November 9, 2017

To: Transit Committee

From: Darrell Johnson, Chief Executive Officer

Subject: Rail Programs and Facilities Engineering Quarterly Report

Overview

The Rail Programs and Facilities Engineering departments are responsible for the Orange County Transportation Authority's rail project development, rail capital programs, rail operations, OC Streetcar, and transit facilities engineering projects. This report provides an update on rail and facilities engineering programs through the first quarter (July, August, and September) of fiscal year 2017-18.

Recommendation

Receive and file as an information item.

Background

The Rail Programs and Facilities Engineering departments (Departments) are responsible for implementing the Orange County Transportation Authority's (OCTA) railroad capital projects, including station parking enhancements and expansions, new station developments, expanded rail services, OC Streetcar, and transit facilities engineering. Additionally, the Departments are responsible for improved and expanded operations of Orange County's rail system by providing rail service that supports and matches the growth and development patterns of Orange County and the region.

Discussion

The report provides an update on the Departments' programs and projects, including Rail Capital, Transit Extensions to Metrolink, Rail Operations, and Transit Facilities Engineering.

Rail Capital

Rail Capital projects include a wide range of projects necessary to sustain existing passenger rail services and support future increases in service. This includes new station developments, station parking expansions and enhancements, grade separations and grade crossing enhancements, and various other track and infrastructure projects.

Station Improvements

The Laguna Niguel/Mission Viejo Metrolink Station Improvements project construction was completed on September 20, 2017. The Project provides Americans with Disabilities Act (ADA)-compliant access ramps that replaced the existing elevators. The existing elevators were out of service prior to construction, and bus service was required to transport passengers in wheelchairs from one side of the station to the other. The existing elevator rooms were converted into a restroom, a vending machine, and storage rooms. The project's scope also included additional benches, shade structures, and relocation of the Moulton Niguel Water District's 33-inch sewer line, which was in conflict with the project. The construction notice to proceed (NTP) was issued on February 23, 2016. The contractor was able to open the east side ADA ramps to the public on August 25, 2017, and all the remaining facilities by September 12, 2017.

The Orange Transportation Center parking structure project represents a long-standing effort between the City of Orange and OCTA to increase the parking capacity to accommodate future growth in ridership of the Metrolink system. Per a cooperative agreement between OCTA and the City of Orange, the City of Orange is the lead on the design phase, and OCTA is the lead on the construction phase of the project. A groundbreaking ceremony was held on July 26, 2017. During excavation, contaminated soils were encountered which needed to be removed. A change order was presented to the Board of Directors (Board) for the necessary removal work. The January 2019 project completion date is not expected to be impacted.

The proposed Placentia Metrolink Station will be located on the BNSF Railway (BNSF) and City of Placentia-owned right-of-way (ROW). The station will include platforms, parking, a new bus stop, and passenger amenities. OCTA is the lead for design and construction of the project. Previously completed design plans are being revised to include a parking structure in lieu of surface parking. The project will also include a third track which should assist with the on-time performance of train operations and provide operational flexibility for both freight and passenger trains. BNSF will be the lead on the rail construction. An operations and maintenance agreement with BNSF for the work will need to be in place before a contract for construction is awarded. The

plans are anticipated to be complete and will be advertised for bid in April 2018, with an anticipated completion date of February 2020, pending the BNSF agreement is in place.

The Anaheim Canyon Metrolink Station Improvement project includes the addition of a second station track, platform, and passenger amenities, including ticket vending machines, benches, canopies, and signage. The existing platform will also be extended to accommodate longer train consists. OCTA is the lead agency on all phases of project development, including construction. Preliminary engineering (30 percent plans) and the California Environmental Quality Act (CEQA) clearance was obtained in January 2017, and the National Environmental Policy Act (NEPA) clearance was obtained in June 2017. Final selection of HNTB Corporation to prepare final plans, specifications, and estimates was approved by the Board on August 14, 2017, and construction is expected to begin in June 2019 and be completed in August 2020.

