

June 5, 2023

То:	Regional Transportation Planning 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

The Project is approximately 95 percent complete from a DB perspective. A number of activities are ongoing as 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's Build America Bureau (Bureau) for up to approximately \$629 million. In October 2020, OCTA staff received Board approval to pursue a reset of the interest rate on the TIFIA loan. After approximately one year of working with the Bureau, OCTA successfully executed a new TIFIA loan agreement with the Bureau on September 9, 2021, establishing OCTA as the first agency to close a rate reset loan for a TIFIA loan that had been drawn upon. As part of the new TIFIA loan, the interest rate was reset from 2.91 percent to 1.95 percent. The lower interest rate will result in a net present value savings of approximately \$158 million. In December 2022, OCTA received the full disbursement from the Bureau as requested by OCTA.

Tolling Contracts

In early 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 OC405 to deliver fully functional express lanes upon opening in late 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 has begun installing elements of the ETTM equipment at sites completed by OC405 and continues to coordinate activities related to ETTM site infrastructure and turnover for the remainder of the ETTM sites currently being completed by OC405. The Traffic Operations Center (TOC) will be located at OCTA's Santa Ana Bus Base and will be staffed by Kapsch for 405 Express Lanes operations. The TOC improvements at the Santa Ana Bus Base are complete and the facility has been turned over to Kapsch for furniture and equipment installation and to prepare for installation and testing of the 405 Express Lanes.

In late 2021, the Board selected WSP USA Services, Inc., (WSP) to provide back-office system and customer service center operations for the 405 Express Lanes. Over the past several months, WSP has continued the development of project documentation, functional requirements of the back-office system, and will begin testing of the software systems. The software development has been split into two phases. The first phase includes core functionalities required for opening day, such as transaction processing for transponders and license plates. The second phase includes those areas of the system that can be

deferred until after the opening of the facility, such as collections processing, since these transactions need to age at least 90 days to be eligible for collections. Additionally, WSP continues to work closely with OCTA on the required equipment for the Customer Service and Operations Center (CSOC).

Also in late 2021, the Board authorized the Chief Executive Officer to negotiate and execute a lease with C.J. Segerstrom & Sons for the 405 Express Lanes CSOC. The lease was executed in February 2022. The CSOC will house both a customer service walk-up center, as well as the call center and other support for the 405 Express Lanes. This location is separate from the TOC location as it needs to be readily accessible to the public for customer and motorist service purposes. Tenant improvements at the CSOC were recently completed.

In March 2023, the Board selected Stantec Consulting Services, Inc., to provide traffic and revenue services for the 405 Express Lanes. These services include providing opening day toll rate schedules, post-opening day monitoring and support, and a short-term forecast. The opening day toll rate schedules will be provided to the Board in summer 2023.

In terms of marketing for the 405 Express Lanes, staff has begun the development of the logo and branding, as well as several awareness elements, including multi-lingual brochures, social media advertising, and website development.

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. Since July 2020, OCTA has had possession of the required property rights for all 288 property impacts, which retired a significant risk to OCTA. The overall ROW process continues as OCTA works with property owners to close temporary construction easements and also 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.

Utility Relocations

There are currently 146 utilities that require relocation to accommodate the Project. OCTA has been coordinating with 24 impacted utility owners to identify and resolve conflicts and relocation issues. To date, OCTA has executed 94 percent of the necessary utility relocation agreements and is in the process of finalizing the remaining utility agreements. There are a handful of remaining potential utility relocation risks, including Southern California Edison (SCE) facilities, as well as a system of overhead and underground facilities in the City of Seal Beach belonging to Frontier Communications, 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 previously been considered to pose some risk, such as facilities owned by Frontier Communications, Chevron USA, Crimson Pipeline, Southern California Gas Company, and SCE have been successfully completed. OCTA continues to take an active role in coordinating utility relocations with both OC405 and utility owners, including coordinating construction schedules to ensure that utility construction activities are completed in a timely manner to mitigate any potential risks to the project schedule.

Roadway and Wall Construction

OC405 began construction in March 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 clearing and grubbing, including tree and ground cover removal, and grading. These initial construction activities are complete.

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 is substantially complete on all Orange County Flood Control District facilities which required improvements associated with the Project, including the Bixby, East Garden Grove Wintersburg, Fountain Valley, Gisler, Greenville Banning, Milan, Montecito, Newland, Ocean View, and Santa Ana River channels. The

only exception is the Montecito channel, which will be completed this summer. Additionally, over 95 percent of the paving operations, retaining walls and soundwalls, and on- and off-ramps are currently complete.

Bridge Construction

The Project includes the replacement of 18 bridges that cross over the freeway within the project limits. Bridges that are being replaced are being reconstructed in either one or two stages. Bridges being built in one stage are closed to traffic on both sides of I-405 during demolition and reconstruction of that bridge, and traffic is detoured to other adjacent bridges crossing the freeway. Bridges being built in two stages maintain traffic on a portion of the existing bridge while the new bridge is being constructed.

