

AGENDA: January 11, 2007

TO: Regional Transportation Commission

FROM: Kim Shultz, Senior Transportation Planner
Lisa Powell, Transportation Planner

REGARDING: Highway 1 Projects Status Update

RECOMMENDATIONS

Staff recommends that the Regional Transportation Commission accept the Quarterly Progress Report (Attachment 1) from the consultant for the Highway 1 HOV Lane Project, and receive a status report on other activities related to Highway 1 projects.

DISCUSSION

Highway 1 Widening/ HOV Lane Project – Project Approval/Environmental Documentation (PA/ED)

Chris Metzger, Nolte Project Manager, will make an oral presentation of the Quarterly Progress Report (Attachment 1) for the Highway 1 HOV Lane Project. Mr. Metzger's presentation will provide an update of traffic operation analysis and engineering completed in this quarter. The presentation will also describe the refinement of project alternatives and provide an update to the project schedule and budget.

The critical path for completion of the PA/ED phase continues to be traffic analysis and investigation of cultural resources, specifically the excavation of potential archaeological sites. The public circulation of the draft environmental document previously scheduled for Fall 2007 is now Spring 2008. This delay is due to resolution of the engineering design issues and integration of the traffic operations data to determine interchange and ramp geometrics details. The scheduled completion date of the PA/ED process remains Winter 2009/2010. Overall phasing/development schemes to expedite construction, should funding become available, are being discussed by the project team.

As reported in Attachment 1, the focus of activity over the past few months has been on traffic modeling analysis and geometric development of the project alternatives. This is an iterative process wherein traffic operations are used to properly scale and guide design of the alternatives, while environmental and cost considerations constrain the size and extent of proposed improvements.

Also during the past quarter, a series of three open house public information meetings were held in Aptos, Watsonville and Santa Cruz in September. The open house meetings provided an update on the project and collected public input on the project. A summary report of the

meetings is currently under review by the project team and will be shared with the Commission within the next two months.

Traffic Analysis

The primary focus of the traffic analysis for this quarter was the arterial streets and interchanges surrounding the on and off ramps. Existing traffic counts including turning movements were previously collected by the consultant for the intersections requiring analysis. Utilizing the Association of Monterey Bay Area Governments (AMBAG) Regional Travel Demand model, the existing traffic counts were projected for 2015 and 2035 to conduct operational analysis. The AM and PM peak periods are analyzed at the highway ramp and arterial intersections to determine delay and Level of Service (LOS) performance measures. The analysis is scheduled for completion in January 2007.

A coordination meeting was held on November 30, 2006 with representatives from Santa Cruz County, the City of Santa Cruz, and the City of Capitola to discuss the primary findings of the traffic analysis for the interchanges and arterials within their jurisdictions. Coordination will continue with these agencies.

During the last Highway 1 Quarterly Report to the Commission in September 2006, questions were raised regarding AMBAG's Regional Travel Demand model. RTC staff passed those questions on to AMBAG staff and modeling consultant. AMBAG's response and notes from two additional meetings, including a Model Users Group meeting, are included in Attachment 2 of this staff report. In summary, the AMBAG traffic demand model projects future growth at UCSC to 21,000 students. The average annual growth rate assumed for Santa Cruz County is 0.64% for population, 0.65% for housing, and 1.42% for employment with Watsonville having the highest growth rates. The travel demand model does not assume growth that exceeds the respective local agency's adopted General Plans at the time the model is run.

Engineering

The primary focus of engineering this quarter has been modifying interchange and intersection design details with the benefit of the traffic operations analysis work that is nearing completion. Updated plans incorporating Caltrans comments and updated traffic analysis through September were submitted to Caltrans in October, 2006. Through this period, there has been extensive discussion with Caltrans regarding design exceptions and efforts to avoid costly engineering design work.

