



January 4, 2021

To: Regional Planning and Highways Committee
From: Darrell E. Johnson, Chief Executive Officer
Subject: Interstate 405 Improvement Project Update

Overview

The Orange County Transportation Authority is currently underway with the implementation of the Interstate 405 Improvement Project. This report provides a project update.

Recommendation

Receive and file as an information item.

Background

The Orange County Transportation Authority (OCTA), in cooperation with the California Department of Transportation and the cities of Costa Mesa, Fountain Valley, Huntington Beach, Seal Beach, and Westminster, is implementing the Interstate 405 (I-405) Improvement Project between State Route 73 (SR-73) and Interstate 605 (I-605) (Project). The Project will add one general purpose lane in each direction from Euclid Street to I-605, consistent with Measure M2 Project K, and will add an additional lane in each direction that will combine with the existing high-occupancy vehicle lane to provide dual express lanes in each direction of I-405 from SR-73 to I-605, otherwise known as the 405 Express Lanes.

On November 14, 2016, the OCTA Board of Directors (Board) awarded the design-build (DB) contract to OC 405 Partners (OC405), a joint venture. OCTA executed the DB contract with OC405 and issued Notice to Proceed (NTP) No. 1 on January 31, 2017. NTP No. 1 was a limited NTP for mobilization, design, and administrative activities. On July 26, 2017, the Transportation Infrastructure Finance and Innovation Act (TIFIA) loan agreement was executed between OCTA and the United States Department of Transportation (USDOT). On July 27, 2017, OCTA issued NTP No. 2 to OC405. NTP No. 2 was a full NTP for all activities, including construction.

Discussion

A number of activities are ongoing as the construction work continues to advance. The following provides a more detailed status of Project activities.

Financing and TIFIA Loan

In July 2017, OCTA executed a TIFIA loan agreement with the USDOT for up to \$628.93 million. Pursuant to the terms identified in the loan agreement, OCTA staff submits periodic reimbursement requisitions to the USDOT Build America Bureau (Bureau) and Federal Highway Administration. OCTA has received two TIFIA loan disbursements amounting to approximately \$287 million.

In October 2020, OCTA staff received Board approval to pursue a reset of the interest rate on the TIFIA loan. OCTA has applied, and is currently working with the Bureau, to reset the 2.91 percent interest rate on the 2017 TIFIA loan. If successful, the current interest rate of 2.91 percent could be reduced, resulting in substantial debt service savings. Based on the estimated timeline provided by the Bureau, OCTA is targeting a financial close for the new TIFIA loan as early as March 2021. Prior to closing, OCTA staff will return to the Board for approval of the financing documents.

Tolling Contracts

On February 26, 2018, the Board selected Kapsch TrafficCom USA, Inc., (Kapsch) to provide toll lanes system integration services for design, installation, operation, and maintenance of the electronic toll and traffic management (ETTM) system on both the 405 and 91 Express Lanes. Kapsch is currently under contract and is working closely with the design-builder to deliver fully functional express lanes upon opening in 2023. Kapsch has received approval for the ETTM infrastructure final design to be used for the 405 Express Lanes, including equipment types and configurations. Kapsch continues to review the design-builder's plans and construction activities and has provided input on requirements for the Toll Operations Center (TOC) improvements. The TOC will be located at OCTA's Santa Ana Bus Base and will be staffed by Kapsch for 405 Express Lanes operations.

OCTA staff developed a request for proposals for the back-office system and customer service center operations for the 405 Express Lanes. The Board approved its release in June 2020, and a preferred vendor will be recommended to the Board for approval in late 2021. Later this year, OCTA staff will be updating the Board on options for a future customer service center and roadway services location. OCTA staff is currently evaluating various buy versus lease options and will be seeking Board direction on a future site to locate these services.

Design

The final design is substantially complete at this time. The DB process allows for design refinements, and that process will continue throughout the remainder of construction.

Right-of-Way (ROW) Acquisition

Construction of the Project impacts 288 properties, including 179 residential properties, 71 commercial/industrial properties, 37 public properties, and one railroad property. There are 287 properties identified as partial acquisitions and one property identified as a full acquisition at the owner's request. The ROW required to construct the Project is comprised of a combination of fee acquisitions, permanent easements, temporary construction easements, permanent and temporary ground lease reductions, and access control rights. This ROW is required for roadway and bridge construction, soundwalls and retaining walls, drainage systems, and for the installation of above ground and underground facilities, including electrical, telecommunication, water, sewer, gas, and storm drain systems.

