



February 5, 2018

To: Regional Planning & Highways

From: Darrell Johnson, Chief Executive Officer 

Subject: Update on the Implementation of Orange County Transportation Authority Corridor Studies

Overview

Between 2006 and 2010, five corridor studies were completed by the Orange County Transportation Authority. These studies focused on major travel corridors within Orange County and between neighboring counties. They also identified, evaluated, and recommended improvement options to address mobility challenges. Substantial progress has been made with respect to implementation of the studies' recommended improvements, and a status report is provided for the Board of Directors' information.

Recommendation

Receive and file as information item.

Background

The Orange County Transportation Authority (OCTA) regularly conducts long-range planning studies to address the long-term transportation needs of Orange County. Corridor and major investment studies (MIS) are key components of the long-range planning process. These studies provide focused analysis of corridor-specific transportation issues and develop and recommend targeted cost-effective improvement solutions.

The primary outcome of these types of studies is consensus on a set of recommended long-term transportation improvements. These recommendations are also sometimes referred to as locally preferred strategies (LPS) when a preferred alternative is selected by the Board of Directors (Board).

With respect to the five major corridor studies discussed in this staff report (listed below), numerous policy and technical advisory committee meetings,

public workshops, and/or surveys were conducted in order to fully engage stakeholders.

- Riverside/Orange County MIS;
- Interstate 405 (I-405) MIS;
- Orange County/Los Angeles County (OC/LA) Intercounty Study;
- South Orange County MIS (SOCMIS);
- Central Orange County Corridor Study (CCCMIS).

These consensus-building efforts generally involved key elected officials, local jurisdiction's technical staff, transportation and environmental resource agencies, business and homeowner associations, and other key community organizations in the study screening and decision-making processes. As such, the improvement recommendations (identified in the discussion section) for each of the studies represent the most prudent, locally supported, and cost-effective improvement recommendations for each of the five corridors' long-term needs.

Discussion

Over a decade has passed since OCTA first initiated the major corridor studies identified above. Since that time, significant components of each of the studies' recommended improvements have either been implemented and/or further advanced through subsequent project development activities. Progress on each studies' major recommended improvements are summarized below.

Riverside/Orange County MIS (January 2006)

This MIS was initiated in cooperation with the Riverside County Transportation Commission (RCTC). It focused on identifying capital and operational improvements to the State Route 91 (SR-91) corridor.

The MIS' preferred strategy (Attachment A) included widening sections of the SR-91, potential managed lane modifications, continued studies for a new tunneled highway, and operational improvements to State Route 74 (SR-74)/Ortega Highway. Recommended transit enhancements included a new Intermodal Transportation Center in Corona, as well as shuttle/circulator feeder buses, local and express buses, preferential treatment for high-occupancy vehicles (HOV), enhanced Metrolink service, and coordination with high-speed rail and proposed Maglev projects.

To date, significant progress has been made with respect to implementation of the MIS' recommendations. Much of this progress is documented in the SR-91 Implementation Plan, which highlights major capacity improvements along the SR-91 corridor. These include lane additions between State Route 55 (SR-55) and State Route 241 (SR-241), as well as in the eastbound direction between the SR-241 and State Route 71 (SR-71). Auxiliary lane extensions have also been completed between the County line and the SR-71. In March 2017, RCTC opened the 91 Corridor Improvement Project which added one general-purpose lane in each direction from SR-71 to Interstate 15 (I-15), extended the 91 Express Lanes from the countyline to I-15, and improved numerous interchanges, bridges, ramps, and local streets. A number of other improvements, such as a connection between SR-241 and the 91 Express Lanes, as well as improvements to the SR-91/SR-71 interchange are also under consideration.

The LPS also recommended improving operations on SR-74/Ortega Highway. To date, moderate progress has been made with additional intersection capacity improvements at Antonio Parkway. The County of Orange (County) has also widened portions of SR-74/Ortega Highway between Antonio Parkway and the City of San Juan Capistrano easterly city limit. The County is also currently developing the environmental impact report for widening other portions of SR-74/Ortega Highway to planned Master Plan of Arterial Highways (MPAH), four-lane configuration.

