. The scope of work for the Corridor Study included:

1. Community Engagement
2. Data Collection and Review
3. Identify Performance Metrics
4. Analyze Existing Conditions
5. Develop Travel Demand Forecasts
6. Future No Project Analysis
7. Alternatives Analysis
8. Prepare Report
9. Conduct Environmental Review
10. Conduct Engineering Design of El Camino Real/Ravenswood Avenue Modifications

The consultant team has generally completed tasks 1 through 8, culminating in the Corridor Study Report, dated July 2015 and linked as Attachment A. Tasks 9 and 10 remain, and may be completed following the Council’s acceptance of the Corridor Study. The modifications assumed in Task 10 at El Camino Real/Ravenswood Avenue include a potential additional northbound through-lane, as identified in the El Camino Real/Downtown Specific Plan. The Corridor Study included assessment of the engineering feasibility, potential impacts and congestion-relief benefits of this improvement.

On August 25, 2015, the City Council held a study session to provide direction to staff on next steps for the Corridor Study (staff report linked as Attachment B). At that meeting, the Council voiced support to develop a concept plan for the El Camino Real Corridor, which may include a bike lane alternative, with a possible parallel route in the northbound direction between Ravenswood-Menlo Avenues and Glenwood-Valparaiso Avenues. There was also consensus for a trial installation, for potentially a one-year time period. Council developed a list of tasks including outreach to neighboring jurisdictions, the Menlo Park Fire Protection District, and Caltrans, all to be completed before a preferred alternative would be identified.

On October 20, 2015, staff prepared an informational report to the City Council summarizing the City Council direction from the prior study session. A detailed list of tasks requested by the City Council and the resulting outcome of each is included in Attachment C.

**Analysis**

El Camino Real is a major transportation corridor in the region, carrying approximately 30,000 – 45,000 daily vehicles, buses, and serving local business and school traffic. It is a historic asset for the region, but also a barrier to east-west travel in Menlo Park, and an opportunity for the City to define the desired vision for the corridor. The purpose of the Corridor Study was to identify potential alternatives to modify El Camino Real.
Real to better meet the community’s needs and evaluate each of the proposed alternatives against a set of criteria including impact on traffic congestion, travel time, safety, aesthetics, parking, and multi-modal access. The Corridor Study built on the El Camino Real/Downtown Specific Plan (Specific Plan) to develop consensus around a conceptual design for El Camino Real.

Through the community engagement process, the highest priorities for desired improvements heard from the community included:

- Enhanced pedestrian safety and crossings
- Inclusion of bicycle lanes on El Camino Real
- More bicycle parking closer to downtown
- More landscaping along El Camino Real
- Timing of traffic signals to favor continuous north-south flow on El Camino Real

A detailed description of the community engagement process and development of the Corridor Study was prepared for the August 25, 2015 City Council study session (staff report linked as Attachment B). While all five of these priorities provide important context for developing El Camino Real in accordance with the community vision, some of them are currently being addressed through other City efforts, including the addition of bicycle parking downtown, the recent completion of the El Camino Street Tree implementation in late 2014, and improved traffic signal timing through the installation of a new signal coordination system in late 2015.

The top two requested items, enhanced pedestrian safety/crossings and inclusion of bicycle lanes on El Camino Real, are directly addressed in the Corridor Study.

Given the complexities of the elements identified in the Corridor Study, the analysis of the alternatives, including impacts and staff recommendations, are broken down into three categories as follows:

1. El Camino Real Corridor
2. El Camino Real Crossings
3. Ravenswood Avenue

**El Camino Real Corridor Recommendations**

Three alternatives which included modifications to vehicle lanes, bicycle lanes, and pedestrian crossing improvement options were developed based on the evaluation of potential travel demand, vehicle travel time, pedestrian safety and comfort, bicycle safety and comfort, aesthetics and parking impact. Each alternative also considered a potential option to reconfigure northbound El Camino Real at Ravenswood Avenue, and they are described in a separate section below.

The three alternatives are briefly summarized as follows:

- **No Project**: Existing travel lanes, traffic controls, pedestrian crossings remain with no changes.
- **Alternative 1: Continuous Three Lanes**: Adds a third vehicle travel lane in each direction between Live Oak Avenue and Valparaiso Avenue/Glenwood Avenue by removing on-street parking, and adds pedestrian crossing improvements.
- **Alternative 2: Buffered Bicycle Lanes**: Adds a bicycle lane with painted buffer area in each direction by removing on-street parking, and adds pedestrian crossing improvements.
- **Alternative 3: Separated Bicycle Facility**: Adds a physically separated bicycle lane in each direction by...
removing on-street parking and modifying right-turn lanes at selected intersections, and adds pedestrian crossing improvements.