The ROW acquisition program is on schedule. As of July 2020, OCTA has possession of the required property rights needed for all 288 property impacts, which retires a significant risk to OCTA. The overall ROW process continues as OCTA works with certain property owners to finalize remaining agreements on costs related to certain acquisitions. As this is a DB project, minor additional ROW needs may become necessary in the future as construction continues. Of the 288 total properties impacted, 288 offers were presented and the ROW is in OCTA's possession for construction. There were 60 resolutions of necessity (RONs) approved by the Board and no additional RONs are anticipated at this time.

Utility Relocations

There are currently 133 utilities that require relocation to accommodate the Project. OCTA is coordinating with 22 impacted utility owners to identify and resolve conflicts and relocation issues. To date, OCTA has executed 83 percent of the necessary utility relocation agreements and is in the process of finalizing the remaining utility agreements. There are several remaining potential utility relocation risks, including various Southern California Edison (SCE) facilities for which staff continues to develop and implement mitigation plans, as utilities are a shared risk between OCTA and OC405. Many critical utility relocations that had once been considered to pose some risk, such as facilities owned by Frontier Communications, Chevron USA, Crimson Pipeline, and SCE have been successfully completed. Additionally, a major Southern California Gas (SCG) pipeline relocation within the United States Navy property that posed a significant risk to the Project schedule has been successfully completed on schedule.

However, a new conflict along a different section of the same existing SCG gas line near Bolsa Chica Road was recently identified as a conflict by the design builder, and it has been determined that this portion of the existing facility cannot be protected in place and requires relocation. OCTA is taking an active role in coordinating this relocation with both the design builder and SCG to allow construction activities at this location to continue, and to mitigate any potential risks to the Project schedule.

Construction

OC405 began construction on March 6, 2018. Initial construction activities included restriping portions of the freeway and setting up concrete barriers on the outside of the freeway to protect work areas for activities such as tree removals and grading. These initial construction activities are complete. Clearing and grubbing, including tree and ground cover removal, and rough grading activities are also substantially complete at this time.

Significant roadway construction activities, including installation of drainage systems, retaining walls and soundwalls, and paving operations began in earnest in 2019, and will continue through the end of the Project. Construction at Oceanview Channel, Greenville-Banning Channel, and East Valley Channel, three major drainage facilities that cross under the freeway, is well underway. Additionally, over half of the retaining walls and soundwalls needed for the Project are currently under construction or complete.

After the opening of the Slater Avenue overcrossing bridge in the fall of 2019, demolition and construction activities commenced on Bushard Street and Talbert Avenue. The Bushard Street overcrossing bridge was completed and opened to traffic in October 2020. The Talbert Avenue overcrossing bridge construction is actively progressing, and the bridge is anticipated to be opened to traffic in the spring of this year. Construction on the McFadden Avenue overcrossing bridge also was completed, and the bridge was opened to traffic in October 2020. The Edwards Street overcrossing bridge began construction last fall and is anticipated to be opened to traffic late this year. Bushard Street, Talbert Avenue, McFadden Avenue, and Edwards Street are all one-stage bridges, which means the bridges are closed to traffic on both sides of I-405 during demolition and reconstruction.

Significant bridge construction also continued at Fairview Road, Magnolia Street, Bolsa Avenue, Goldenwest Street, Westminster Boulevard, and Bolsa Chica Road overcrossings. These are two-stage bridges, which means traffic is being maintained on the remaining portion of the bridge while the first half of the new bridge is constructed. The first half of the new Magnolia Street overcrossing bridge opened last March, and the full bridge is anticipated to be the first two-stage bridge to be opened to traffic this summer. Similarly, the first halves of the new Goldenwest Street and Bolsa Chica Road overcrossing bridges opened last

summer, and the full bridges are anticipated to be opened late this year. The first halves of the new Fairview Road, Bolsa Avenue, and Westminster Boulevard overcrossing bridges are all anticipated to be opened in the next several months.

This past quarter, the widening of existing freeway bridges continued over Harbor Boulevard, Santa Ana River, Beach Boulevard, Bolsa overhead railroad crossing, and an old United States Navy railroad crossing.

Lastly, the Heil pedestrian overcrossing bridge was demolished last fall and a new pedestrian overcrossing is under construction at this location and is anticipated to open to pedestrian traffic later this year.

Looking ahead, the remainder of 2021 will remain busy related to bridge, wall, and pavement construction.