The City of Fullerton is the lead agency on a project to add an elevator tower to each side of the existing railroad pedestrian bridge at the Fullerton Transportation Center and modify the restrooms to be ADA compliant. The City of Fullerton issued the construction NTP in January 2016, and renovations to the restrooms have been completed. The contractor has experienced significant delays on the elevator work due to subcontractor issues and dry utility conflicts. The City of Fullerton is now estimating the completion of the project to be September 2018.

Rail Corridor Improvements

Rail corridor improvements consist of capital and rehabilitation projects that improve the safety, operations, or reliability of the rail infrastructure. OCTA owns approximately 48 miles of operating railroad.

There are currently six grade separation projects along the Los Angeles – San Diego – San Luis Obispo (LOSSAN) rail corridor that have completed the project study reports or environmental clearance and are not currently advancing due to lack of funding for subsequent phases.

The 17th Street Grade Separation project is progressing through the environmental clearance phase. The project report equivalent document was reviewed and approved by the stakeholders. The City of Santa Ana provided a CEQA statutory exemption determination for the project. With the California Department of Transportation (Caltrans) working with OCTA, both agencies reviewed the revised Finding of Effects document and submitted it to the Office of Historic Preservation (OHP) for review and concurrence. On October 5, 2017, Caltrans received a letter of concurrence from OHP on the Finding of No Adverse Effect. Caltrans requested a letter to document the

preliminary Section 4(f) *de minimis* impact determination. Section 4(f) of the Department of Transportation Act (49 USC 303) of 1966 prohibits the use of land from a historic site of national, state, or local significance. Upon completion of the requested documentation, Caltrans will complete the documents requested for categorical exclusion. The environmental phase is anticipated to be completed in November 2017.

The Laguna Niguel to San Juan Capistrano passing siding project will add approximately 1.8 miles of new passing siding railroad track adjacent to the existing mainline track. The project will enhance operational efficiency of passenger services within the LOSSAN rail corridor. Proposed modifications to the existing Rancho Capistrano private crossing, associated with the addition of passing track, were discussed with all the stakeholders, including the California Public Utilities Commission (CPUC). Alternatives to address concerns raised by the CPUC have been developed in coordination with the stakeholders. Staff met with the CPUC to discuss concerns regarding the private crossing and recently received an NTP with the proposed design. The completion of project design is anticipated to be December 2017 and advertisement for construction by February 2018. All advance utility relocation activities were completed in June 2017.

The San Juan Creek railroad bridge in the City of San Juan Capistrano was built in 1917. The existing 300-foot long bridge carries a single mainline track for passenger and freight rail traffic over San Juan Creek and is in need of replacement. The replacement bridge will be constructed adjacent to the existing bridge to minimize disruption of rail traffic. Additionally, the new railroad bridge will incorporate a future bikeway underpass on the south end of the track along the creek. OCTA and Metrolink are working with the County of Orange to develop a cooperative agreement to identify the roles, responsibilities, and funding to design and construct the future bikeway underpass to enhance the County of Orange's network of trails and bikeways. Metrolink is the overall project lead, and OCTA is the ROW lead. The draft Documented Categorical Exclusion was submitted to the Federal Transit Administration (FTA) for review and concurrence in compliance with NEPA. The project received revised CEQA clearance in May 2017. The Board approved the authority to obtain the necessary ROW for the project in June 2017. The preliminary ROW acquisition schedule is anticipated to be 18 months and construction ready by the third quarter 2018. The project budget is $38.3 million based on the 60 percent design estimates. The Southern California Regional Rail Authority (SCRRA) is currently advancing the design to 90 percent completion by November 2017.

