

Orange County Transportation Authority

Board Agenda Monday, October 13, 2025 at 9:30 a.m.

550 South Main Street, Orange, California

Board Members

Doug Chaffee, Chair Jamey M. Federico, Vice Chair Valerie Amezcua Katrina Folev William Go Patrick Harper Michael Hennessey Fred Jung Stephanie Klopfenstein Carlos A. Leon Janet Nguyen Tam T. Nguyen Vicente Sarmiento John Stephens Kathy Tavoularis Mark Tettemer Donald P. Wagner Lan Zhou, Ex-Officio

Accessibility

Any person with a disability who requires a modification or accommodation in order to participate in this meeting should contact the Orange County Transportation Authority (OCTA) Clerk of the Board's office at (714) 560-5676, no less than two business days prior to this meeting to enable OCTA to make reasonable arrangements to assure accessibility to this meeting.

Agenda Descriptions

Agenda descriptions are intended to give members of the public a general summary of items of business to be transacted or discussed. The posting of the recommended actions does not indicate what action will be taken. The Board may take any action which it deems to be appropriate on the agenda item and is not limited in any way by the notice of the recommended action.

Public Availability of Agenda Materials

All documents relative to the items referenced in this agenda are available for public inspection at www.octa.net or through the Clerk of the Board's office at the OCTA Headquarters, 600 South Main Street, Orange, California.

Meeting Access and Public Comments on Agenda Items

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In-Person Comment

Members of the public may attend in-person and address the Board regarding any item within the subject matter jurisdiction of OCTA. Please complete a speaker's card and submit it to the Clerk of the Board and notify the Clerk regarding the agenda item number on which you wish to speak. Speakers will be recognized by the Chair at the time of the agenda item is to be considered by the Board. Comments will be limited to three minutes. The Brown Act prohibits the Board from either discussing or taking action on any non-agendized items.

Written Comment

Written public comments may also be submitted by emailing them to ClerkOffice@octa.net, and must be sent by 5:00 p.m. the day prior to the meeting. If you wish to comment on a specific agenda Item, please identify the Item number in your email. All public comments that are timely received will be part of the public record and distributed to the Board. Public comments will be made available to the public upon request.

Call to Order

Invocation

Director Amezcua

Pledge of Allegiance

Director Go

1. Closed Session

Overview

A Closed Session will be held as follows:

Pursuant to Government Code Section 54957.6 to discuss negotiations with Teamsters Local 952 regarding the maintenance unit. The lead negotiator for the Orange County Transportation Authority is Maggie McJilton, Executive Director of People and Community Engagement and Teamsters Local 952 representative.

Special Calendar

Orange County Local Transportation Authority Special Calendar Matters

2. Update on Emergency Need for Railroad Track Stabilization in the Vicinity of Mile Post 203.83 to 204.40 and 206.00 to 206.70 on the Orange Subdivision

Jason Lee/James G. Beil

Overview

The four reinforcement areas identified in the Coastal Rail Resiliency Study adjacent to the Orange County Transportation Authority-owned railroad right-of-way, in the vicinity of Mile Post 203.83 to 204.40 and 206.00 to 206.70 on the Orange Subdivision, have continued to experience coastal erosion and the hillside continues to move incrementally, posing an imminent threat to the railroad corridor and public safety if immediate necessary actions are not taken to mitigate the threat. Measures must be taken immediately to stabilize the track and maintain passenger and freight rail service.

Recommendation(s)

Reaffirm Resolution No. 2025-068 and authorize the Chief Executive Officer to take all necessary actions to address the emergency need for railroad track stabilization in the vicinity of Mile Post 203.80 to 204.40 and 206.00 to 206.70 on the Orange Subdivision, and to return to the Board of Directors, as required, to report on the status thereof.

Attachments:

Presentation

Consent Calendar (Items 3 through 11)

All matters on the Consent Calendar are to be approved in one motion unless a Board Member or a member of the public requests separate action on a specific item.

Orange County Transportation Authority Consent Calendar Matters

3. Approval of Minutes

Clerk of the Board

Recommendation(s)

Approve the minutes of the September 22, 2025 Orange County Transportation Authority and affiliated agencies' regular meeting.

Attachments:

<u>Minutes</u>

4. Approval to Release Request for Proposals for Harbor Boulevard Transit Signal Priority Deployment

Alicia Yang/Rose Casey

Overview

The Orange County Transportation Authority has developed a request for proposals to initiate a competitive procurement process to retain consultant services for the deployment of a transit signal priority solution that includes software, signal equipment, and system integration. The project will focus on the OC Bus Rapid 543 service and will encompass 52 signalized intersections along Harbor Boulevard.

Recommendation(s)

- A. Approve the proposed evaluation criteria and weightings for Request for Proposals 250014 for the selection of a consultant to deliver the Harbor Boulevard Transit Signal Priority Deployment.
- B. Approve the release of Request for Proposals 250014 for consultant services to deliver the Harbor Boulevard Transit Signal Priority Deployment.

Attachments:

Staff Report
Attachment A

5. Coastal Rail Resiliency Study Update

Rebekah Soto/Rose Casey

Overview

The Orange County Transportation Authority initiated the Coastal Rail Resiliency Study in fall 2023, focusing on both short- and mid-term solutions to protect the rail line and preserve rail operations. Through this study, staff has developed Alternative Concepts that would protect the rail line in place for up to 30 years. An update on the refined Alternative Concepts for the Coastal Rail Resiliency Study and a summary of the public meetings hosted in July 2025 is provided herein.

Recommendation(s)

Direct staff to advance the study with the refined range of Alternative Concepts, continue collaborating with key stakeholders for further analysis, and actively engage the public to solicit input.

Attachments:

<u>Transmittal</u>

Staff Report

Attachment A

Attachment B

Attachment C

Presentation

6. Amendments to the Master Plan of Arterial Highways

Ivy Hang/Rose Casey

Overview

The Orange County Transportation Authority administers the Master Plan of Arterial Highways, including the review and approval of amendments requested by local agencies. The cities of Dana Point and Laguna Niguel have requested amendments to the Master Plan of Arterial Highways that are recommended for approval. A status update is also provided on Master Plan of Arterial Highways amendments that are in process.

Recommendation(s)

- A. Conditionally approve the following amendments to the Master Plan of Arterial Highways:
 - City of Dana Point Modify ten MPAH arterials within City of Dana Point city limits as discussed herein.
 - City of Laguna Niguel Reclassify La Paz Road from a primary (four-lane, divided) to a divided collector (two-lane, divided) arterial between Aliso Creek Road and Crown Valley Parkway.
- B. Direct the Executive Director of Planning to file a Notice of Exemption from the California Environmental Quality Act for the Master Plan of Arterial Highways amendments in the City of Dana Point.
- C. Direct the Executive Director of Planning to file a Notice of Exemption from the California Environmental Quality Act in support of the Master Plan of Arterial Highways amendment in the City of Laguna Niguel.
- D. Receive and file a status report on the active Master Plan of Arterial Highways amendments.

Attachments:

Transmittal

Staff Report

Attachment A

Attachment B

Attachment C

Attachment D

Attachment E

7. 2026 State Transportation Improvement Program

Ben Ku/Rose Casey

Overview

Every two years, the Orange County Transportation Authority develops a program of projects for funding through the State Transportation Improvement Program based on Board of Directors' approved policies and state guidelines. Project recommendations for the 2026 program are presented for Board of Directors' consideration and approval.

Recommendation(s)

- A. Approve the 2026 State Transportation Improvement Program submittal of eight projects for \$151.742 million, from fiscal year 2026-27 through fiscal year 2030-31.
- B. Authorize staff to make all necessary amendments to the State Transportation Improvement Program and the Federal Transportation Improvement Program and execute any necessary agreements to facilitate the recommendations above.

Attachments:

Transmittal

Staff Report

Attachment A

Attachment B

Attachment C

Attachment D

Attachment E

Orange County Local Transportation Authority Consent Calendar Matters

8. Contract Change Orders for Construction of the OC Streetcar Project

Jeff Mills/James G. Beil

Overview

On September 24, 2018, the Orange County Transportation Authority Board of Directors authorized Agreement No. C-7-1904 with Walsh Construction Company II, LLC, for construction of the OC Streetcar Project. Contract change orders are required for additional compensation for maintenance and storage facility access control system installation support, maintenance and storage facility service inspection pit safety enhancements, additional work to implement an accelerated schedule, public conveyance and safety enhancements, overhead contact system modifications, modifications to miscellaneous maintenance and storage facility systems, maintenance and storage facility mezzanine fall protection modifications, overhead contact system adjustments, and train signal control modifications.

Recommendation(s)

A. Authorize the Chief Executive Officer to negotiate and execute Contract Change Order No. 89.2 to Agreement No. C-7-1904 with Walsh Construction Company II,

BOARD MEETING AGENDA

LLC, in the amount of \$350,000, for maintenance and storage facility access control system installation support.

- B. Authorize the Chief Executive Officer to negotiate and execute Contract Change Order No. 248 to Agreement No. C-7-1904 with Walsh Construction Company II, LLC, in the amount of \$350,000, for maintenance and storage facility service and inspection pit safety enhancements.
- C. Authorize the Chief Executive Officer to negotiate and execute Contract Change Order No. 251.1 to Agreement No. C-7-1904 with Walsh Construction Company II, LLC, in the amount of \$1,100,000, for additional work to implement an accelerated schedule.
- D. Authorize the Chief Executive Officer to negotiate and execute Contract Change Order No. 252.1 to Agreement No. C-7-1904 with Walsh Construction Company II, LLC, in the amount of \$250,000, for public conveyance and safety enhancements.
- E. Authorize the Chief Executive Officer to negotiate and execute Contract Change Order No. 255.1 to Agreement No. C-7-1904 with Walsh Construction Company II, LLC, in the amount of \$350,000, for overhead contact system modifications.
- F. Authorize the Chief Executive Officer to negotiate and execute Contract Change Order No. 266.1 to Agreement No. C-7-1904 with Walsh Construction Company II, LLC, in the amount of \$250,000, for modifications to miscellaneous maintenance and storage facility systems.
- G. Authorize the Chief Executive Officer to negotiate and execute Contract Change Order No. 277 to Agreement No. C-7-1904 with Walsh Construction Company II, LLC, in the amount of \$425,000, for maintenance and storage facility mezzanine fall protection modifications.
- H. Authorize the Chief Executive Officer to negotiate and execute Contract Change Order No. 291.1 to Agreement No. C-7-1904 with Walsh Construction Company II, LLC, in the amount of \$160,000, for overhead contact system span wire to contact wire changes.
- I. Authorize the Chief Executive Officer to negotiate and execute Contract Change Order No. 301 to Agreement No. C-7-1904 with Walsh Construction Company II, LLC, in the amount of \$1,000,000, for train signal control modifications.

Attachments:

<u>Transmittal</u>

Staff Report

Attachment A

Attachment B

9. Cooperative Agreement with the California Department of Transportation for the State Route 55 Improvement Project Between Interstate 5 and State Route 91

Jeannie Lee/James G. Beil

Overview

The Orange County Transportation Authority proposes to enter into a cooperative agreement with the California Department of Transportation for construction capital and construction management support services for the State Route 55 Improvement Project between Interstate 5 and State Route 91.