Several major transit improvements have also been completed, including the extension of the Metrolink Perris Valley Line between Riverside Downtown and Perris South. Additionally, a new Metrolink station in the City of Placentia serving the Metrolink 91 Line is scheduled to begin construction in 2018, contingent on railroad approvals.

I-405 MIS (February 2006)

The I-405 MIS analyzed transportation issues and considered potential improvements for the 13-mile portion of the I-405 between Interstate 605 (I-605) and State Route 73 (SR-73). The LPS (Attachment B) recommended an additional general-purpose lane in each direction between the I-605 and Brookhurst Street. It also included auxiliary lanes at numerous locations along the corridor, as well as improvements to arterial transit service.

Significant progress has been made on the implementation of the I-405 MIS LPS. The current "405 Improvement Project" will add one travel lane in each direction between Euclid Street and the I-605, and improve freeway ramps and bridges. The project will also add the 405 Express Lanes, which will incorporate existing carpool lanes and a new lane in each direction between the SR-73 and I-605, thereby providing two tolled express lanes in each direction.

The 405 Improvement Project is currently in the design/build phase and construction is scheduled to begin this year. The 405 Improvement Project is also expected to improve arterial intersection levels of service.

OC/LA Intercounty Study (July 2008)

The OC/LA Intercounty Transportation Study explored five concepts (Attachment C) for improving transportation infrastructure and services between Orange and Los Angeles counties. These include the following concepts:

- Transportation System Management/Transportation Demand Management – which called for increased local bus coordination, traffic signal coordination, and freeway traffic monitoring. It also included additional park-and-ride lots in the cities of Artesia/Cerritos, Buena Park, La Habra, Seal Beach/Los Alamitos, and Whittier;
- Street-Rapid Bus – concentrated on increasing arterial roadway capacity, improving freeway interchanges, providing new rapid bus service, Metrolink Station shuttle service, and grade-separated Bus Rapid Transit (BRT) service in the Pacific Electric Right-of-Way (PE ROW);
- Freeway – increased capacity on all study area freeways by providing new general-purpose lanes, where appropriate;
- Transit – improved transit service for both short-and long-distance trips, improved efficiency of local transit service, increased Metrolink service, enhanced planned Rapid Bus routes, and intermodal connectivity;
- Public-Private Partnership – assumed privately-financed improvements to supplement publicly-funded projects, potentially including toll lanes, truck toll lanes, and high-speed transit service in the PE ROW.

Some progress has been made on advancement of these recommendations. For instance, the California Department of Transportation (Caltrans) is currently constructing the “Interstate 5 (I-5) South Corridor Improvement Project” in Los Angeles County. This project will widen the I-5, upgrade bridges and overcrossings, and add one HOV lane and one general-purpose lane between the OC/LA border and the I-605. Caltrans has also initiated development of a project study report (PSR) for potential high-occupancy toll managed lanes on the I-5 from the SR-55 to the Los Angeles County line. Improvements for State Route 57 are also being advanced for the addition of truck climbing lanes from Lambert Road to the Los Angeles County line, and for the addition of general-purpose lanes between Orangewood Avenue and Katella Avenue. In terms of roadways, Brea Canyon Road widening, between Canyondale Drive and the OC/LA border, is currently in the engineering phase.

Additionally, State Route 39 (SR-39)/Beach Boulevard has been identified as a transit opportunity corridor in the OC Transit Vision and is being evaluated for transit signal priority as part of OCTA's implementation of Bravo! Route 529. Another major transit improvement is expected with the addition of a third track to increase Metrolink/Amtrak service between the City of Fullerton and Los Angeles.