The Control Point (CP) Fourth project is located in the City of Santa Ana between Fourth Street and Chestnut Avenue, between mile posts 175.45 and 175.80. Metrolink operations utilize Centralize Traffic Control (a train traffic control system) in which a dispatcher controls the railroad traffic through the use of

signal blocks. A CP is a set of railroad signals and switches controlled by the dispatcher and authorizes a train to proceed or stop within the block of track it controls. The project includes installation of a turnout to a Union Pacific Railroad spur track, along with related civil, signal, and communication modifications and improvements. The project will provide rail operational efficiencies. On June 13, 2016, the Board approved a cooperative agreement with SCRRA to define the roles, responsibilities, and the funding requirements of the project. SCRRA began the removal of existing spur track and installation of a new track up to the new CP. A new turnout was installed in August 2017. SCRRA completed an agreement with Union Pacific Railroad on future maintenance responsibilities. Signal house, cables, and other related items will begin installation in late October 2017 to early November 2017. The project is expected to be complete by February 2018.

The Slope Stabilization project includes eight locations within OCTA-owned operating railroad ROW that have been identified for improvements to prevent erosion and slope instability. In September 2017, the OCTA design consultant submitted 100 percent design plans. In coordination with SCRRA, staff divided the plans into two sets. The first set will include four locations that require work on or in close proximity to the railroad. Due to the type of work and equipment necessary to perform the work, OCTA will enter into a cooperative agreement with SCRRA to complete these locations. OCTA will issue an invitation for bid (IFB), scheduled for release in December 2017, to complete the remaining locations.

Metrolink continues the implementation of positive train control (PTC) throughout the system. On October 16, 2017, Metrolink commenced interoperable PTC revenue service operations with BNSF. Over the coming weeks, Metrolink is expanding the PTC safety benefits to all of the 47 daily Metrolink trains that run over BNSF lines, as well as the Union Pacific Railroad, Amtrak, and the North County Transit District in 2018, depending on the PTC deployment status of those railroads.

<u>Transit Extensions to Metrolink: OC Streetcar</u>

The Transit Extensions to Metrolink Program is intended to broaden the reach of Orange County's backbone rail system to key employment, population, and activity centers. The OC Streetcar project will serve the Santa Ana Regional Transportation Center (SARTC) through downtown Santa Ana and the Civic Center to Harbor Boulevard in the City of Garden Grove.

During the reporting period, the design firm responded to comments by OCTA, the cities of Santa Ana and Garden Grove, and other project stakeholders on the 90 percent design plans for the streetcar infrastructure and facilities. The design firm also initiated its internal quality assurance review of the design plans with

oversight by OCTA's quality assurance manager. Upon completion of the designer's internal audit, OCTA will conduct an audit of plans and specifications prior to the IFB release. Work is proceeding on preparation of the procurement documents for the construction IFB, including responding to questions from potential bidders on the pre-qualification process. The IFB is scheduled to be released in November 2017.

Work was finalized on a series of technical project readiness documents and financial plans with FTA's Project Management Oversight Consultant (PMOC). Approval on project readiness from FTA's PMOC is expected in October 2017. The approval is the final step prior to the negotiation and approval of a Full Funding Grant Agreement.

Terms for utility relocation were agreed upon with the two remaining utility companies needed for the project (Southern California Edison [SCE] and the Orange County Sanitation District [OCSD]). These agreed-upon terms will be reflected in letters of intent to be approved by SCE and OCSD in October 2017. With the City of Santa Ana approving the resolution of necessity last quarter for the properties required for the maintenance and storage facility, the eminent domain proceedings were initiated and continued during the current reporting period. Negotiations continued with property owners for relocation assistance for the residential and commercial tenants. Staff continued to coordinate with representatives of the Orange County Flood Control District and the Army Corp of Engineers to obtain the permits required for the Santa Ana River Bridge.

Staff met with the CPUC and conducted a thorough field diagnostic review of the alignment. The CPUC made several requests for additional project safety modifications such as raised medians and protected left turns. CPUC approval of the grade crossings is required prior to the initiation of the construction work.

The vehicle manufacturing and delivery procurement continued with interviews of proposers conducted in September 2017. A best and final offer request will be issued in October 2017, with a contract award anticipated for February 2018.

Work continued on development of the scope of services for the operations and maintenance contractor. OCTA is hosting an industry forum in November 2017 as an opportunity to gain industry input on the scope of services for potential inclusion into the procurement.