Project Challenges

As would be expected on a project of this magnitude, certain challenges have been encountered, including the following:

- Oversight and approvals from many different agencies and third parties
- Cost and availability of construction resources in this active construction market
- Dispute resolution and change management
- Minimizing impacts and disruptions to the public
- Timely performance of third-party utility work
- Project schedule impacts and mitigations

Additionally, in September 2019, there was a discovery of archaeological resources within the Project site. OCTA is following established state procedures for this type of discovery, and is working with the responsible parties to ensure appropriate and respectful procedures are followed. This discovery impacted construction at a specific location; however, construction has since resumed.

OCTA has worked closely with its partners and OC405 to mitigate schedule delays when identified. Significant schedule mitigations have been implemented during the course of construction. These include expediting construction of several key bridges and extended overnight and daytime freeway lane closures to take advantage of the significantly reduced traffic volumes on the freeway last spring related to the coronavirus (COVID-19) pandemic. The objectives of the schedule mitigations are to minimize schedule delay impacts while balancing the minimization of traffic impacts.

Risks Remaining

Many of the Project risks have been realized during the design phase and the first half of construction and have since been retired. However, there are risks that remain for the second half of construction moving forward. The COVID-19 pandemic continues to be a risk as the effects and duration of the pandemic remain unknown. OCTA, its partners, and OC405 remain vigilant in taking the appropriate safety measures to minimize impacts to the workforce and construction progress. Additional archaeological discoveries also continue to be a risk as excavation in certain areas of the Project will take place in the next year. OCTA has taken a proactive approach with the appropriate stakeholders to minimize impacts if there are future discoveries. The timely relocation of utilities is always a risk and the team will remain very focused on these efforts. Lastly, the coordination near the end of the Project when Kapsch will be installing and testing the tolling equipment, at the same time OC405 will be completing construction, is key to remaining on schedule. Coordination efforts to plan for this timeframe at the end of the Project are ongoing and have been effective to date.

Project Cost and Schedule

The overall Project cost is \$2,080,234,000. The Project milestones for substantial completion and opening of the 405 Express Lanes are scheduled for late 2023.

Public Outreach

In 2020, the Outreach team pivoted to conduct all meetings with residents, business owners, and key stakeholders virtually because of the COVID-19 pandemic. The team held more than a dozen virtual community meetings, with more than 4,700 people participating live or viewing recordings afterward on OCTA's YouTube channel. Participation in these virtual meetings has outpaced that of in-person meetings by more than six to one. In addition, labor and other direct costs for virtual meetings are lower, allowing the team to conduct more meetings more frequently.

During 2020, the Outreach team fielded more than 1,600 comments and questions from the public, averaging more than 140 per month. That was a 40 percent increase over the monthly average for 2019, reflecting the rise in construction activity on the Project. Many of the calls and emails focus on construction activities, design questions, upcoming closures and maintenance concerns.

Bridge, roadway, ramp, and wall construction also required ramping up the use of Project emails, calls and text alerts, as well as distribution of flyers. These proven communications methods were the foundation of community

engagement efforts in 2020, with nearly 475,000 flyers distributed, 230 email alerts delivered, and 109 calls and text alerts.

The Outreach team continues to build the Project's online presence through its social media channels, its interactive map tied to the Waze navigation app, the 405 Improvement smartphone app, and the revamped Project website. In addition, the Outreach team has expanded its digital toolkit, adding location-based advertising on mobile devices and tablets to engage constituents in specific geographic areas with short, relevant messages about upcoming activities. These efforts over the last year have helped drive a nearly 50 percent increase in the number of subscribers to the Project database, which recently topped 15,000.

Looking ahead, the team anticipates a busy 2021, with construction continuing for many of the 18 bridge replacements, four bridges widenings, and several ramps.

Community meetings will focus on work beginning on the second halves of the Westminster Boulevard, Bolsa Avenue, and Fairview Road overcrossing bridges. Several focused neighborhood presentations will also be conducted to provide residents and business owners status updates on construction activities near them.

Later this year, it is anticipated the second half of the Magnolia Street bridge will open to traffic. This will be the first two-phase bridge on the Project to fully open, and the Outreach team is planning a unique event to mark this major milestone.

As the Project continues to advance, the team will continue to meet with diverse communities and other key stakeholders such as emergency responders, as well as project partners at each of the corridor cities and school districts.

Summary

Construction continues to advance. Currently, utility relocations, public outreach, and other activities are in process to continue the construction phase of the Project.

Attachment

None.

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