Currently, 11 of the 18 bridge replacements have been completed and opened to traffic. Following is a table summary of the completed and anticipated openings of the Project's 18 bridges that cross over the freeway and require replacement:

Overcrossing Bridge	Number of Stages	Anticipated Opening Date	
Bolsa Chica Road	Two	Open	
Springdale Street	One		July 2023
Westminster Boulevard	Two	Open	
Edwards Street	One	Open	
Goldenwest Street	Two		June 2023
Bolsa Avenue	Two		July 2023
McFadden Avenue	One	Open	
Edinger Avenue	One	Open	
Newland Street	One		August 2023
Heil Avenue (pedestrian)	One	Open	
Magnolia Street	Two	Open	
Warner Avenue	One		June 2023
Bushard Street	One	Open	
Slater Avenue	One	Open	
Brookhurst Street	Two		June 2023
Talbert Avenue	One	Open	
Ward Street	One		August 2023
Fairview Road	Two	Open	

In addition to the bridge replacements noted above, the widening of four existing freeway bridges and construction of three new on-ramp bridges continued over Beach Boulevard, Bolsa overhead railroad crossing, Harbor Boulevard, Santa Ana River, and an old United States Navy railroad crossing. Lastly, the construction of the new connector between the medians of I-405 and SR-73 that

will connect the 405 Express Lanes to SR-73 is anticipated to be complete this summer.

Looking ahead, the second half of 2023 will remain busy related to completing the bridge, wall, paving, and tolling work.

Risks Remaining

Many of the project risks that were realized to date on the Project have since been retired. However, there are risks for the remaining construction moving forward. From a DB standpoint, the primary risks remaining include a force majeure event or OCTA-directed changes in the scope of work. From a tolling standpoint, the coordination between OC405 and Kapsch is critical as Kapsch is currently installing the tolling equipment and will begin testing the equipment in the near future while OC405 is finishing their work as well. There are schedule risks associated with Kapsch's equipment installation and testing as they are currently behind schedule and exploring ways to recover the schedule delays. Lastly, WSP's development of the tolling back-office system is also key to remaining on schedule for the opening of the 405 Express Lanes in late 2023.

Project Cost and Schedule

The overall project cost is approximately \$2.16 billion. The project milestones for substantial completion and opening of the 405 Express Lanes are planned for late 2023.

Public Outreach

In 2023, the outreach team has continued to notify the public about construction activities, major milestones, and project benefits as part of the public awareness campaign.

In the first quarter of 2023, the outreach team responded to 523 public inquiries, an average of 174 per month. Inquiries have typically focused on construction activities, bridge opening schedule questions, and maintenance concerns, which increased due to the major rain events that occurred this winter. In addition, the team has also begun to see an increase in questions and comments regarding the 405 Express Lanes. The team continues to collaborate with the Project's technical team, the Express Lanes operations team, and Marketing to provide timely and accurate responses to these inquiries. As new information becomes available, we are also updating the 405 Express Lanes project collateral such as the list of frequently asked questions.

The team continues to utilize a range of electronic communication methods to share project activities such as utility, paving and landscaping work, and related local street closures and detours, and to highlight significant milestones. Between January 2023 and March 2023, 46 construction and special alerts were emailed to more than 13,500 subscribers with an average open rate of 45 percent, which continues to be well above the industry average of 27 percent. Social media continues to be a cost-effective method for communicating project activities. The team reached approximately 184,500 viewers on Facebook, Twitter, and Instagram combined between January 2023 and March 2023. These efforts continue to drive traffic to the project website, with page views averaging 7,284 per month, an increase of ten percent over the last quarter of 2022.

The team continues to reach out to diverse and disadvantaged communities throughout the project corridor, connecting with our partners at community- and faith-based organizations. For example, in April 2023 the team attended an Orange County Hispanic Chamber of Commerce event featuring local nonprofits groups that support Latino communities in underserved populations. Additionally, we continue to promote local Vietnamese and Latino businesses through our 405 Forward business support programs.

Recently, the Project received an EPIC award from the California Association of Public Information Officers for the "Inside the 405" video series launched in 2022. The award recognizes the most creative and effective video communication efforts for engaging the public. The nine-episode series highlighted key project benefits and accomplishments. All episodes were launched between February 2022 and April 2022 and have garnered more than 41,000 views to date. The series also featured in-language updates for our Vietnamese and Latino communities.

In the coming months, the team anticipates participating in community events such as Westminster's Safety Day, where we will highlight project milestones, share the status of activities for the remaining bridges under construction, and provide updates on the 405 Express Lanes.

Summary

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

Attachment

None.

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