Recommendation(s)

Authorize the Chief Executive Officer to negotiate and execute Cooperative Agreement No. C-5-4264 between the Orange County Transportation Authority and the California Department of Transportation, in the amount of \$139,597,000, for construction capital and construction management support services for the State Route 55 Improvement Project between Interstate 5 and State Route 91.

Attachments:

Transmittal

Staff Report

10. Agreement for the Construction of the Inland Slope Rehabilitation Phase II Project

Jason Lee/James G. Beil

Overview

The Orange County Transportation Authority's Board of Directors approved the construction of the Inland Slope Rehabilitation Phase II Project as part of the Orange County Transportation Authority's Fiscal Year 2025-26 Budget. Bids were received in accordance with the Orange County Transportation Authority's procurement policies and procedures for public works projects. Board of Directors' approval is requested to execute the construction agreement.

Recommendation(s)

Authorize the Chief Executive Officer to negotiate and execute Agreement No. C-4-2666 between the Orange County Transportation Authority and Bosco Constructors, Inc., the lowest responsive, responsible bidder, in the amount of \$4,450,000, for construction of the Inland Slope Rehabilitation Phase II Project.

Attachments:

Transmittal

Staff Report

11. Comprehensive Transportation Funding Programs - Project X Tier 1 2025 Call for Projects Programming Recommendations

Mason Dosher/Rose Casey

Overview

The Orange County Transportation Authority's Environmental Cleanup Program provides Measure M2 funding for water quality improvement projects to address transportation-generated pollution. The 2025 Tier 1 Grant Program call for projects was issued on March 10, 2025. Evaluations of the grant applications are now complete, and a list of projects is presented for Board of Directors' review and approval.

Recommendation(s)

Approve the award of \$3,088,766 in Tier 1 Environmental Cleanup Program funding for eight projects.

Attachments:

Transmittal

Staff Report

Attachment A

Attachment B

Attachment C

Regular Calendar

Orange County Local Transportation Authority Regular Calendar Matters

12. Measure M2 Next 10 Delivery Plan: Market Conditions Key Indicators Analysis and Forecast

Kelsey Imler/Rose Casey

Overview

At the direction of the Board of Directors, the Orange County Transportation Authority monitors construction market conditions. Annually, a report on Market Conditions Key Indicators Analysis and Forecast is presented to the Board of Directors to provide insight into potential project delivery cost drivers that could affect the Measure M2 Next 10 Delivery Plan. The last effort was presented to the Board of Directors on October 28, 2024. An updated forecast has been prepared and a presentation on the results of this effort is provided.

Recommendation(s)

Direct staff to continue to monitor market conditions key indicators and provide updates to the Board of Directors as appropriate.

Attachments:

BOARD MEETING AGENDA

Transmittal

Staff Report

Attachment A

Attachment B

Presentation

13. Update on the Interstate 5/El Toro Road Interchange Improvement Project and Direction to Complete the Environmental Documentation

Niall Barrett/James G. Beil

Overview

The Orange County Transportation Authority, in partnership with the California Department of Transportation, is underway with project development for the Interstate 5/El Toro Road Interchange Improvement Project. Staff is providing an update on the project development effort and is seeking Board of Directors' direction to advance project development, finalize selection of the project preferred alternative, and complete the environmental approval phase.

Recommendation(s)

Direct staff to advance project development and the selection of the project preferred alternative, and to complete the environmental phase in late 2026.

Attachments:

Transmittal

Staff Report

Presentation

Orange County Transportation Authority Regular Calendar Matters

14. Fédération Internationale de Football Association World Cup 2026 and Los Angeles 2028 Olympic and Paralympic Games Transit Planning Update

Dan Phu/Rose Casey

Overview

The Orange County Transportation Authority, in collaboration with the Los Angeles County Metropolitan Transportation Authority, is advancing planning efforts for the Fédération Internationale de Football Association World Cup 2026 and the Los Angeles 2028 Olympic and Paralympic Games. These world-wide events represent significant regional mobility challenges and opportunities. The planning focus is to deliver safe, seamless, high-quality transit service for spectators and workforce while minimizing impacts to existing Orange County Transportation Authority riders. This report provides an update on ongoing efforts, outlines estimated funding needs, and presents recommendations for future actions.

Recommendation(s)

A. Direct staff to work with the Los Angeles County Metropolitan Transportation Authority to continue to plan and implement World Cup 2026 transit service.

BOARD MEETING AGENDA

- B. Authorize the Chief Executive Officer to negotiate and execute a funding agreement between the Orange County Transportation Authority and the Los Angeles County Metropolitan Transportation Authority to obtain reimbursement from the Los Angeles County Metropolitan Transportation Authority for World Cup 2026 transit service expenses.
- C. Direct staff to seek state and federal funding opportunities for Los Angeles 2028 Olympic and Paralympic Games transit service.

Attachments:

Transmittal

Staff Report

Presentation

Discussion Items

- 15. Public Comments
- 16. Chief Executive Officer's Report
- 17. Directors' Reports
- 18. Adjournment

The next regularly scheduled meeting of this Board will be held:

9:30 a.m., on Monday, October 27, 2025

OCTA Headquarters Board Room 550 South Main Street Orange, California

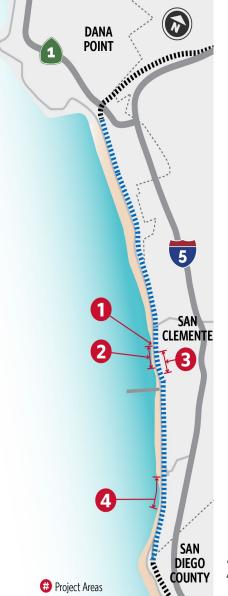
Update on Emergency Need for Railroad Track Stabilization in the Vicinity of Mile Post 203.80 to 204.40 and 206.00 to 206.70 on the Orange Subdivision



Coastal Rail Stabilization Priority Project

- Four priority reinforcement areas were identified in January 2024
- Proposed solutions evaluated at a preliminary design level considering different materials, performance, costs, methods, and schedule

Area	Location (MP)	Challenge	Proposed Solutions
1	203.80 - 203.90	Ongoing deterioration of existing riprap protection	Riprap repair (900 tons/600 CY) followed by sand nourishment
2	204.00 - 204.40	Erosion - no beach at high tide and direct wave attack damaging existing riprap protection	Riprap repair (6,750 tons/4,500 CY) followed by sand nourishment
3	204.07 - 204.34	Steep bluffs with high potential for failure that could impact rail infrastructure	1,400-ft catchment structure
4	206.00 - 206.10 206.42 - 206.70	Near San Clemente State Beach - erosion exposing areas of limited to no riprap protection	Riprap repair (2,100 tons/1,400 CY) and 1,200-ft shoreline protection structure followed by sand nourishment



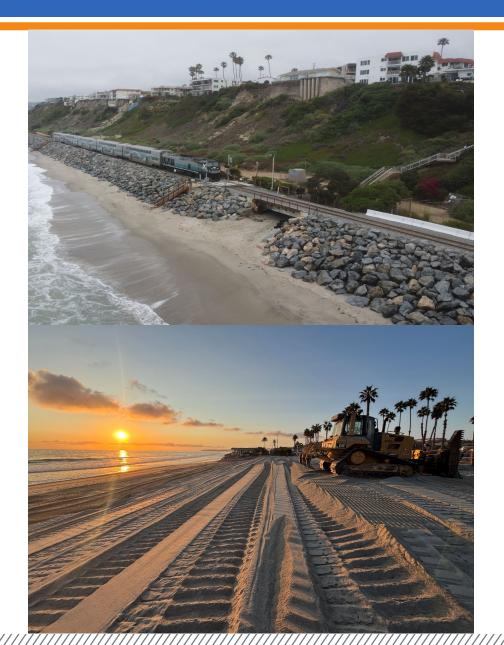
Areas 1 and 2 Riprap Repair and Initial Sand Nourishment

Riprap repair

- All construction activities have been completed
- Provided responses to the California Coastal Commission (CCC) on Emergency Coastal Development Permit (eCDP) conditions of approval for Areas 1 and 2
- Staff is addressing CCC Notice of Incomplete letter which requested additional construction data and a sand nourishment schedule update

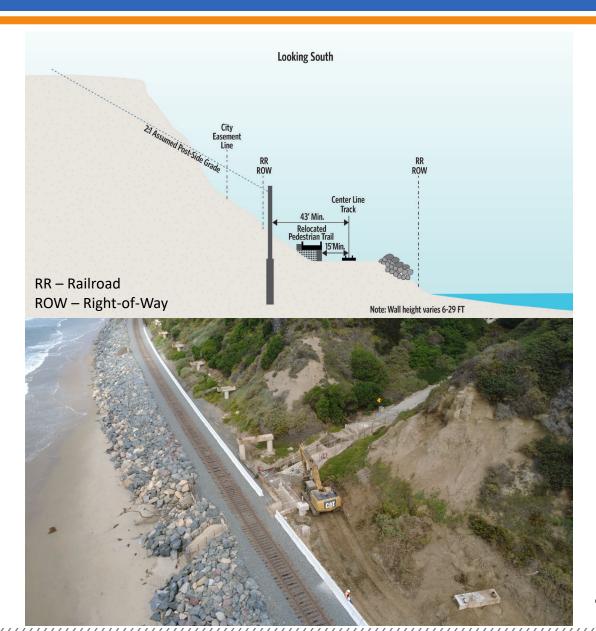
Initial sand nourishment

 Initial sand nourishment, completed on September 10, 2025, is part of the larger effort to place 240,000 CY of sand in Areas 1 and 2, as approved by the CCC