The project alternatives developed up to this point include:

- Ramp Metering and Auxiliary Lane or Transportation System Management (TSM)
- HOV Lane Widening with Standard Geometry (plus TSM elements)
- HOV Lane with Reduced Geometry (plus TSM elements)

In review of the respective HOV lane alternatives, there is no measurable difference in traffic service between the Standard and Reduced Geometry alternatives. However, the Standard Geometry has a significantly greater cost (\$400 million versus \$300 million for the Reduced

Geometry alternative) and extensive environmental impacts given its larger footprint. Moreover, the Standard Geometry alternative would also require design exceptions.

On this basis the Project Development Team (PDT) determined it appropriate to combine the two design options into a single HOV Lane Alternative combining the best elements of both options. The new HOV Lane Alternative would include standard inside median and outside shoulders where there is sufficient right-of-way width (generally in the southern section of the project), but would seek design exceptions for a narrower inside median and/or outside shoulders and would incorporate retaining walls and other design techniques to minimize impacts where the right-of-way is narrow. The new hybrid HOV Lane Alternative would reduce impacts to right-of-way, wetlands, other environmental elements, and ancillary project elements such as bridges and parallel roadways.

The project alternatives to be studied in the EA/EIR and for all future public communications will be:

- No Build
- TSM Alternative (Ramp Metering and Auxiliary Lanes)
- HOV Lane Alternative (plus TSM elements)

The PDT will continue working on the interchange design details along the corridor. The best configuration for pedestrians and bicyclists is generally a diamond interchange. Where this works operationally, this will be proposed, otherwise modified diamonds or other configurations will be developed. The goal of the HOV Lane Alternative is to have a single interchange design recommendation at each location. Where this is not possible, two interchange options will be recommended.

Highway 1 Soquel Avenue to Morrissey Boulevard Auxiliary Lanes Project

The Cooperative Agreement with Caltrans for work to begin on the Project Approval/Environmental Documentation (PA/ED) phase of the project has been executed. The Cooperative Agreement identifies the respective roles of the RTC, serving as sponsoring agency, and Caltrans, serving as lead agency for the environmental documentation.

The draft scope of services, budget and consultant agreement are complete. At RTC's request, Caltrans is currently conducting a pre-award audit as required by FHWA, which is expected to be completed in late December/early January 2007. Once the pre-award audit is complete, the Notice to Proceed will be issued for the PA/ED process to begin.

Caltrans and RTC have submitted a joint application for \$15 million of Corridor Mobility Improvement Account (CMIA) funds for an enhanced version of the Highway 1 Soquel/Morrissey Auxiliary Lanes Project. This project includes modification of the outdated interchange at Morrissey Boulevard with a higher capacity bridge and realignment of the northbound ramps that improves motorist, bicycle and pedestrian safety. The California Transportation Commission (CTC) is expected to adopt the list of CMIA funded projects on February 28th.

Highway 1/17 Merge Lanes Project

Caltrans will provide a status report on the Highway 1/17 Merge Lanes Project.

Highway 1 Construction Authority (HCA)

The next meeting of the HCA at the County Administrative Building is currently scheduled for January 26th, but a new date of March 2nd has been proposed though not yet confirmed.

SUMMARY

Chris Metzger, Nolte Project Manager, will make an oral presentation of the Quarterly Progress Report (Attachment 1) for the Highway 1 HOV Lane Project and the Highway 1 Soquel Avenue to Morrissey Boulevard Auxiliary Lane Project. The Quarterly Progress Report features information on the continued traffic analysis and the development of the geometric plans for the HOV Lane project alternatives. Answers to questions regarding the AMBAG traffic demand model raised at the previous Highway 1 Quarterly Report are summarized in Attachment 2.

Attachments:

1. Quarterly Progress Report on the Highway 1 HOV Lane Project and the Highway 1 Soquel/Morrissey Auxiliary Lane Project, dated December 18, 2006.
2. Meeting Minutes on AMBAG's Regional Traffic Demand Model, dated October 20, 2006.