In 2008, the Southern California Association of Governments initiated a study to analyze transit alternatives for the PE ROW. The OCTA Board took an opposing position to that study's recommendations due to the inclusion of low-speed Maglev as an alternative. In doing so, the Board reaffirmed its policy and guiding principles for emerging transit technologies and ROW protection principles for the PE ROW. Since that time, OCTA has continued to coordinate with local jurisdictions on lease and license policies to maximize revenues and protect a potential future transit option. In addition, the portion of the PE ROW, between Harbor Boulevard/Westminster Avenue and Raitt Street in Santa Ana, will be used for the OC Streetcar Project, which is scheduled to begin construction this year. OCTA has also partnered with corridor cities to implement active transportation facilities along portions of the PE ROW west of Harbor Boulevard.

SOCMIS (November 2008)

The SOCMIS LPS (Attachment D) called for additional general-purpose lanes and managed-lanes on the freeway system. It also sought to achieve more balance between freeway and toll road systems. This included coordination with TCA on an adjusted toll price structure, additional capacity, and new tolled interchanges. For the arterial highway system, the LPS emphasized completion of MPAH, as well as studying the potential for east-west capacity expansion. With regard to transit, the LPS recommended new types of bus service (including beach and special event routes) to address a variety of travel markets.

Significant progress has been made on the LPS' freeway strategies. Measure M2's (M2) projects will provide one general-purpose lane in each direction on the I-5, between the SR-55 and I-405, and the SR-73 and Oso Parkway; including the reconstruction of the Avery Parkway interchange. Further south, three miles of HOV lanes in each direction are under construction on the I-5 from State Route 1/Pacific Coast Highway to Avenida Pico. Numerous freeway interchange improvements have also been completed on the I-5 including the reconstruction of the Pico Avenue interchange, SR-74/Ortega Highway, and La Novia Avenue/Camino Capistrano.

Recommended freeway interchange improvements at La Paz Road, and El Toro Road are in the environmental and design phase and will be included as part of the larger M2 projects. OCTA is also conducting a PSR for additional capacity on the I-5 between Avenida Pico and the San Diego County line. Additional general-purpose lanes will also be added to the I-405, between the I-5 and SR-55, at key segments as part of M2 Project L. This improvement is currently in the environmental phase.

For the toll road system, a project is currently underway to add a lane to the SR-73 northbound on-ramps at Laguna Canyon Road. In addition, TCA is currently conducting a planning process to evaluate and determine potential replacement options for the SR-241 (green alignment).

There has also been significant progress on recommended roadway improvements. Approximately five miles of new arterials on the MPAH were constructed with the extension of Avenida La Pata and Cow Camp Road. In addition to the SOCMIS recommendations, Los Patrones Parkway, a four-lane arterial highway with connections at Oso Parkway, Chiquita Canyon Drive, and Cow Camp Road, is also being advanced. Widenings and intersection improvements on Oso Parkway and SR-74/Ortega Highway have also been implemented or are underway. Railroad grade separations have also been constructed at Jeffrey Road and Sand Canyon Avenue.

The SOCMIS recommended transit strategies have also advanced substantially. M2 Project V, special event and beach trolley/shuttle service, as well as vanpools and shuttles between Metrolink rail stations and major employment centers, have been implemented through much of the study area. Also, as part of the OC Transit Vision, a north-south freeway BRT service between the Fullerton Metrolink Station and the Laguna Niguel/Mission Viejo Metrolink Station (along the I-5) is being evaluated. To improve access to OCTA bus service, the Jeffrey Park-and-Ride lot has also been expanded with 400 additional parking spaces. Access improvements for Metrolink stations have also been implemented, including the installation of new canopies and Americans with Disabilities Act compliant ramps at the Laguna Niguel/Mission Viejo Metrolink Station. OCTA has also coordinated with station cities to plan for biking and walking improvements for first/last mile trips to and from all Metrolink stations. Special event services included trolley rides to the beach in San Clemente and bus rides to the OC Fair & Event Center. Further, weekend roundtrips on the Orange County and Inland Empire/Orange County lines have also doubled.

To address better integration of passenger rail systems in the region, OCTA, the BNSF Railway, RCTC, and Los Angeles County Metropolitan Transportation Authority (Metro) continue to coordinate regularly on track-sharing issues, operating constraints, and funding. OCTA also convenes a Rail Technical Advisory Committee on a quarterly basis to plan station improvements throughout the County.