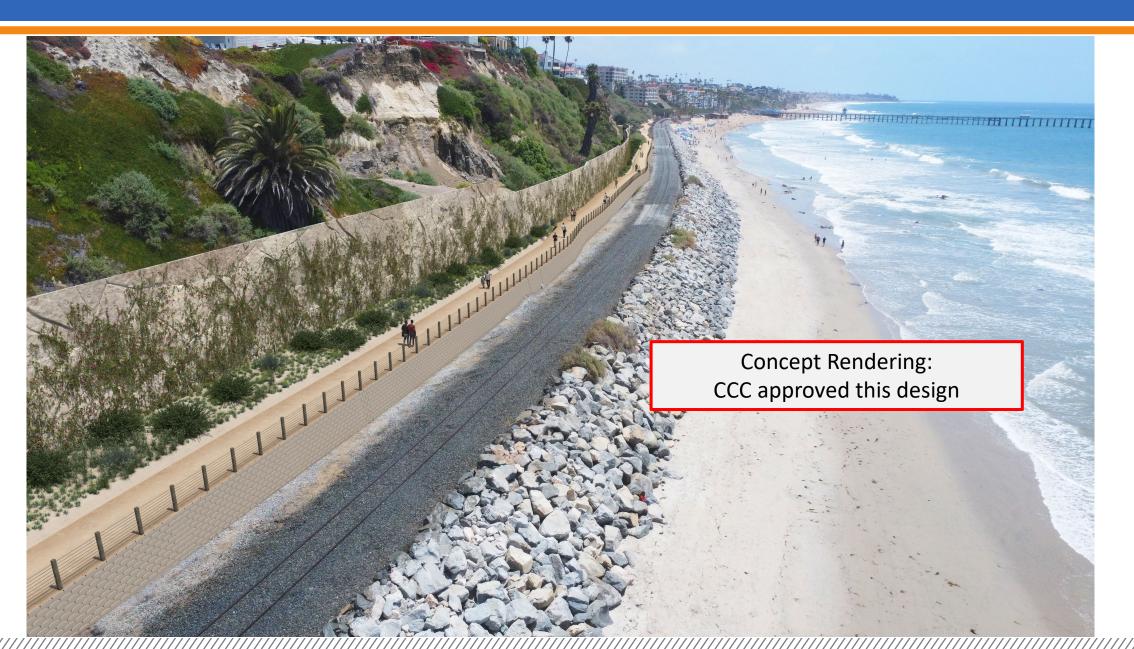


Area 3 Mariposa Catchment Wall Activities

- California Transportation Commission (CTC) allocated \$92.231 million on May 16, 2025
- Executed contract with the design-build contractor, Condon Johnson & Associates (CJA) on June 16, 2025
 - CJA preparing final plans for construction
 - Structural steel column delivery now expected in late October 2025, 30 days later than expected
 - Construction activities (pedestrian bridge pier removal, site clearing, and grubbing) started on September 15, 2025
 - Survey of existing ground conditions completed by CJA
- CCC approved wall aesthetics

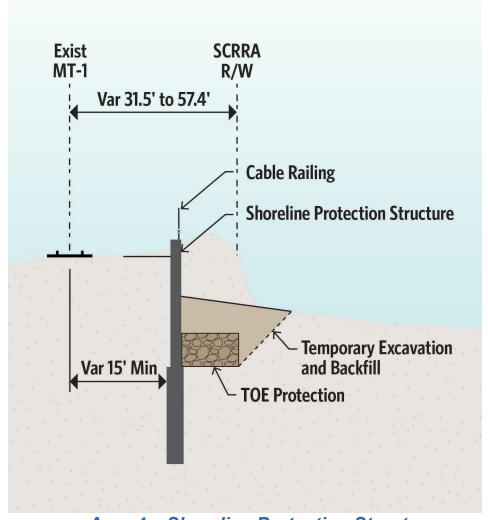


Area 3 Catchment Wall



Area 4 Shoreline Protection Structure Activities

- A CDP for geotechnical investigation testing was submitted to CCC on July 2, 2025, and was approved through a waiver on August 15, 2025
- Submitted a Right of Entry Permit to Metrolink for the geotechnical investigation on September 29, 2025
- Geotechnical field investigations are planned in October 2025 for validation of conceptual design
- CCC to consider a CDP for Area 4 at future CCC meeting (date to be determined)



Area 4 – Shoreline Protection Structure

Estimated Remaining Schedule



Area 4 Shoreline Protection Structure Construction										
Estimated Number of Months	1	2	3	4	5	6	7	8	9	10
Area 4 - Shoreline Protection Structure 8 Months										

Sand Nourishment Construction										
Estimated Number of Months	1	2	3	4	5	6	7	8	9	10
Sand Nourishment 9 Months										

North Beach and Area 1 initial sand nourishment is complete Areas 4 schedule is TBD depending on environmental and permit approvals Sand nourishment schedule is TBD depending on environmental and permit approvals

Sand Nourishment

- The Orange County Transportation Authority (OCTA) is securing federal environmental clearance for offshore sand source dredging and placement of sand for Areas 1, 2, and 4
- U.S. Army Corps of Engineers will be the lead agency for the environmental process
- OCTA is utilizing previous studies by the City of San Clemente to streamline the process
- Collaborative city offshore sand exploration is completed with Surfside Sunset as a viable offshore source, pending lab testing
- Marine environmental studies for beach nourishment are underway
- Preliminary schedule (subject to change):
 - Environmental and final design approvals: Anticipated Q4 of 2026
 - Procure sand nourishment contractor: Anticipated Q4 of 2026
 - Bids due date: Anticipated Q4 of 2026
 - Contract award and notice to proceed: Anticipated Q1 of 2027
 - Project completion: Anticipated in 2027





Pictures from San Clemente Sand Replenishment Project

Contract Commitments as of October 1, 2025

Area	Entity	Agreement	Value
Area 1, 2, & 3 (Bridge Removal)	Southern California Regional Rail Authority (SCRRA)	Cooperative agreement	\$8,238,000 (Direct Allocation by CTC)
Area 1, 2, & 3 (Bridge Removal)	Los Angeles – San Diego – San Luis Obispo Rail Corridor Agency	Cooperative agreement for bus bridge	\$565,000
Area 1 & 2	Joshua Grading & Excavating, Inc.	Construction contract for early sand placement	\$879,000
Area 3	SCRRA	Cooperative agreement for rail support	\$4,500,000 (Direct Allocation by CTC)
Area 3	Kleinfelder, Inc.	Contract for Independent Geotechnical Review	\$50,000
Area 3	CJA	Design-build contract	\$46,196,198
Area 1, 2, & 4	City of San Clemente	Cooperative agreement to partially fund offshore sand exploration	\$180,000
Area 1, 2, 3 & 4	Mott MacDonald	Program management consultant services to provide environmental clearances, design, permitting, construction management, and project management	\$6,442,470
		Total:	\$67,050,668

Recommendation

Reaffirm Resolution No. 2025-068 and authorize the Chief Executive Officer to take all necessary actions to address the emergency need for railroad track stabilization in the vicinity of Mile Post 203.80 to 204.40 and 206.00 to 206.70 on the Orange Subdivision, and to return to the Board of Directors, as required, to report on the status thereof.



Call to Order

The September 22, 2025, regular meeting of the Orange County Transportation Authority (OCTA) Board of Directors and its affiliated agencies was called to order by Chair Chaffee at 9:30 a.m. at the OCTA Headquarters, located at 550 South Main Street, Orange, California.

Directors Present: Doug Chaffee, Chair

Jamey M. Federico, Vice Chair

Valerie Amezcua Katrina Foley William Go Patrick Harper Michael Hennessey

Fred Jung

Stephanie Klopfenstein

Carlos A. Leon
Janet Nguyen
Tam T. Nguyen
Vicente Sarmiento
John Stephens
Kathy Tavoularis
Mark Tettemer
Donald P. Wagner
Lan Zhou, Ex-Officio

Directors Absent: None

Staff Present: Darrell E. Johnson, Chief Executive Officer

Jennifer L. Bergener, Deputy Chief Executive Officer

Gina Ramirez. Assistant Clerk of the Board

Sahara Meisenheimer, Clerk of the Board Specialist

Andrea West, Clerk of the Board James Donich, General Counsel

1. Closed Session

A Closed Session was held as follows:

- A. Pursuant to Government Code Section 54956.9(d)(1) Conference with General Counsel Existing Litigation Orange County Transportation Authority v. Cabinets Plus, Inc., et al., OCSC Case No. 30-2021-01197416.
- B. Pursuant to Government Code Section 54956.9(d)(1) Conference with General Counsel Existing Litigation Walsh Construction Company v. Orange County Transportation Authority, OCSC Case No. 30-2022-01248455.



C. Pursuant to Government Code Section 54956.9(d)(1) - Conference with General Counsel - Existing Litigation - Enrique Santoy v. Orange County Transportation Authority - OCSC Case No. 30-2024-01371585.

All Members were present.

There was no report out on this item.

Special Calendar

2. Presentation of Resolutions of Appreciation for Employees of the Month

Resolutions of Appreciation were presented to Breonia Mack, Coach Operator, Gilberto Anaya, Maintenance, and Timothy Lee, Administration, as Employees of the Month for September 2025.

3. Update on Emergency Need for Railroad Track Stabilization in the Vicinity of Mile Post 203.83 to 204.40 and 206.00 to 206.70 on the Orange Subdivision

James G. Beil, Executive Director of Capital Programs, presented this item.

Public comments were heard from Peter Warner and Paul Hyek.

A motion was made by Director Foley, seconded by Director Sarmiento, and declared passed by those present, to reaffirm Resolution No. 2025-068 and authorize the Chief Executive Officer to take all necessary actions to address the emergency need for railroad track stabilization in the vicinity of Mile Post 203.80 to 204.40 and 206.00 to 206.70 on the Orange Subdivision, and to return to the Board of Directors, as required, to report on the status thereof.

Consent Calendar (Items 4 through 23)

4. Approval of Minutes

A motion was made by Director Sarmiento, seconded by Director Jung, and declared passed by those present to approve the minutes of September 8, 2025, Orange County Transportation Authority and affiliated agencies' regular meeting.

5. 91 Express Lanes Update for the Period Ending – June 30, 2025

A motion was made by Director Sarmiento, seconded by Director Jung, and declared passed by those present to receive and file as an information item.



6. 405 Express Lanes Update for the Period Ending – June 30, 2025

A motion was made by Director Sarmiento, seconded by Director Jung, and declared passed by those present to receive and file as an information item.

7. Orange County Transportation Authority Investment and Debt Programs Report – July 2025

A motion was made by Director Sarmiento, seconded by Director Jung, and declared passed by those present to receive and file as an information item.

8. Fourth Quarter Fiscal Year 2024-25 Procurement Status Report

A motion was made by Director Sarmiento, seconded by Director Jung, and declared passed by those present to receive and file as an information item.

9. Annual New York Credit Update - July 2025

A motion was made by Director Sarmiento, seconded by Director Jung, and declared passed by those present to receive and file as an information item.

10. State Legislative Status Report

A motion was made by Director Sarmiento, seconded by Director Jung, and declared passed by those present to receive and file as an information item.

11. Federal Legislative Status Report

A motion was made by Director Sarmiento, seconded by Director Jung, and declared passed by those present to receive and file as an information item.

12. Federal Transit Administration Program of Projects for Federal Fiscal Year 2024-25

A motion was made by Director Sarmiento, seconded by Director Jung, and declared passed by those present to:

- A. Approve the Federal Fiscal Year 2024-25 Federal Transit Administration Section 5307 Urbanized Area Formula, Section 5310 Enhanced Mobility of Seniors and Individuals with Disabilities, Section 5337 State of Good Repair, and Section 5339 Bus and Bus Facilities Program of Projects, including federal and local funds, and the use of match credit for projects included in this report.
- B. Approve changes to funding for preventive maintenance and capitalized cost of contracted services in prior federal fiscal years for Federal Transit Administration, Section 5307 Urbanized Area Formula Program of Projects, including federal and local funds, and the use of match credit for projects to comply with guidelines for use of the funding.



