



# City of Palo Alto

## City Council Staff Report

(ID # 5861)

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**Report Type: Study Session**

**Meeting Date: 6/22/2015**

**Summary Title: Page Mill Road Plan Line Review Study Session**

**Title: Presentation and Discussion Regarding the Page Mill Road Portion of the County Expressway Plan**

**From: City Manager**

**Lead Department: Planning and Community Environment**

### **Recommendation**

This is a Study Session and there is no recommended action. County staff will make a presentation and are seeking the City's input.

### **Executive Summary**

The County of Santa Clara is currently developing conceptual improvement plans for Page Mill Road between Interstate 280 (I-280) and Oregon Expressway. The City provided \$100,000 towards the preparation of the study to ensure adequate level of detail for proposed improvements along Page Mill Road, including a Class One trail between Deer Creek Road and I-280.

This staff report summarizes the improvements proposed between I-280 and Oregon Expressway. The Draft Corridor Study Report, which includes full details of the traffic projections and proposed improvement concepts, is included in Attachment A.

Based on existing deficiencies and projected traffic demand by 2025, the County of Santa Clara is recommending several improvements along the Page Mill Road corridor, at the I-280 interchange as well as along Page Mill Road between the interchange and El Camino Real. The recommended capacity improvements along Page Mill Road were determined to be a necessary step prior to increasing capacity at the I-280 interchange. This concept plan also includes a new Class I mixed use trail between Deer Creek Road and the I-280 interchange to address anticipated bicycle and pedestrian usage.

Improvements at the I-280/Page Mill Road interchange will include both capacity enhancements as well bicycle and pedestrian connectivity improvements through the interchange. The recommended alternative for the interchange at this time incorporates a round-about for the southbound ramps with circulation improvements to the existing Park and

Ride lot, and a new traffic signal for the northbound ramps.

Between the interchange and Oregon Expressway, the proposed concept plan has two primary components; widening of Page Mill Road to six lanes (three lanes per direction) between I-280 and Foothill Expressway, and traffic signal and median/left-turn pocket improvements along Page Mill Road (between Hanover Street and Ramos Way). A grade separation project is proposed as a longer term improvement at Page Mill Road and Foothill Expressway.

## **Background**

Page Mill Road is an Expressway that is currently maintained by the Santa Clara County Roads and Airports department between I-280 and the Oregon Expressway. The Draft Corridor Study Report identifies a need to increase vehicle capacity at both the interchange and along Page Mill Road for traffic conditions anticipated by 2025. The analysis also suggests that capacity improvements for Page Mill Road should be implemented prior to I-280 interchange improvements; if not, increased congestion within the Page Mill interchange at I-280 may occur.

The upcoming Valley Transportation Plan (VTP) 2040 Plan is expected to contain both the Page Mill / I-280 Interchange improvements and the Page Mill Road Improvements from El Camino Real to Old Page Mill Road as Tier 1, or highest priority, projects.

In addition to the Interchange modification, the Page Mill Road Improvements between Old Page Mill Road and Oregon Expressway that are proposed on the Concept Plan Line include the following:

- Widening of Page Mill Road from I-280 to Foothill Expressway to three lanes in each direction, with an eastbound lane merge east of Foothill Expressway
- Addition of a new Class I mixed-use trail between I-280 and Deer Creek Road, providing an extension of the existing trail that currently runs from Foothill Expressway and ends at Deer Creek Road
- New traffic signal at Page Mill Road and Coyote Hill Road
- Future grade separation at Foothill Expressway with near term improvements that adds an eastbound through lane.
- Intersection improvements at Page Mill Road and Hanover Street
  - continuous thru-bike lanes in both directions of Hanover Street
  - 8-phase signal operation with increased westbound left-turn storage capacity.
- Median and left-turn pocket improvements on Page Mill Road between Hanover Street and Hansen Way
- Signal modification plan at El Camino Real with eastbound right-turn improvements, westbound right-turn lane and improved westbound left turn pockets

The City of Palo Alto provided \$100,000 to the County for the draft study from traffic mitigation fees in order to ensure adequate level of detail for improvements such as the Class I trail. The

Concept Plan Line Study was to include two focused community outreach meetings in Palo Alto and Study Sessions with both the Planning & Transportation Commission and City Council. The PTC study session is scheduled for June 24, 2015. Outreach to Stanford University, City of Los Altos, and Town of Los Altos Hills is also ongoing. (See CMR #4880 June 23, 2014.)

