



**April 5, 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 approximately \$629 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 in April of this year.

**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. Also, later this year, OCTA staff will be presenting the Board 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. This location is separate from the TOC location as it needs to be readily accessible to the public for customer service purposes.

## 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 (RON) approved by the Board and no additional RONS are anticipated at this time.

## Utility Relocations

There are currently 132 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 85 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. A majority of the walls needed for the Project are anticipated to be complete by the end of 2021.

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 nearing completion, and the bridge is anticipated to be opened to traffic in April of this year. Construction on the McFadden Avenue overcrossing bridge also was completed, and the bridge was opened to traffic in October 2020. The Edinger Avenue and Edwards Street overcrossing bridges began construction in the second half of 2020. The Edwards Street overcrossing bridge is anticipated to be opened to traffic late this year. The Edinger Avenue overcrossing bridge is anticipated to be opened to traffic early next year. Slater Avenue, Bushard Street, Talbert Avenue, Edinger 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 the Fairview Road, Brookhurst Street, Magnolia Street, Bolsa Avenue, Goldenwest Street, Westminster Boulevard, and Bolsa Chica Road overcrossing bridges. 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 year, and the full bridge is anticipated to be the first two-stage bridge to be opened to traffic early 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 early next year. The first halves of the new Fairview Road and Westminster Boulevard overcrossing bridges opened in the last few months, and the full bridges are anticipated to be opened early next year. The first half of the Bolsa Avenue overcrossing bridge is anticipated to be opened this summer, and the full bridge is anticipated to be opened later next year. Construction on the first half of the Brookhurst Street overcrossing bridge began late last year.

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 the last several months, the OCTA Outreach team has conducted six virtual meetings with community members along the Project corridor, as well as with key stakeholders such as OCTA's Diverse Community Leaders Group. An average of 100 people participate in each of the virtual meetings, double the average number of participants at past in-person meetings. The Outreach team will continue to utilize virtual meetings, with a phone-in option for those who do not have online access, as a crucial tool to extend the reach of Project communications.

Virtual meetings allow the team to hold more meetings more frequently, providing opportunities to engage the larger community regarding major activities like bridge demolition, as well as connect with smaller groups to provide construction status updates.

From December 1, 2020 to February 28, 2021, the team received an average of about 90 comments and questions per month from the public, a decrease from the monthly average for 2020. The calls and emails focus on construction activities, bridge and interchange design, maintenance inquiries, and schedule questions.

During this three-month period, there was a 50 percent increase in the use of the Project's interactive map of closures and detours, as traffic volume picked up. Meanwhile, the team continues to utilize proven communication methods, distributing an average of approximately 40,000 flyers each month, and sending out an average of 35 email alerts. Social media and location-based advertising, which deliver short, relevant messages about upcoming activities to mobile devices in specific geographic areas, continue to be cost-effective methods to reach a broad audience. These tools encourage new subscribers to join the Project email database.

In the next three months, the team has another five neighborhood meetings planned to discuss major activities at Ward Street, Bolsa Avenue, and Warner Avenue, and to provide status updates on work at Beach Boulevard and Edwards Street. In addition, the team will hold several focused presentations with smaller groups of residents and business owners to discuss activities occurring adjacent to the groups' properties and businesses.

The team also is focusing on additional strategies to reach diverse and disadvantaged communities throughout the Project corridor. The core element of this effort is partnering with several community-based groups and faith-based organizations that serve the County's diverse populations. These partnerships will be the foundation for additional proactive, culturally sensitive outreach to notify these communities about construction activities and impacts.

Meanwhile, the team will continue coordinating closely with residents living along the freeway whose properties are directly impacted by construction activities such as wall and bridge construction. In the last three months, the team has facilitated more than 60 pre- and post-construction surveys and worked with another 60 property owners who have temporary construction easements. These sensitive activities require a significant level of coordination between the OCTA Outreach and ROW teams and the contractor to ensure easement conditions are met and residents' concerns are addressed.

Next month, the second half of the Magnolia Street bridge is anticipated to open to traffic. This will be the first two-stage bridge on the Project to fully open, and the Outreach team is working on plans to commemorate the milestone.

**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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