- C. Approve the five-year programming plan for Federal Transit Administration Section 5307 Urbanized Area Formula, Federal Transit Administration Section 5310 Enhanced Mobility of Seniors and Individuals with Disabilities, Federal Transit Administration Section 5337 State of Good Repair, and Federal Transit Administration Section 5339 Bus and Bus Facilities.
- D. Authorize staff to adjust individual project funding consistent with final apportionments and eligibility determinations through the Infrastructure Investment and Jobs Act, and direct staff to include updated numbers in grant and programming status reports.
- E. Authorize the Chief Executive Officer to submit the Federal Transit Administration grant applications that are required for the recommendations above to the Federal Transit Administration.
- F. Authorize staff to process all necessary amendments to the Federal Transportation Improvement Program and execute or amend all necessary agreements to facilitate the above actions.

Director Leon abstained from voting on this item.

13. Approval to Release Request for Qualifications and Request for Proposals for Design-Build of a Hydrogen Fueling Station and Facility Modifications at Garden Grove Bus Base

A motion was made by Director Sarmiento, seconded by Director Jung, and declared passed by the members present to:

- A. Approve the proposed evaluation criteria and scoring for Request for qualifications 5-4319 for the short-listing of design-build teams for the design and construction of a hydrogen fueling station and facility modifications at the Garden Grove Bus Base.
- B. Approve the release of Request for Qualifications 5-4319 for design-build services for a hydrogen fueling station and facility modifications at the Garden Grove Bus Base.
- C. Authorize staff to determine a short-list of qualified design-build teams in accordance with the Board of Directors-approved criteria and issue to the short-listed firms the subsequent request for proposals for the design and construction of a hydrogen fueling station and facility modifications at the Garden Grove Bus Base.
- D. Approve the evaluation criteria, weightings, and best value selection process for Request for Proposals 5-4320 for design and construction of a hydrogen fueling station and facility modifications at the Garden Grove Bus Base.



E. Approve the release of Request for Proposals 5-4320 for design and construction of a hydrogen fueling station and facility modifications at the Garden Grove Bus Base to the short-listed design-build teams determined under Recommendation C above.

14. Agreement for Armored Vehicle Transportation and Fare Collection Counting Services

A motion was made by Director Sarmiento, seconded by Director Jung, and declared passed by the members present to:

- A. Approve the selection of Sectran Security, Inc. as the firm to provide armored vehicle transportation and fare collection counting services.
- B. Authorize the Chief Executive Officer to negotiate and execute Agreement No. C-5-4123 between the Orange County Transportation Authority and Sectran Security, Inc., in the amount of \$966,322, to provide armored vehicle Transportation and fare collection counting services for a two-year initial term with three, two-year option terms.

15. Agreement for Property Management Services

A motion was made by Director Sarmiento, seconded by Director Jung, and declared passed by the members present to:

- A. Approve the selection of Lincoln Property Company as the firm to provide property management services.
- B. Authorize the Chief Executive Officer to negotiate and execute Agreement No. C-5-4109 between the Orange County Transportation Authority and Lincoln Property Company, in the amount of \$999,170, for an initial term of three years with a three-year option term to provide property management services.

16. Amendment to Agreement for Lot Sweeping Services

A motion was made by Director Sarmiento, seconded by Director Jung, and declared passed by the members present to authorize the Chief Executive Officer to negotiate and execute Amendment No. 2 to Agreement No. C-3-2835 between the Orange County Transportation Authority and Superior Sweeping Ltd. to exercise the option term in the amount of \$307,380, to continue providing lot sweeping services effective November 1, 2025, through October 31, 2026. This will increase the maximum cumulative obligation of the agreement to a total contract value of \$681,972.



17. Agreement for OC ACCESS Eligibility Assessments and Transit Support Services

A motion was made by Director Sarmiento, seconded by Director Jung and declared passed by the members present to:

- A. Approve the selection of MTM Transit, Inc., as the firm to provide the management and operations of the OC ACCESS eligibility assessments and transit support services.
- B. Authorize the Chief Executive Officer to negotiate and execute Agreement No. C-5-3959 between the Orange County Transportation Authority and MTM Transit, Inc., in the amount of \$4,428,810, to provide OC ACCESS eligibility assessments and transit support services for an initial three-year term commencing on January 1, 2026, with one two-year option term.

18. Amendment to Agreement for Compressed Natural Gas Fueling Facility Operation and Maintenance

A motion was made by Director Sarmiento, seconded by Director Jung, and declared passed by the members present to authorize the Chief Executive Officer to negotiate and execute Amendment No. 3 to Agreement No. C-1-3317 between the Orange County Transportation Authority and Trillium USA Company, LLC, in the amount of \$640,802 to exercise the second option term of the agreement from December 1, 2025, through November 30, 2026, for continued compressed natural gas station operation and maintenance. This will increase the maximum obligation of the agreement to a total contract value of \$3,127,144.

19. Amendment to Agreement for Janitorial Services

A motion was made by Director Sarmiento, seconded by Director Jung, and declared passed by the members present to authorize the Chief Executive Officer to negotiate and execute Amendment No. 2 to Agreement No. C-2-2438 between the Orange County Transportation Authority and Gamboa Services, Inc., doing business as Corporate Image Maintenance, to exercise the option term in the amount of \$3,286,118, to continue providing janitorial services effective November 1, 2025, through October 31, 2027. This will increase the maximum cumulative obligation of the agreement to a total contract value of \$7,086,446.

20. November 2025 OC Bus Service Change

A public comment was heard from Peter Warner.

A motion was made by Director Sarmiento, seconded by Director Jung, and declared passed by the members present to receive and file as an information item.:



21. Amendment to Agreement for Design Support Services for the OC Streetcar Project

Director Janet Nguyen pulled this item for comment.

A motion was made by Director Sarmiento, seconded by Director Jung, and declared passed by the members present to authorize the Chief Executive Officer to negotiate and execute Amendment No. 16 to Agreement No. C-5-3337 between the Orange County Transportation Authority and HNTB Corporation, in the amount of \$3,735,309, and extend the agreement term through December 31, 2026, for continued design support services during construction for the OC Streetcar Project. This will increase the maximum cumulative obligation of the agreement to a total contract value of \$37,819,150.

Directors Janet Nguyen and Wagner voted in opposition to this item.

22. Environmental Mitigation Program Endowment Fund Investment Report for June 30, 2025

A motion was made by Director Sarmiento, seconded by Director Jung, and declared passed by the members present to receive and file as an information item.

23. Agreement for Public Outreach Services for the State Route 57 Northbound Improvement Project between Orangewood Avenue and Katella Avenue

A motion was made by Director Sarmiento, seconded by Director Jung, and declared passed by the members present to:

- A. Approve the selection of Kleinfelder Construction Services, Inc. as the firm to provide public outreach consultant services for the State Route 57 Northbound Improvement Project between Orangewood Avenue and Katella Avenue in the City of Anaheim.
- B. Authorize the Chief Executive Officer to negotiate and execute Agreement No. C-5-4104 between the Orange County Transportation Authority and Kleinfelder Construction Services, Inc., in the amount of \$499,911, for a three-year initial term with an option term of up to 24 months, to provide public outreach consultant services for the State Route 57 Northbound Improvement Project between Orangewood Avenue and Katella Avenue in the City of Anaheim.



Regular Calendar

24. 241/91 Express Connector Project Approval

Kirk Avila, General Manager of Express Lanes, presented this item.

A motion was made by Director Leon, seconded by Director Wagner, and declared passed by the members present to:

- A. Authorize the Chief Executive Officer to finalize and execute a master agreement with the California Department of Transportation, Foothill/Eastern Transportation Corridor Agency, and Riverside County Transportation Commission for the development and operation of the 241/91 Express Connector Project.
- B. Authorize the Chief Executive Officer to finalize and execute an operating agreement with the Foothill/Eastern Transportation Corridor Agency and Riverside County Transportation Commission for the operation of the 241/91 Express Connector Project.
- C. Authorize the Chief Executive Officer to finalize and execute amendments to the Lease Agreement Regarding State Route 91 Median Improvements, Amended and Restated Development Franchise Agreement, and any other related 91 Express Lanes agreements necessary for the development and operation of the 241/91 Express Connector Project.
- D. Approve the required AB 194 (Chapter 687, Statutes of 2015) consent letter for the 241/91 Express Connector Project.

Director Sarmiento abstained from voting on this item.

Discussion Items

25. Public Comments

Public comments were heard from Peter Warner and Paul Hyek.

26. Chief Executive Officer's Report

Darrell E. Johnson, Chief Executive Officer, CEO, reported on the following:

- 91 Express Lanes Fitch Ratings
- Clean Air Day & Wave Card Launch
- 2026 Long Range Transportation Plan



27. Directors' Reports

Chair Chaffee thanked OCTA staff for attending the fishing derby.

28. Adjournment

The meeting adjourned at 11:12 a.m.

The next regularly scheduled meeting of this Board will be held: 9:30 a.m., on Monday, October 13, 2025
OCTA Headquarters
Board Room
550 South Main Street
Orange, California

ATTEST:		
Gina Ramirez	 	

Assistant Clerk of the Board



October 13, 2025

To: Members of the Board of Directors

From: Darrell E. Johnson, Chief Executive Officer

Subject: Approval to Release Request for Proposals for Harbor Boulevard

Transit Signal Priority Deployment

Overview

The Orange County Transportation Authority has developed a request for proposals to initiate a competitive procurement process to retain consultant services for the deployment of a transit signal priority solution that includes software, signal equipment, and system integration. The project will focus on the OC Bus Rapid 543 service and will encompass 52 signalized intersections along Harbor Boulevard.

Recommendations

- A. Approve the proposed evaluation criteria and weightings for Request for Proposals 250014 for the selection of a consultant to deliver the Harbor Boulevard Transit Signal Priority Deployment.
- B. Approve the release of Request for Proposals 250014 for consultant services to deliver the Harbor Boulevard Transit Signal Priority Deployment.

Discussion

Orange County agencies have made significant investments in their signal infrastructure, improving communication between the signalized intersections and their respective Traffic Management Centers (TMC) using local funds such as the Orange County Transportation Authority's (OCTA) Measure M2. Similarly, OCTA buses are outfitted with technology that enables data collection, remote communications, and location tracking that creates a constant information exchange between bus operators and the OCTA Traffic Operation Center. This environment is well-suited for integration with cloud-based transit signal priority (TSP) platforms, enabling timely and data-driven priority requests to improve overall transit operations.

In 2023, OCTA was awarded \$1.6 million in U.S. Department of Transportation's Stage 1 Strengthening Mobility and Revolutionizing Transportation Program funds to pilot a cloud-based TSP system on a segment of Harbor Boulevard in the City of Fullerton. This quick-build pilot, implemented in November 2024, was evaluated for both transit benefits and impacts to general vehicular traffic, confirming its viability for broader deployment. Simultaneously, in July 2023, the OCTA Board of Directors (Board) approved the acceptance of Regional Early Action Planning Grants of 2021 (REAP 2.0) funds, administered by the Southern California Association of Governments, to implement Stage 2 of the Harbor Boulevard TSP expansion. As one of the 11 OCTA-led projects under REAP 2.0, this Stage 2 initiative includes the deployment of cloud-based TSP along the entire OC Bus Rapid 543 Route corridor with a budget of approximately \$2.35 million and a project expenditure deadline of December 31, 2026. The project will improve bus reliability and predictability and allow commuters to reach their jobs, medical appointments, schools, and homes in a safe and timely manner. Lastly, the Harbor Boulevard TSP Deployment Project (Project) will allow OCTA to use buses more efficiently and improve the driving experience for OCTA coach operators.