## **Discussion**

The proposed concept plan line was developed to provide roadway capacity improvements as well as increased bicycle and pedestrian access along and across Page Mill Road between Oregon Expressway and I-280. Below are brief details of the concept improvements proposed along the Page Mill Road corridor. The County has ultimate decision making authority on this project. **City Council input on some or all of these elements would be welcome.**

### I-280 Interchange Improvements

Santa Clara County and Caltrans have been working with staff from the Town of Los Altos Hills and the City of Palo Alto to develop a preferred strategy to improve both the vehicular as well as bicycle and pedestrian operations at the I-280 interchange. The currently proposed concept plan includes a traffic circle on the west side of the interchange (southbound ramps) and a traffic signal on the east side (northbound ramps). Details of the other alternatives considered are included in the County's Draft Corridor Study Report.

### Foothill Expressway and Page Mill Road Intersection

The Corridor Study Report shows that the intersection of Foothill Expressway and Page Mill Road currently operates at LOS F during the existing conditions, and would continue to do so under each of the Interchange scenarios and the widening of Page Mill Road (LOS F indicates vehicular wait times which are not at acceptable levels). The study identifies that adding an eastbound through lane at the intersection would bring the intersection to an acceptable LOS C and LOS D under the existing baseline conditions. The future year 2025 forecasts show that the intersection operating conditions would return back to LOS F, identifying a future need for grade separation.

### Page Mill Road Widening

Widening of Page Mill Road from four to six-lanes (3 lanes in each direction) is proposed within the existing curb-to-curb alignment from I-280 to Foothill Expressway. An 8-foot shoulder would also be provided in both directions. Portions of the existing median would be narrowed to accommodate the additional lane, and the narrowing would result in the removal of several median trees. The three-lane westbound segment would start west of Foothill Expressway and continue to the I-280 Interchange. The three eastbound lanes would start at the I-280 Interchange and continue until the right lane ends approximately 300 feet east of Foothill Expressway with a lane merge.

### Class 1 Mixed Use Pathway

A new Class I dedicated pathway would be constructed on the south-east side of Page Mill Road between Deer Creek Road and the I-280 interchange where ramp crossing and connections to

the west side of I-280 would be proposed as part of a separate interchange project. The new Class I trail would be an extension of the current trail that currently ends at Deer Creek Road and provide a connection to the I-280 interchange. The interchange improvements would provide a connection to areas west of I-280.

#### New Traffic Signal at Coyote Hill Road

As part of the widening of Page Mill Road to six-lanes, the intersection of Coyote Hill Road and Page Mill Road would be converted from a one-way stop controlled intersection to a fully signalized intersection. A traffic signal would provide safer left turn movements from Coyote Hill Road, and would provide a more attractive route from offices on Coyote Hill and Hillview Roads as opposed to using alternative routes such as Arastradero Road and Foothill Expressway.

#### Traffic Signal Modification at Hanover Street

The intersection of Hanover Street and Page Mill Road currently operates with split phasing for the approaches on Hanover Street. The left turn storage pockets for westbound Page Mill often fills with vehicles and results in vehicles blocking the left through lane. In addition, the bicycle lanes in both directions of Hanover Street end approaching Page Mill Road. The intersection modification would accommodate several improvements including:

- Create dedicated left turn lanes and protected movements along Hanover to remove the split phasing.
- Improve signal timing efficiency to better serve left-turn movements from Page Mill Road
- Create continuous bicycle lanes along Hanover Street through the intersection. Increase westbound left-turn storage capacity to reduce blockage of the through lanes. Possible to accommodate two left turn lanes with additional widening on Hanover Street.
- Improve average delay and level of service (LOS).

#### Median Improvements between Hanover Street and Hansen Way

In addition to limited westbound left turn storage capacity at Hanover, the eastbound left turn storage pocket at Hansen Way is very limited and also often overfills, resulting in blockage of through lanes on Page Mill Road. Median modifications are proposed between Hanover Street and Ramos Way to accommodate additional left turn storage to reduce the amount of lane blocking on Page Mill Road.