Rail Operations

As one of five member agencies that comprise Metrolink, OCTA participates in the design and operation of Metrolink service in Orange County. Rail Operations staff serve as the liaison with Metrolink and are involved in route and service planning, funding, and implementation. In addition to coordination of daily

Metrolink operations, the team coordinates the StationLink service, special trains, promotional activities, and outreach.

- The 2017 Metrolink Angels Express service ended on September 29, 2017, with just over 39,000 boardings; eight percent below the 2016 service. The Mobile Source Air Pollution Reduction Review Committee grant funded program served 54 weekday home games on the Orange County Line, including 15 Friday night games on the Inland Empire – Orange County (IEOC) Line, with an extension from Perris Valley.

- Metrolink has received 13 of 40 new Tier 4 clean emissions locomotives, with 20 more expected by the end of the calendar year. The first locomotive was operated in revenue service on October 12, 2017, and additional units are anticipated to be in service in the coming weeks.

- Mobile ticketing is completely functional and is available via the Metrolink app, with over 20 percent of Metrolink passengers systemwide as users. Almost half of the passengers on the IEOC Line use the app exclusively, mainly because there is no transfer in Los Angeles. Metrolink plans to fully integrate transfers through the Los Angeles County Metropolitan Transportation Authority transit access pass system with the installation of optical readers by December 2017. The beta version of the online ticket sales was launched at the end of September 2017 and is available on metrolinktrains.com. This initial version allows for a customer to buy a ticket online and display the ticket in the mobile app. The print-at-home feature is expected to launch in April 2018.

Metrolink performance data (ridership and revenue) for the first quarter of fiscal year (FY) 2017-18 will be made available in the next quarterly report to the Board.

Rail Operations staff also represents OCTA's interests in the LOSSAN Joint Powers Authority, including the ongoing coordination and service integration efforts on the LOSSAN rail corridor.

Transit Facilities Engineering

Transit Facilities Engineering is responsible for the development and implementation of capital rehabilitation, facility modifications, and new capital projects for all OCTA transit facilities, including the five bus bases and seven park-and-ride lots. Design is underway on seven projects, including facility modifications for the ten hydrogen bus demonstration projects at the Santa Ana Bus Base, video surveillance system replacement at the Garden Grove and Santa Ana bus bases, liquid hydrogen fueling station utilities

at the Santa Ana Bus Base, preliminary engineering and environmental clearance for the proposed Transit Security Operations Center, and facilities condition assessment at all transit facilities. Design was completed on two projects, including minor rehabilitation of the bus dock platform at the Fullerton Park-and-Ride, and bus wash building metal framing and siding repairs at the Irvine Construction Circle (ICC) Bus Base.

There are five projects in the bid phase for construction, including removal of liquefied natural gas underground storage tanks at the Anaheim and Garden Grove bus bases, bus yard pavement striping and markings at the Garden Grove Bus Base, and the hydrogen fueling station at the Santa Ana Bus Base funded by California Air Resources Board as part of a ten hydrogen bus demonstration project. The bid process started on two projects including the bus wash building repair project at the ICC Bus Base and minor rehabilitation of the bus dock platform at the Fullerton Park-and-Ride.

Five projects were under construction this period, including the vehicle inspection station equipment canopy at the Garden Grove Bus Base, bus wash water run-off mitigation modifications at all bus bases, and replacement of heating and ventilation units at the Garden Grove Bus Base maintenance shop. Construction started on one new project, the hydrogen gas detection upgrades at the Santa Ana Bus Base for the single hydrogen bus demonstration project. The fence repair and bus parking stall wheel stops at the Anaheim Bus Base were completed on August 31, 2017.

Summary

The Departments are responsible for OCTA's rail project development, rail capital improvement programs, rail operations, and transit facilities engineering projects. For the period covering the first quarter of FY 2017-18, projects generally progressed consistent with scope and schedule.

Attachment

None.

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