This Project will deploy cloud-based TSP at 52 signalized intersections along the OCTA Harbor Boulevard OC Bus Rapid 543 Route from the OCTA Santa Ana Base at MacArthur Boulevard to the Fullerton Transportation Center at Commonwealth Avenue. The signalized intersections are owned and operated by the Project partners, which include the cities of Anaheim, Fountain Valley, Fullerton, Garden Grove, and Santa Ana. The Project will also modernize the traffic signal infrastructure to support TSP deployment. This modernization will include upgraded traffic signal controllers, field communication switches, and enhanced firewall and security systems at the TMCs.

The selected consultant will be responsible for the system planning, technical architecture, procurement of signal devices, configuration, testing, and deployment of the TSP solution. The consultant will also lead system integration, training, and post-deployment support, ensuring the solution improves bus reliability and is scalable for future corridor expansions. Timely implementation of this solution is critical to ensure compliance with the REAP 2.0 funding requirements.

Procurement Approach

OCTA's Board-approved procurement policies and procedures require that the Board approve all Request for Proposals (RFP) over \$1,000,000, as well as approve the evaluation criteria and weightings. Staff is submitting for Board approval the draft RFP and evaluation criteria and weightings, which will be used to evaluate proposals received in response to the RFP.

The proposed evaluation criteria and weightings are as follows:

•	Qualifications of the Firm	20 percent
•	Staffing and Project Organization	25 percent
•	Work Plan	30 percent
•	Cost and Price	25 percent

Several factors were considered in developing the evaluation criteria weightings. Qualifications of the firm is weighted at 20 percent as the proposing firm must demonstrate experience with TSP, signal infrastructure needs, and performance measures of a similar scope and scale. Staffing and project organization is weighted at 25 percent as the firm must demonstrate the level of expertise, resource availability, and involvement for the roles of the proposed project team. The work plan is weighted at 30 percent as the firm's proposed technology solution must be able to meet the functional and technical requirements and challenges of a corridor with multiple stakeholders operating varying signal systems. Cost and price are weighted at 25 percent to ensure that OCTA receives value for the services provided.

The contract term for this procurement will be a five-and-a-half-year term, consisting of six months for implementation followed by five years for software maintenance and support. The total cost is anticipated to be approximately \$2,349,000.

This RFP will be released upon Board approval of these recommendations.

Fiscal Impact

This project was approved in OCTA's Fiscal Year 2025-2026 Budget, Planning Division, Account No. 0017-7669-SPT01-0Q7, and will be funded using REAP 2.0 program funds.

Summary

Board approval is requested to release RFP 250014 to select a firm to deliver the Harbor Boulevard TSP Deployment, as well as approval of the proposed evaluation criteria and weightings.

Attachment

A. Draft Request for Proposals (RFP) 250014, Harbor Boulevard Transit Signal Priority Deployment

Prepared by:

Alicia Yang Senior Project Manager, Planning

(714) 560-5362

Pia Veesapen

Director, Contracts Administration and Materials Management

(714) 560-5619

Approved by:

Lose Casay

Rose Casey

Executive Director, Planning

(714) 560-5729

REQUEST FOR PROPOSALS (RFP) 250014

HARBOR BOULEVARD TRANSIT SIGNAL PRIORITY DEPLOYMENT



ORANGE COUNTY TRANSPORTATION AUTHORITY
550 South Main Street
P.O. Box 14184
Orange, CA 92863-1584
(714) 560-6282

Key RFP Dates

Issue Date: Monday, October 13, 2025

Question Submittal Date: Friday, October 24, 2025

Proposal Submittal Date: November 17, 2025

SECTION I. INSTRUCTIONS TO OFFERORS

A. NOTICE OF REQUEST FOR PROPOSALS



NOTICE OF REQUEST FOR PROPOSALS

(RFP): "Harbor Boulevard Transit Signal Priority Deployment"

TO: ALL OFFERORS

FROM: ORANGE COUNTY TRANSPORTATION AUTHORITY

The Orange County Transportation Authority (Authority) invites proposals from qualified consultants to deliver the Harbor Boulevard Transit Signal Priority (TSP) Deployment:

Please note that by submitting a Proposal, Offeror certifies that it is not subject to any Ukraine/Russia-related economic sanctions imposed by the State of California or the United States Government including, but not limited to, Presidential Executive Order Nos. 13660, 13661, 13662, 13685, and 14065. Any individual or entity that is the subject of any Ukraine/Russia-related economic sanction is not eligible to submit a Proposal. In submitting a Proposal, all Offerors agree to comply with all economic sanctions imposed by the State or U.S. Government.

Proposals must be submitted, electronically, through the <u>Authority's OpenGov Procurement portal</u>, at https://procurement.opengov.com/portal/octa/projects/197693 before the deadline of 2:00 pm on Monday, November 17, 2025. Authority will not accept hard copy proposals for this RFP.

Offerors are instructed to submit a response to "250014" on the Authority's OpenGov Procurement portal, and follow the instructions as prompted to submit the proposal. The ability to submit a response will expire at the submittal deadline.

Should Offerors encounter technical issues with uploading the proposals via the link provided, Offerors are required to contact the Contract Administrator prior to the submission deadline. Proposals and supplemental information to proposals received after the date and time specified above will be rejected.

Firms interested in obtaining a copy of this Request for Proposals (RFP) may do so by downloading the RFP from the Authority's OpenGov Procurement portal.

To receive all further information regarding this RFP, firms and subconsultants must be registered on OpenGov Procurement and following this RFP on the <u>Authority's public OpenGov Procurement portal</u>.

A pre-proposal conference will be held both on-site/in-person and via teleconference on Tuesday, October 21, 2025, at 2:30 pm.

For prospective Offerors who wish to join on-site/in-person, the pre-proposal conference will be held at the Authority's Administrative Office, 550 South Main Street, Orange, California, in Conference Room Administrative Offices I: 550 South Main Street Orange, CA 92868 Conference Room 09.

Prospective Offerors not attending in-person may join or call-in using the following credentials:

Click here to join the meeting https://teams.microsoft.com/l/meetup-join/19%3ameeting_MWM1NzhiYTgtMDRmZC00ZTNhLWI4YTEtMzJmMjVIMzUxMTVI% 40thread.v2/0?context=%7b%22Tid%22%3a%221e952f6c-c8fc-4e38-b476-ab4dd5449420%22%2c%22Oid%22%3a%229407a9f5-b2b6-45ec-bf64-8b2cd4aff444%22%7d

OR Call-in Number: 916-550-9867

Conference ID: 470 199 093#

A copy of the presentation slides and pre-proposal conference registration sheet(s) will be issued via addendum prior to the date of the pre-proposal conference. All prospective Offerors are encouraged to attend the pre-proposal conference.

The Authority has established January 13 & 14, 2026, as the date(s) to conduct interviews. All prospective Offerors will be asked to keep this date available.

Offerors are encouraged to subcontract with small businesses to the maximum extent possible.

All Offerors will be required to comply with all applicable equal opportunity laws and regulations.

The award of this contract is subject to receipt of state and/or local funds adequate to carry out the provisions of the proposed agreement including the identified Scope of Work.

B. PRE-PROPOSAL CONFERENCE

A pre-proposal conference will be held both on-site/in-person and via teleconference on Tuesday, October 21, 2025, at 2:30 pm.

For prospective Offerors who wish to join on-site/in-person, the pre-proposal conference will be held at the Authority's Administrative Office, 550 South Main Street, Orange, California, in Conference Room Administrative Offices I: 550 South Main Street Orange, CA 92868 Conference Room 09.

Prospective Offerors not attending in-person may join or call-in using the following credentials:

Click here to join the meeting https://teams.microsoft.com/l/meetup-join/19%3ameeting_MWM1NzhiYTgtMDRmZC00ZTNhLWI4YTEtMzJmMjVIMzUxMTVI% 40thread.v2/0?context=%7b%22Tid%22%3a%221e952f6c-c8fc-4e38-b476-ab4dd5449420%22%2c%22Oid%22%3a%229407a9f5-b2b6-45ec-bf64-8b2cd4aff444%22%7d

OR Call-in Number: 916-550-9867

Conference ID: 470 199 093#

A copy of the presentation slides and pre-proposal conference registration sheet(s) will be issued via addendum prior to the date of the pre-proposal conference. All prospective Offerors are encouraged to attend the pre-proposal conference.

C. EXAMINATION OF PROPOSAL DOCUMENTS

By submitting a proposal, Offeror represents that it has thoroughly examined and become familiar with the work required under this RFP and that it is capable of performing quality work to achieve the Authority's objectives.

D. ADDENDA

The Authority reserves the right to revise the RFP documents. Any Authority changes to the requirements will be made by written addendum to this RFP. Any written addenda issued pertaining to this RFP shall be incorporated into the terms and conditions of any resulting Agreement. The Authority will not be bound to any modifications to or deviations from the requirements set forth in this RFP as the result of oral instructions. Offerors shall acknowledge receipt of addenda in their proposals. Failure to acknowledge receipt of Addenda may cause the proposal to be deemed non-responsive to this RFP and be rejected.

E. AUTHORITY CONTACT

All communication and/or contacts with Authority staff regarding this RFP are to be directed to the following Contract Administrator:

Iris Deneau Section Manager, Procurement (714) 560-5786 ideneau@octa.net

Commencing on the date of the issuance of this RFP and continuing until award of the contract or cancellation of this RFP, no Offeror, subcontractor, lobbyist or agent hired by the Offeror shall have any contact or communications regarding this RFP with any Authority's staff; member of the evaluation committee for this RFP; or any contractor or consultant involved with the procurement, other than the Contract Administrator named above or unless expressly permitted by this RFP. Contact includes face-to-face, telephone, electronic mail (e-mail) or formal written communication. Any Offeror, subcontractor, lobbyist or agent hired by the Offeror that engages in such prohibited communications may result in disqualification of the Offeror at the sole discretion of the Authority.

F. CLARIFICATIONS

1. Examination of Documents

Should an Offeror require clarifications of this RFP, the Offeror shall submit such request for clarification or inquiry through the "Question and Answer" section of this RFP on the Authority's OpenGov Procurement portal prior to 5:00 pm on Friday, October 24, 2025. Should it be found that the point in question is not clearly and fully set forth, the Authority will issue a written addendum clarifying the matter which will be issued to this RFP on the Authority's OpenGov Procurement portal.

2. Submitting Requests

All questions, including questions that could not be specifically answered at the preproposal conference must be put in writing and received via the Authority's OpenGov Procurement portal before 5:00 pm, on Friday, October 24, 2025.

3. Authority Responses

Responses from the Authority will be posted on the OpenGov Procurement portal at https://procurement.opengov.com/portal/octa/projects/197693.

To receive email notification of Authority responses when they are posted on the OpenGov Procurement portal, firms and subconsultants must be registered on OpenGov and following this RFP on the Authority's portal.

G. SUBMISSION OF PROPOSALS

1. Date and Time

Proposals must be received electronically through the Authority's OpenGov Procurement portal before 2:00 pm on Monday, November 17, 2025.