Regarding transit-oriented development, the City of Laguna Niguel completed a Gateway Specific Plan in 2011, and has since approved 3,000 new dwelling units near their Metrolink Station. OCTA has also conducted a joint-development study at the Laguna Hills Transportation Center to determine if providing transit oriented development at this location is a viable option.

CCCMIS (December 2010)

The CCCMIS LPS (Attachment E) focused upon enhancing and adding interchanges and HOV lane continuity. Arterial components focused on optimizing key corridors and critical intersections, improvements at key SR-55 interchanges (at Paularino Avenue and Baker Street), and solutions to meet future north-south demand on SR-39/Beach Boulevard and Harbor Boulevard. Transit components focused on improving travel times and reliability, as well as BRT routes.

Implementation of this LPS has progressed at a moderate level. M2 Project A which is adding a second HOV lane on the I-5 between the SR-55 and SR-57 is scheduled to begin construction in early 2018. Also, the northern portion of M2 Project F (on the SR-55 between State Route 22 and SR-91) is currently in the environmental phase, and is anticipated to provide much needed operational improvements. Numerous improvements to the roadway system have also been completed, including signal synchronization for nine key corridors and intersection improvements for nine critical intersections. Additionally, construction of frontage road improvements for Baker Street (at the SR-55) are scheduled to be complete in summer 2018.

Transit improvements included the completion of the Anaheim Regional Transportation Intermodal Center (ARTIC) and the addition of commuter shuttles to/from the ARTIC, operated by Anaheim Resort Transit. Bus transit improvements include an ongoing study for transit signal priority along SR 39/Beach Boulevard as part of OCTA's Bravo! Route 529 service. Also, as part of the OC Transit Vision, both the I-5 and SR-39/Beach Boulevard are being considered as transit opportunity corridors.

Next Steps

In total, significant progress has been made with regard to implementation of the recommendations identified above in the various corridor studies. Most notable is the progress made in implementing the Riverside/Orange County MIS; I-405 MIS; and SOCMIS LPS. With respect to the other corridor studies, there has been moderate progress. OCTA will continue working both internally and with area stakeholders and project sponsors to ensure continued momentum on all these efforts.

Future corridor planning efforts may also need to consider revisiting studies for periodic updates as planning and funding priorities and assumptions change over time. For example, these corridor studies evaluated limited bike and pedestrian improvements, which are now a key component of OCTA's overall work program. They also did not factor in passage of Metro's Measure M transportation sales tax, its Countywide Managed Lanes Strategic Plan, or selection of the City of Los Angeles for the 2028 Olympics. As such, staff is proposing to complete an update to the OC/LA Intercounty Study in the next fiscal year in order to better factor these developments into OCTA's long-range planning and coordination processes along the OC/LA boarder. Staff also anticipates performing similar update efforts to the other corridor studies, as conditions evolve, and changes become necessary.

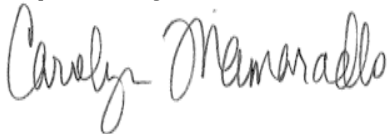
Summary

As Orange County's regional transportation planning agency, OCTA conducts long-range planning studies to ensure that the County's vision and goals are clearly identified and support effective decision-making. To fulfill this role, OCTA has conducted several MIS's that involved extensive technical analyses and consensus-building efforts. The resulting recommendations from these studies reflect the most effective transportation improvements for specific major corridors in the County. Over the past decade, implementation of the studies' improvement recommendations has made significant progress and are reported on above.

Attachments

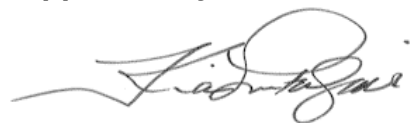
- A. Riverside County - Orange County MIS, Locally Preferred Strategy
- B. I-405 Major Investment Study
- C. OC/LA Intercounty Transportation Study
- D. Locally Preferred Strategy (LPS) for the South Orange County Study Area
- E. Central County Corridor Major Investment Study, Final Evaluation of Alternatives Report

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