One-page summaries of each of the alternatives and key findings are included in Attachment D. Each proposed alternative includes east-west pedestrian crossing improvements and potential changes to the overall corridor in order to facilitate north-south travel.

Staff has conducted preliminary outreach to both the City of Palo Alto and the Town of Atherton to determine the potential to ensure appropriate connections to adjacent routes are developed as part of any future improvements. The City of Palo Alto expressed interest in partnering to extend improvements to the Sand Hill Road intersection in order to connect to Alma Street and Caltrain station to the east and the Class I bicycle paths to the west. The Town of Atherton expressed interest in continued coordination and is also considering improvements on the El Camino Real corridor with initiation of a Complete Streets Study in early 2016, with an approximate 12 month timeline for completion. In order to continue productive coordination efforts, staff recommends Council identify a preferred alternative for north-south travel on El Camino Real.

However, given the connectivity of the improvements to adjacent jurisdictions, staff recommends delaying implementation of the north-south travel improvements which would allow the City to continue to work with Atherton and Palo Alto to develop a concept plan for the entire corridor. Staff would return to City Council for authorization prior to re-initiating work on the north-south improvements.

This direction would complement several other ongoing or potential City projects designed to improve east-west connectivity, access, and safety. The projects include:
- Valparaiso Safe Routes to School project (Menlo Park-Atherton Bicycle-Pedestrian Project)
- Ravenswood Railroad Crossing Study
- Middle Avenue Caltrain Crossing and potential bicycle improvements to Middle Avenue to connect to a future crossing
- Improvements to the Glenwood Avenue approach to El Camino Real through the 1400 El Camino Real development project
- Oak Grove Avenue-Crane Street-University Drive Bicycle Boulevard (which the Council will also consider on the May 3, 2016 agenda)

In summary, staff is requesting that the City Council:
- Identify a preferred alternative for north-south travel on El Camino Real
- Delay implementation of north-south improvements to allow for further coordination with adjacent cities planning efforts on El Camino Real

**El Camino Real Crossing Recommendations**

While north-south travel is important to overall mobility within the City, the highest priority improvements desired, as described above, were noted to be modifications that improve access and safety crossing El Camino Real. Staff recommends the City Council prioritize crossing improvements identified in the Corridor Study, which include modifying intersections to add crosswalks on all legs and adding pedestrian crossing signals at the following intersections:
- Cambridge Avenue (south leg)
- Middle Avenue (south leg)
- Roble Avenue (north leg)
Ravenswood Avenue/Menlo Avenue (south leg), plus the addition of a westbound bicycle lane on Ravenswood Avenue between the Caltrain tracks and El Camino Real and adding a bicycle box or other treatment to facilitate bicycle turn movements

Encinal Avenue (south leg)

Staff recommends these east-west connectivity improvements advance through the next stages of design and environmental clearance.

Ravenswood Avenue Recommendations

Three options for modifications to the northbound approach of the El Camino Real/Ravenswood Avenue-Menlo Avenue intersection were identified. Each alternative considered some roadway widening to accommodate additional northbound travel demand as summarized below:

- **Alternative 1**: The addition of a third northbound through lane, relocating the existing right-turn lane and sidewalk farther east;
- **Alternative 2**: The addition of a northbound through lane and bicycle lane, relocating the existing right-turn lane and sidewalk farther east; or
- **Alternative 3**: The addition of a northbound bicycle lane on El Camino Real approaching Ravenswood Avenue by relocating the sidewalk farther east.

Based on the Corridor Study evaluation, minimal or no improvement to vehicle travel time was observed with the addition of a northbound through lane. Additionally, the potential roadway widening to add a vehicle travel lane was found to have likely impacts to up to seven street trees and 11 heritage trees based on a tree assessment completed by HortScience. The roadway widening would also impact the access to the property at 1000 El Camino Real, located on the southeast corner of the intersection at Ravenswood Avenue. The property’s driveways, surface parking area, and pedestrian access may be impacted; additionally, the sub-surface parking area may also be affected by the additional weight of vehicle traffic being positioned closer to the building foundation.

For these reasons, staff does not recommend further consideration of Alternatives 1 or 2. Alternative 3 would have lesser potential impacts on trees and on the 1000 El Camino Real property. Staff recommends continued evaluation of Alternative 3 at the time that north-south improvements to the El Camino Real Corridor are considered in the future and reallocation of the construction fund to the balance of the TIF fund to be used for future projects identified by the City Council.

Next Steps

With the City Council’s acceptance of the Corridor Study, identification of a preferred alternative, and direction to prioritize east-west connectivity, staff would advance the design and environmental review of crossing improvements along the El Camino Real corridor and develop construction cost estimates and Caltrans encroachment permits application packages.

Staff would also continue coordination with the Town of Atherton, City of Palo Alto, and the Menlo Park Fire Protection District, as well as with planned or approved development projects including Station 1300 and the 1400 and 500 El Camino Real projects.