Proposals received after the above-specified date and time or submitted in any manner other than as specified above will be returned to Offerors unopened.

2. Acceptance of Proposals

- a. The Authority reserves the right to accept or reject any and all proposals, or any item or part thereof, or to waive any informalities or irregularities in proposals.
- b. The Authority reserves the right to withdraw or cancel this RFP at any time without prior notice and the Authority makes no representations that any contract will be awarded to any Offeror responding to this RFP.
- c. The Authority reserves the right to issue a new RFP for the project.
- d. The Authority reserves the right to postpone proposal openings for its own convenience.
- e. Each proposal will be received with the understanding that acceptance by the Authority of the proposal to provide the services described herein shall constitute a contract between the Offeror and Authority which shall bind the Offeror on its part to furnish and deliver at the prices given and in accordance with conditions of said accepted proposal and specifications.
- f. The Authority reserves the right to investigate the qualifications of any Offeror, and/or require additional evidence of qualifications to perform the work.
- g. Submitted proposals are not to be copyrighted.

H. PRE-CONTRACTUAL EXPENSES

The Authority shall not, in any event, be liable for any pre-contractual expenses incurred by Offeror in the preparation of its proposal. Offeror shall not include any such expenses as part of its proposal.

Pre-contractual expenses are defined as expenses incurred by Offeror in:

- 1. Preparing its proposal in response to this RFP;
- 2. Submitting that proposal to the Authority;
- 3. Negotiating with the Authority any matter related to this proposal; or
- 4. Any other expenses incurred by Offeror prior to date of award, if any, of the Agreement.

I. JOINT OFFERS

Where two or more firms desire to submit a single proposal in response to this RFP, they should do so on a prime-subcontractor basis rather than as a joint venture. The Authority intends to contract with a single firm and not with multiple firms doing business as a joint venture.

J. TAXES

Offerors' proposals are subject to State and Local sales taxes. However, the Authority is exempt from the payment of Federal Excise and Transportation Taxes. Offeror is responsible for payment of all taxes for any goods, services, processes and operations incidental to or involved in the contract.

K. PROTEST PROCEDURES

The Authority has on file a set of written protest procedures applicable to this solicitation that may be obtained by contacting the Contract Administrator responsible for this procurement. Any protests filed by an Offeror in connection with this RFP must be submitted in accordance with the Authority's written procedures.

L. CONTRACT TYPE

It is anticipated that the Agreement resulting from this solicitation, if awarded, will be a firm-fixed price contract specifying firm-fixed prices for individual tasks specified in the Scope of Work, included in this RFP as Attachment A. The Agreement will have five-and-a-half (5.5)-year term term.

M. CONFLICT OF INTEREST

All Offerors responding to this RFP must avoid organizational conflicts of interest which would restrict full and open competition in this procurement. An organizational conflict of interest means that due to other activities, relationships or contracts, an Offeror is unable, or potentially unable to render impartial assistance or advice to the Authority; an Offeror's objectivity in performing the work identified in the Scope of Work is or might be otherwise impaired; or an Offeror has an unfair competitive advantage. Conflict of Interest issues must be fully disclosed in the Offeror's proposal.

All Offerors must disclose in their proposal and immediately throughout the course of the evaluation process if they have hired or retained an advocate to lobby Authority staff or the Board of Directors on their behalf.

Offerors hired to perform services for the Authority are prohibited from concurrently acting as an advocate for another firm who is competing for a contract with the Authority, either as a prime or subcontractor.

N. CODE OF CONDUCT

All Offerors agree to comply with the Authority's Code of Conduct as it relates to Third-Party contracts which is hereby referenced and by this reference is incorporated herein. All Offerors agree to include these requirements in all of its subcontracts.

O. OWNERSHIP OF RECORDS/PUBLIC RECORDS ACT

All proposals and documents submitted in response to this RFP shall become the property of the Authority and a matter of public record pursuant to the California Public Records Act, Government

Code sections 7920.000 et seq. (the "Act"). Offerors should familiarize themselves with the provisions of the Act requiring disclosure of public information. Offerors are discouraged from marking their proposal documents as "confidential" or "proprietary."

If a Proposal does include "confidential" or "proprietary" markings and the Authority receives a request pursuant to the Act, the Authority will endeavor (but cannot guarantee) to notify the Offeror of such a request. In order to protect any information submitted within a Proposal, the Offeror must pursue, at its sole cost and expense, any and all appropriate legal action necessary to maintain the confidentiality of such information. The Authority generally does not consider pricing information, subcontractor lists, or key personnel, including resumes, as being exempt from disclosure under the Act. In no event shall the Authority or any of its officers, directors, employees, agents, representatives, or consultants be liable to an Offeror for the disclosure of any materials or information submitted in response to the RFP or by failing to notify an Offeror of a request seeking its Proposal. The Authority reserves the right to make an independent decision to disclose records and material.

Notwithstanding the above, all information regarding proposal responses may be held as confidential until such time as the evaluation has been completed; an award has been made by the Board of Directors or Authority Staff, as appropriate; and the contract has been fully negotiated.

P. STATEMENT OF ECONOMIC INTERESTS

The awarded Offeror (including designated employees and subconsultants) may be required to file Statements of Economic Interests (Form 700) in accordance with the Political Reform Act (Government Code section 81000 et seq.). This applies to individuals who make, participate in making, or act in a staff capacity for making governmental decisions. The AUTHORITY determines which individuals are required to file a Form 700, and if such determination is made, the individuals must file Form 700s with the AUTHORITY's Clerk of the Board no later than 30 days after the execution of the Agreement, annually thereafter for the duration of the Agreement, and within 30 days of termination of the Agreement.

SECTION II. PROPOSAL CONTENT

A. PROPOSAL FORMAT AND CONTENT

Proposals should be typed with a standard 12-point font, double-spaced and submitted on 8 1/2" x 11" size paper. Charts and schedules may be included in 11"x17" format. Proposals should not include any unnecessarily elaborate or promotional materials. Proposals should not exceed fifty (50) pages in length, excluding any appendices, cover letters, resumes, or forms.

1. Letter of Transmittal*

The Letter of Transmittal shall at a minimum, contain the following:

- a. Identification of Offeror that will have contractual responsibility with the Authority. Identification shall include legal name of company, corporate address, telephone and fax number, and email address. Include name, title, address, email address, and telephone number of the contact person identified during period of proposal evaluation.
- b. Identification of all proposed subcontractors including legal name of company, contact person's name and address, phone number and fax number, and email address; relationship between Offeror and subcontractors, if applicable.
- c. A statement to the effect that the proposal shall remain valid for a period of not less than 120 days from the date of submittal.
- d. Signature of a person authorized to bind Offeror to the terms of the proposal.
- e. Signed statement attesting that all information submitted with the proposal is true and correct.

*Response required

2. Qualifications, Related Experience and References to Offeror

This section of the proposal should establish the ability of Offeror to satisfactorily perform the required work by reasons of: experience in performing work of a similar nature; demonstrated competence in the services to be provided; strength and stability of the firm; staffing capability; work load; record of meeting schedules on similar projects; and supportive client references.

Offeror to provide:

Profile of Firm*

Provide a brief profile of the firm, including the types of services offered; the year founded; form of the organization (corporation, partnership, sole proprietorship); number, size and location of offices; and number of employees.

^{*}Response required

Firm's Financial Condition*

Provide a general description of the firm's financial condition and identify any conditions (e.g., bankruptcy, pending litigation, planned office closures, impending merger) that may impede Offeror's ability to complete the project.

*Response required

Firm's Experience*

Describe the firm's experience in performing work of a similar nature to that solicited in this RFP, and highlight the participation in such work by the key personnel proposed for assignment to this project.

*Response required

Subcontractors*

Identify subcontractors by company name, address, contact person, telephone number, email, and project function. Describe Offeror's experience working with each subcontractor.

*Response required

Lobbying or Advocating Services on Behalf of Offeror*

Identify all firms hired or retained to provide lobbying or advocating services on behalf of the Offeror by company name, address, contact person, telephone number and email address. This information is required to be provided by the Offeror immediately during the evaluation process, if a lobbyist or advocate is hired or retained.

*Response required

References*

Provide as a minimum three (3) references for the projects cited as related experience, and furnish the name, title, address, telephone number, and email address of the person(s) at the client organization who is most knowledgeable about the work performed. Offeror may also supply references from other work not cited in this section as related experience.

*Response required

Do you have a Dun & Bradstreet (DUNS) number? If so, enter it here.

Do you have an Unique Entity Identifier (UEI) number? If so, enter it here.

3. Proposed Staffing and Project Organization

This section of the proposal should establish the method, which will be used by the Offeror to manage the project as well as identify key personnel assigned.

Offeror to:

Identify Key Personnel*

Identify key personnel proposed to perform the work in the specified tasks and include major areas of subcontract work. Include the person's name, current location, proposed position for this project, current assignment, level of commitment to that assignment, availability for this assignment and how long each person has been with the firm.

^{*}Response required

Resumes of Key Personnel*

Furnish brief resumes (not more than two [2] pages each) for the proposed Project Manager and other key personnel that includes education, experience, and applicable professional credentials.

*Response required

Adequacy of Labor Resources*

Indicate adequacy of labor resources utilizing a table projecting the labor-hour allocation to the project by individual task.

*Response required

Project Organization Chart*

Provide a project organization chart, which clearly delineates communication/reporting relationships among the project staff.

*Response required

Key Personnel Availability*

Provide a statement that key personnel will be available to the extent proposed for the duration of the project acknowledging that no person designated as "key" to the project shall be removed or replaced without the prior written concurrence of the Authority.

*Response required

4. Work Plan

Offeror should provide a narrative, which addresses the Scope of Work, and shows Offeror's understanding of Authority's needs and requirements.

Offeror to:

Approach*

Describe the approach to completing the tasks specified in the Scope of Work. The approach to the work plan shall be of such detail to demonstrate the Offeror's ability to accomplish the project objectives and overall schedule.

*Response required

Sequence of Activities*

Outline sequentially the activities that would be undertaken in completing the tasks and specify who would perform them.

*Response required

Project Schedule*

Furnish a project schedule for completing the tasks in terms of elapsed weeks.

*Response required

Quality Control Methods*

Identify methods that Offeror will use to ensure quality control as well as budget and schedule control for the project.

*Response required

Special Issues or Problems*

Identify any special issues or problems that are likely to be encountered in this project and how the Offeror would propose to address them.

*Response required

Enhancements or Procedural/Technical Innovations to Scope of Work*

Offeror is encouraged to propose enhancements or procedural or technical innovations to the Scope of Work that do not materially deviate from the objectives or required content of the project.

Do you have any such enhancements or innovations to propose?

☐ Yes

*Response required

When equals "Yes"

Enhancements or Innovations*

You have indicated that you have enhancements or procedural or technical innovations to the Scope of Work to propose. As previously stated, such enhancements or innovations must not materially deviate from the objectives or required content of the project.