#### Signal Modification Plan at El Camino Real

Intersection improvements at Page Mill Road and El Camino Real are proposed to accommodate improved movements through the following measures:

- Addition of a dedicated westbound right-turn lane
- Re-alignment of the two westbound left-turn lanes to provide a more traditional alignment, additional storage capacity, and provide more efficient usage.
- Increased corner radius at the southeast corner to improve right-turn capabilities.
- Removal of the “pork chop” island and free-right turn movement from eastbound Page

Mill Road to southbound El Camino Real to improve pedestrian circulation.

Improvements at the El Camino Real intersection would also include removal of the on-street parking along the south side of Page Mill Road between El Camino Real and Ash Street.

### Project Phasing

The proposed concept plan line is not yet currently funded; however, the County of Santa Clara is anticipating that funding would come from several sources including future tax measures, City Impact Fee funds, potential Developer mitigation, and potential grant funding.

The widening of Page Mill Road to six lanes between I-280 and Foothill Expressway would be the first phase of improvements, and would be necessary prior to any capacity improvements anticipated at the I-280 interchange. In addition, a third eastbound through leg at the intersection of Foothill Expressway and Page Mill Road would bring the intersection to acceptable levels; however grade separation would be needed at a future phase.

Intersection improvements at Hanover Street and the median improvements between Hanover Street and Ramos Way are recommended, but may occur separately from the improvements west of Foothill Expressway. The improvements between Hanover and Hansen Way could be implemented with private development projects in the area. Similarly, improvements at the intersection of El Camino Real would likely occur concurrently with development projects near the intersection.

### **Timeline**

Upon adoption of the VTP 2040, the County would proceed with environmental analysis and design of the project in phases as described above.

Implementation of the proposed Plan Line Concept is not currently scheduled and would be dependent upon funding. Funding could come from a ballot measure, developer mitigations, and other sources.

### **Resource Impacts**

Funding for the various stages of this project is anticipated to come from a combination of sources including the County of Santa Clara (using grant funds and county match funds), City of Palo Alto funding from traffic impact fees,<sup>1</sup> and potential mitigation funding from proposed development projects along the corridor. Planning level cost estimates include approximately \$18.2 million for the widening of Page Mill Road (includes the Class I Trail extension ), \$2.7M for the improvements between Hanover and Hansen Way, and \$2.4M for the improvements to the intersection of El Camino Real and Page Mill Road.

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<sup>1</sup> The City has been collecting Stanford Research Park (SRP) traffic impact fees to help fund improvements in the area.

## **Policy Implications**

The City's existing Comprehensive Plan is not generally supportive of increased roadway capacity unless absolutely critical and unless the needs of pedestrians and bicycles are also addressed:

Policy T-27: Avoid major increases in street capacity unless necessary to remedy serve traffic congestion or critical neighborhood traffic problems. Where capacity is increased, balance the needs of motor vehicles with those of pedestrians and bicyclists.

Staff would appreciate the City Council's input on proposed capacity increases and facilities included in the draft concept plan. The City's participation is itself consistent with the Comprehensive Plan:

Policy T-49: Lead and participate in initiatives to manage regional traffic.

Other relevant Goals, Policies, and Programs include:

Policy T-25: When constructing or modifying roadways, plan for usage of the roadway spaced by all users, including motor vehicles, transit vehicles, bicyclists, and pedestrians.

Goal T-3: Facilities, Services, and Programs that Encourage and Promote Walking and Bicycling

Policy T-14: Improve pedestrian and bicycle access to and between local destinations including public facilities, schools, parks, open space, employment districts, shopping centers, and multimodal transit stations.

Program T-22: Implement a network of bicycle boulevards, including extension of the southern end of the Bryant street bicycle boulevard to Mountain View.

## **Environmental Review**

Environmental Analysis will be conducted as part of the final design. The County will be the lead agency for such analysis. Any improvements that may occur as part of separate development projects would undergo environmental analysis and clearance as part of those individual projects.

### **Attachments:**

- Attachment A: Concept Plan Line to be provided at a later date (DOCX)

Attachment A: Concept Plan Line to be provided at a later date