The current consultant contract for the Corridor Study includes outstanding tasks for future design and
environmental clearance. With the staff recommendation to prioritize crossing improvements at this time, staff also recommends reserving the remainder of the contract and budget until such time as the corridor improvements are desired to be advanced.

**Impact on City Resources**

The cost and staff time for the Corridor Study were budgeted in the City’s Capital Improvement Plan for FY 2013-2014 and 2014-2015. No additional funds are currently being requested to complete the Corridor Study, and the remaining project budget would be reserved for future use on this project. Funds for construction of the northbound through-lane on El Camino Real at Ravenswood Avenue were previously budgeted from the Transportation Impact Fee Program in the amount of $1.02 million. With Council approval, these funds would be returned to the Transportation Impact Fee Program to be allocated to other projects in the future.

As staff continues to refine the design of potential crossing improvements, additional funds may be necessary for design and/or construction. Staff would return to Council for a future appropriations request at that time. If Council desires to move forward with implementation of a north-south corridor improvement project, additional resources are likely to be needed in order to advance this project along with other potential projects like the Oak Grove Avenue-Crane Street-University Drive Bicycle Boulevard proposal also under consideration on the May 3, 2016 agenda.

**Environmental Review**

Accepting the Corridor Study does not require environmental review under the California Environmental Quality Act (CEQA). Any improvements identified would require future environmental clearance under CEQA.

**Public Notice**

Public Notification was achieved by posting the agenda, with the agenda items being listed, at least 72 hours prior to the meeting.

**Attachments**

C. Council-directed Tasks Following August 25, 2015 Study Session

Report prepared by:
Michael Tsai, Assistant Engineer, Transportation

Report reviewed by:
Nicole H. Nagaya, P.E, Transportation Manager
<table>
<thead>
<tr>
<th>Task</th>
<th>Status</th>
<th>Notes</th>
</tr>
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<tbody>
<tr>
<td>1. Outreach to Menlo Park Fire Protection District to discuss how</td>
<td>Initial staff consultation completed, September 2015. Follow up discussion conducted in</td>
<td>Continued coordination would be needed. Provide plan for Fire District review prior to submitting to Caltrans at design stage.</td>
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<td>addition of bike lanes impedes emergency vehicle access, and</td>
<td>April 2016.</td>
<td></td>
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<td>address concerns</td>
<td></td>
<td></td>
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<tr>
<td>2. Meeting with Caltrans to confirm permitting process, schedule,</td>
<td>Initial consultation completed September 2015. Caltrans voiced support for a bike facility</td>
<td>Caltrans developed and approved Class IV separated bicycle facility design standards on December 31, 2015.</td>
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<td>potential trial installation and parallel route on Merrill-Garwood</td>
<td>so long as capacity not reduced and facility does not detour to parallel routes.</td>
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<td>3. Collaborate with neighboring cities to discuss interest in joining</td>
<td>City Manager/Mayor Meeting with Palo Alto held September 9, 2015. Meeting with City of Palo</td>
<td>Continued coordination would be needed through Atherton’s Complete Streets Study and with Palo Alto to connect to Sand Hill Road and Alma Street.</td>
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<td>a trial project</td>
<td>Alto staff held December 8, 2015. Meeting with Town of Atherton staff held March 8, 2016.</td>
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<td>4. Outreach to ECR businesses between Live Oak to Ravenswood</td>
<td>Letter to business owners on the west side of ECR between Live Oak Avenue and Menlo Avenue</td>
<td>Continued coordination would be needed.</td>
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<td>5. Prepare cost estimates to identify order of magnitude costs for</td>
<td>Preliminary estimates completed. Trial installation cost estimated at $250,000 to $1,200,000</td>
<td>N/A</td>
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<td>design and construction</td>
<td>depending on scope of pedestrian improvements included.</td>
<td></td>
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<td>6. Explore alternative sidewalk layout, consider tree root mapping,</td>
<td>Completed, investigated scope of work for subsurface root investigation, determined not</td>
<td>N/A</td>
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<tr>
<td>or identify other strategies, including scope &amp; cost, to preserve</td>
<td>likely viable tool to assess potential tree impacts.</td>
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<td>trees at Ravenswood/El Camino</td>
<td></td>
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<td>7. Develop metrics for a trial installation to clearly define what</td>
<td>List of metrics for potential future pilot was developed by staff and refined with input</td>
<td>Prior to advancing implementation, this list of metrics would be reviewed with Council.</td>
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<td>would be considered successful</td>
<td>from the Bicycle and Transportation Commissions in November 2015.</td>
<td></td>
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<td>8. Summarize bike traffic counts on Alma, Willow Place, San Mateo</td>
<td>Completed September 2015</td>
<td>N/A</td>
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