*Response required

5. Exceptions/Deviations

State any technical and/or contractual exceptions and/or deviations from the requirements of this RFP, including the Authority's technical requirements and contractual terms and conditions set forth in the Scope of Work (Exhibit A) and Proposed Agreement (Exhibit C), using the form entitled "Proposal Exceptions and/or Deviations" included in this RFP. This Proposal Exceptions and/or Deviations form must be included in the original proposal submitted by the Offeror. If no technical or contractual exceptions and/or deviations are submitted as part of the original proposal, Offerors are deemed to have accepted the Authority's technical requirements and contractual terms and conditions set forth in the Scope of Work (Exhibit A) and Proposed Agreement (Exhibit C). Offerors will not be allowed to submit the Proposal Exceptions and/or Deviations form or any technical and/or contractual exceptions after the proposal submittal date identified in the RFP. Exceptions and/or deviations submitted after the proposal submittal date will not be reviewed by Authority.

All exceptions and/or deviations will be reviewed by the Authority and will be assigned a "pass" or "fail" status. Exceptions and deviations that "pass" do not mean that the Authority has accepted the change but that it is a potential negotiable issue. Exceptions and

deviations that receive a "fail" status means that the requested change is not something that the Authority would consider a potential negotiable issue. Offerors that receive a "fail" status on their exceptions and/or deviations will be notified by the Authority and will be allowed to retract the exception and/or deviation and continue in the evaluation process. Any exceptions and/or deviation that receive a "fail" status and the Offeror cannot or does not retract the requested change may result in the firm being eliminated from further evaluation.

Exceptions or Deviations*

Do you have any exceptions and/or deviations from the requirements of this RFP?

☐ Yes

□ No

*Response required

When equals "Yes"

Exceptions or Deviations - Yes*

Offerors shall complete the form entitled "Proposal Exceptions and/or Deviations" provided in this RFP and submit it as part of the proposal. For each exception and/or deviation, a new form should be used, identifying the exception and/or deviation and the rationale for requesting the change. Exceptions and/or deviations submitted after the proposal submittal date will not be reviewed nor considered by the Authority.

Proposal Exceptions and Dev...

6. Cost and Price Proposal

As part of the cost and price proposal, the Offeror shall submit proposed pricing to provide the services described in the Scope of Work for this RFP.

Price Summary Sheet*

The Offeror shall complete the "Price Summary Sheet" form included with this RFP (Exhibit B), and furnish any narrative required to explain the prices quoted in the schedules. It is anticipated that the Authority will issue a firm-fixed-price contract specifying firm-fixed-prices for individual tasks.

7. Forms

Campaign Contribution Disclosure Form*

In conformance with the statutory requirements of the State of California Government Code Section 84308, part of the Political Reform Act and Title 2, California Code of Regulations 18438 through 18438.8, regarding campaign contributions to members of appointed Board of Directors, Offeror is required to complete and sign the Campaign Contribution Disclosure Form provided in this RFP and submit as part of the proposal.

This form must be completed regardless of whether a campaign contribution has been made or not and regardless of the amount of the contribution.

^{*}Response required

^{*}Response required

The prime contractor, subconsultants, lobbyists and agents are required to report all campaign contributions made from the proposal submittal date up to and until the Board of Directors makes a selection.

Offeror is required to submit only one copy of the completed form(s) as part of its proposal and it must be included in only the original proposal.

Offeror is required to report any campaign contributions made by the prime contractor, subconsultants, lobbyists and agents after the proposal submittal date, and up to the anticipated Board of Directors selection on March 9, 2026. The offeror shall use the campaign contribution form for any additional reporting. The forms must be submitted at least 15 calendar days prior to the Board Committee date on March 2, 2026 and sent via e-mail to the Contract Administrator.

Campaign Contribution Discl...

Status of Past and Present Contracts Form*

Offeror shall complete and sign the form entitled "Status of Past and Present Contracts" provided in this RFP and submit as part of its proposal. Offeror shall identify the status of past and present contracts where the firm has either provided services as a prime vendor or a subcontractor during the past five (5) years in which the contract has been the subject of or may be involved in litigation with the contracting authority. This includes, but is not limited to, claims, settlement agreements, arbitrations, administrative proceedings, and investigations arising out of the contract. Offeror shall have an ongoing obligation to update the Authority with any changes to the identified contracts and any new litigation, claims, settlement agreements, arbitrations, administrative proceedings, or investigations that arise subsequent to the submission of Offeror's proposal.

A separate form must be completed for each identified contract. Each form must be signed by the Offeror confirming that the information provided is true and accurate. Offeror is required to submit the completed form(s) as part of its proposal.

Status of Past and Present ...

*Response required

8. Submittal

Appendices*

Information considered by Offeror to be pertinent to this project and which has not been specifically solicited in any of the aforementioned sections may be placed in a separate appendix section. Offerors are cautioned, however, that this does not constitute an invitation to submit large amounts of extraneous materials. Appendices should be relevant and brief.

*Response required

Submittal Confirmation*

Proposer hereby certifies that all information provided within this proposal is accurate to the best of their knowledge. Proposer acknowledges that they have examined and carefully studied all RFP and Contract Documents and any Addenda and that they have provided any

^{*}Response required

necessary proof of their authority to submit a proposal on behalf of the Company/Firm Nan	ne
stated on the proposal thereby committing the Company/Firm to the information contains within.	∍d
within.	

☐ Please confirm

*Response required

Technical Solution Design (TSD) Narrative*

Provide a TSD narrative highlighting the proposed technical solution for OCTA. This narrative shall include a description of the technical architecture and the justification for the proposed approach. This shall include hardware and/or cloud hosting environments topology, including network and security components, all third-party software, and integration solutions for disparate components

*Response required

SECTION III. EVALUATION AND AWARD

A. EVALUATION CRITERIA

The Authority will evaluate the offers received based on the following criteria:

No.	Evaluation Criteria	Scoring Method	Weight (Points)
1.	Qualifications of the Firm Technical experience in performing work of a closely similar nature; strength and stability of the firm; strength, stability, experience and technical competence of subcontractors; assessment by client references.	0-5 Points	20 (20% of Total)
2.	Staffing and Project Organization Qualifications of project staff, particularly key personnel and especially the Project Manager; key personnel's level of involvement in performing related work cited in "Qualifications of the Firm" section; logic of project organization; adequacy of labor commitment; concurrence in the restrictions on changes in key personnel.	0-5 Points	25 (25% of Total)
3.	Work Plan Depth of Offeror's understanding of Authority's requirements and overall quality of work plan; logic, clarity and specificity of work plan; appropriateness of resource allocation among the tasks; reasonableness of proposed schedule; utility of suggested technical or procedural innovations.	0-5 Points	30 (30% of Total)
4.	Cost and Price Reasonableness of the total price as well as the individual tasks; competitiveness with other offers received; adequacy of data in support of figures quoted.	0-5 Points	25 (25% of Total)

B. EVALUATION PROCEDURE

An evaluation committee will be appointed to review all proposals received for this RFP. The committee is comprised of Authority staff and may include outside personnel. The committee members will evaluate the written proposals using criteria identified in Section III A. A list of top ranked proposals, firms within a competitive range, will be developed based upon the totals of each committee members' score for each proposal.

During the evaluation period, the Authority may interview some or all of the proposing firms. The Authority has established January 13 & 14, 2026, as the date(s) to conduct interviews. All prospective Offerors are asked to keep this date available. No other interview dates will be provided, therefore, if an Offeror is unable to attend the interview on this date, its proposal may be eliminated from further discussion. The interview may consist of a short presentation by the Offeror after which the evaluation committee will ask questions related to the firm's proposal and qualifications.

At the conclusion of the proposal evaluations, the evaluation committee will score the proposals to develop a competitive range. Offerors remaining within the competitive range may be asked to submit a Best and Final Offer (BAFO). In the BAFO request, the firms may be asked to provide additional information, confirm or clarify issues and submit a final cost/price offer. A deadline for submission will be stipulated.

At the conclusion of the evaluation process, the evaluation committee will recommend to the Regional Transportation Planning Committee, the Offeror with the highest final ranking or a short list of top ranked firms within the competitive range whose proposal(s) is most advantageous to the Authority. The Board Committee will review the evaluation committee's recommendation and forward its recommendation to the Board of Directors for final action.

C. AWARD

The Authority's Board of Directors will consider the selection of the firm(s) recommended by the Board Committee.

The Authority may also negotiate contract terms with the selected Offeror prior to award, and expressly reserves the right to negotiate with several Offerors simultaneously and, thereafter, to award a contract to the Offeror offering the most favorable terms to the Authority.

Offeror acknowledges that the Authority's Board of Directors reserves the right to award this contract in its sole and absolute discretion to any Offeror to this RFP regardless of the evaluation committee's recommendation or recommendation of a Board Committee

The Authority reserves the right to award its total requirements to one Offeror or to apportion those requirements among several Offerors as the Authority may deem to be in its best interest. In addition, negotiations may or may not be conducted with Offerors; therefore, the proposal submitted should contain Offeror's most favorable terms and conditions, since the selection and award may be made without discussion with any Offeror.

The selected Offeror will be required to submit to the Authority's Accounting department a current IRS W-9 form prior to commencing work.

D. NOTIFICATION OF AWARD AND DEBRIEFING

Offerors who submit a proposal in response to this RFP shall be notified via the Authority's OpenGov Procurement portal. Such notification shall be made within three (3) business days of the date the contract is awarded.

SCOPE OF WORK

HARBOR BOULEVARD TRANSIT SIGNAL PRIORITY DEPLOYMENT

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1. BACKGROUND

The Harbor Boulevard corridor is a critical multimodal route in central Orange County, spanning the cities of Anaheim, Fountain Valley, Fullerton, Garden Grove, and Santa Ana. The twelve (12)-mile corridor serves OC Bus routes 543 (Rapid) and 43 (local) routes, which collectively support over 10,000 daily boardings. Eight percent (8%) of all Orange County Transportation Authority (OCTA) bus ridership and over 50,000 vehicles travel this route each day. This corridor connects vital destinations including medical facilities, California State University, Fullerton, Disneyland, Santa Ana College, places of worship, and shopping centers.

In 2023, OCTA was awarded \$1.6 million in US Department of Transportation's Stage 1 Strengthening Mobility and Revolutionizing Transportation (SMART) program funds to pilot a cloud-based transit signal priority (TSP) system on a segment of Harbor Boulevard. This quick-build pilot, implemented in November 2024, was evaluated for both transit performance benefits and impacts to general vehicular traffic, confirming its viability for broader deployment. Simultaneously, in July 2023, the OCTA Board of Directors (Board) approved the acceptance of Regional Early Action Planning Grants of 2021 (REAP 2.0) funds, administered by the Southern California Association of Governments, to implement Stage 2 of the Harbor Boulevard TSP expansion. As one of the eleven OCTA-led projects under REAP 2.0, this Stage 2 initiative includes the full deployment of cloud-based TSP along the entire OC Bus Rapid 543 Route corridor with a budget of \$2.34 million. Improved bus reliability and predictability will allow commuters to reach their jobs, medical appointments, schools, and homes in a safe and timely manner. Lastly, the project would allow OCTA to use buses more efficiently and improve the driving experience for OCTA coach operators.

Orange County agencies have made significant investments in their signal infrastructure, improving communication between the signalized intersections and their respective Traffic Management Centers (TMCs). OCTA buses host a suite of equipment that allows for comprehensive data collection, remote network communications, and location tracking that exchange information between the bus operator and the OCTA Traffic Operation Center (TOC). Each bus is equipped with a Cradlepoint router (IBR1100 or IBR1700) with cellular connection to OCTA's Conduent OrbCAD Computer-Aided Dispatch/Automatic Vehicle Location (CAD/AVL) system. Bus locations are polled by the OrbCAD system and uploads the General Transit Feed Specification (GTFS) package to the Swiftly data engine roughly every five to ten seconds. This frequency and level of data detail is well-suited for integration with centralized or cloud-based TSP platforms, enabling timely, data-driven priority requests to traffic signal systems.

2. PROJECT GOALS AND OBJECTIVES

The Harbor Boulevard Transit Signal Priority Deployment (Project) includes fifty-two (52) signalized intersections along the OCTA Harbor Boulevard Rapid 543 Route from the OCTA Santa Ana Base at MacArthur Boulevard and Hyland Avenue in the City of Santa Ana to the Fullerton Transportation Center (FTC) at Commonwealth Avenue and Pomona Avenue in the City of Fullerton, as shown in worksheet B5 of Attachment A. The signalized intersections are owned and operated by the Project partners, cities of Anaheim, Fountain Valley, Fullerton,

Garden Grove, and Santa Ana, with remote access for signal operations from each agency's Advanced Traffic Management System (ATMS) located at their respective TMCs. This Project's goals and objectives are summarized below.

- **Expand Cloud-Based TSP** along Harbor Boulevard, implementing TSP at approximately fifty-two (52) signalized intersections to improve bus travel time reliability and on-time performance for OC Bus Rapid 543 Route.
- Leverage real-time data from Swiftly static and real-time GTFS feed to inform dynamic TSP requests based on vehicle location.
- Modernize traffic signal infrastructure to support cloud-based TSP functionality, including:
 - Replacement or upgrade of traffic signal controllers;
 - Deployment of field communications switches for network reliability;
 - o Installation or upgrade of firewall and security systems at TMCs.
- Enhance multimodal corridor performance by reducing bus delay without significantly disrupting cross-traffic or vehicular operations.
- **Support corridor-wide coordination** among multiple jurisdictions (Anaheim, Fountain Valley, Fullerton, Garden Grove, Santa Ana) by implementing a standards-based TSP system, using protocols such as NTCIP 1211 and 1202.
- Establish a scalable, replicable model for future TSP deployment throughout Orange County.

This Project is fully funded by REAP 2.0 with a funding expenditure deadline expected to be December 30, 2026. the selected Consultant shall provide an understanding of the funding requirements throughout the delivery of the project.

3. CONSULTANT SERVICES, EFFORTS AND DELIVERABLES

OCTA is soliciting proposals from all qualified firms, including but not limited to licensors, authorized distributors, and certified value-added resellers (collectively referred to as "Consultants"). Consultants are invited to propose the most current and effective technology solutions that align with the Project's objectives and meet the specific requirements outlined in this Scope of Work (SOW) and Request for Proposals (RFP) 250014.

By submitting a proposal, the Consultant acknowledges that they have reviewed and understand the following documents and criteria:

- Evaluation Criteria
- Project Goals, Objectives, and High-Level Scope
- Attachment A

4. TECHNICAL PROPOSAL

OCTA encourages Consultants to offer the latest available technology solutions that best meet the Project objectives and specific requirements listed herein. Consultant's proposal response shall include the following information:

FIRM QUALIFICATIONS

As part of the proposal, the Consultant shall provide a comprehensive statement demonstrating their qualifications for selection. This shall include:

- A detailed summary of technical experience in performing work of a closely similar nature.
- An overview of the firm's overall strength and organizational stability.
- An assessment of the strength, stability, experience, and technical competence of any proposed subcontractors.
- Client references that would are close in nature to the project needs and/or industry alignment.
- This information will be used as a basis for evaluating the Consultant's capability to successfully perform the services described in this Scope of Work (SOW) and Request for Proposals (RFP).

STAFFING AND PROJECT ORGANIZATION

Consultant shall possess demonstrable experience in the implementation of the software solution specified for this Project.

TECHNICAL SOLUTION DESIGN (TSD) NARRATIVE.

Consultant shall include in the "Work Plan" section of its proposal a TSD narrative section highlighting the proposed technical solution for OCTA. This narrative shall include a description of the technical architecture and the justification for the proposed approach. This shall include hardware and/or cloud hosting environments topology, including network and security components, all third-party software, and integration solutions for disparate components.

PROPOSED PROJECT SCHEDULE

For the purposes of the <u>proposal</u>, the schedule shall identify all phases/stages of the project and the high-level tasks in sufficient detail as a roadmap for the deliverables. Tasks shall be grouped into the project phases/stages, and shall include all the relevant deliverables, and project milestones. The tasks shall identify Resources, Duration of tasks, and Predecessor relationships (whenever applicable). The schedule shall indicate the tasks for which OCTA is responsible.

During the <u>actual</u> project implementation effort, a more detailed project schedule shall be required (as described in Task 1 – Project Schedule), which shall incorporate OCTA-specified modifications, including duration and start-date modifications, as necessary, to align with regular work-day activities, business cycles, holidays, and other work-day

constraints. This alignment may result in eight (8) to twelve (12) weeks of additional project duration if sufficient time was not allocated for OCTA to conduct reviews/approvals of project documentation, testing, etc.

ROLES AND RESPONSIBILITIES MATRIX

Consultant shall provide the number of resources, and their respective roles. Consultant shall provide an organization chart (Org Chart) that reflects to whom the project personnel report.

ATTACHMENT A

Consultant shall utilize the Microsoft Excel spreadsheet provided as part of this RFP package to respond to all questions pertaining to Attachments A. The completed Excel spreadsheet file must be included in the proposal submittal. Supplementary screenshots are not required and should not be included as part of the supporting documentation.

PRICE SUMMARY SHEET

Consultants shall utilize the Price Summary Sheet provided as part of this RFP package. The completed Price Summary Sheet must be included in the proposal submittal.

Prices shall include all direct costs, indirect costs, profit, and applicable taxes. OCTA intends to award a firm-fixed price contract for a five-and-a-half (5.5)-year solution. The contract term shall start with the six (6)-month implementation phase followed by the five (5)-year software maintenance and support upon formal acceptance of the implemented solution by OCTA.

5. DEMONSTRATION/INTERVIEW

Consultants may be invited to participate in a system demonstration and/or interview as part of the evaluation process. The purpose of the demonstration is to allow the Consultant to present key functionalities of the proposed solution in alignment with OCTA's business and technical requirements.

6. OCTA RESOURCES

OCTA will establish a project team that will include the following staffing for this project:

- A Project Steering Committee consisting of the Project Sponsors, and major stakeholders
 which will meet as needed (at a minimum, quarterly) to monitor progress and make any
 project decisions and course corrections that are needed.
- A Leadership Team consisting of Business Owners, including the OCTA and Partnering Resources, and Information Systems (IS) departments which will meet regularly (every two [2]-four [4] weeks) to drive efforts, address issues.
- An OCTA Project Manager (PM).

- Technical lead(s), who will be available as needed. The technical lead(s) will assist with technical efforts, such as: network configuration, security, databases.
- A Senior Business Analyst (BA) and functional experts will be available as needed, based on the project schedule, at the request of the OCTA PM.
- One (1) or more power users from each department will be available as needed. They will assist with application use-case questions and testing.
- An Application Analyst (AA) will be assigned.
- System users will be available during certain testing periods. All users of the system will
 participate, provided they have received proper training.

7. CONSULTANT SERVICES, EFFORTS AND DELIVERABLES

Consultant shall provide the following as part of this engagement. The details of each component are outlined in this SOW, and within the Business Requirements.

- Project Management and Documentation The various administrative efforts and documentation to implement this system / project.
- Electronic device, power supply, and mounting.
- Hosted Application Software The latest software version, including any related application software or modules required.
- Other Related Software This includes all software utilities, report writers, workflow software, development tools, hardware drivers, etc., that are required to operate and maintain the application software.
- Annual Maintenance The annual maintenance and support for a minimum of five (5) years for all software that is being licensed.
- Provision, Install, Configure, Test, and Deploy the software and hardware The services required to install, set-up and configure all software and hardware products.
- Software Interfaces and Reports All electronic interfaces between the new system and OCTA's existing application systems (GTFS), as well as the required reports as defined in the Business Requirements.
- Training for OCTA resources (Section 6, above).
- Organizational Change Management (OCM).

8. CONSULTANT TEAM

Consultant's personnel shall accept the following as part of this engagement.

 Consultant's resources shall accept the condition that scheduling flexibility is required since OCTA's activities are driven by a combination of internal and external dependencies.

- Consultant's resources shall work closely with OCTA PM to plan the expected work for each reporting/billing period. All project work shall be coordinated through the OCTA PM.
- Consultant may use offshore resources where appropriate; however, the OCTA PM shall be aware and approve of the use of offshore resources. Consultant assumes full responsibility for the quality of the resultant deliverables and the timeliness of their delivery.
- Consultant's resources shall backup all work products/artifacts at the end of each workday
 onto an OCTA designated storage device (most likely a SharePoint repository or shared
 network drive setup for the Project Team). The intent is to create a collaborative work
 environment, providing visibility to work in progress.
- Consultant's personnel assigned to work on OCTA projects are responsible for the proper care of OCTA's facilities and equipment made available to them throughout the term of the contract.
- Consultant shall provide all phone and desktop-sharing conference calling dial-in numbers and Uniform Resource Locators (URLs).
- Consultant's resources shall respond to voicemail, email, and text messages within a
 reasonable amount of time, but under no circumstances shall the amount of time exceed
 two (2) business days. If a deadline or 'respond by' date/time is indicated in a communication
 by OCTA, it will be expected to be met unless it is considered unreasonable by Consultant.
 If so, Consultant shall immediately notify OCTA, and provide a reasonable deadline that
 would need to be approved by OCTA.

9. BUSINESS NARRATIVE

The new system will serve as OCTA's first TSP solution in Orange County. The new system will be remotely accessible by OCTA and partner stakeholders to manage and monitor TSP operations. Users will have real-time access to communication status, TSP performance metrics, and reporting tools.

Key system features shall include:

- A centralized repository for managing and monitoring transit, traffic, and signal operations with TSP capabilities.
- Customizable dashboards and reports to provide real-time key performance indicators.
- Automated alerts and notifications for critical failures that will impact TSP operations.

Once TSP is enabled, OCTA and partner stakeholder users will have the capability to evaluate the effectiveness of the implemented TSP business rules and their impacts to signalized intersection operations. All data collected from third-party or other integrated platforms, traffic signal controllers, and relevant connected vehicle sources will be securely stored and maintained, ensuring availability and reporting purposes. The TSP system will integrate bus, traffic, and signal operations to improve bus service reliability and provide actionable data insights, thereby enhancing efficiency for OCTA and its partner stakeholders.

10. CONTRACT TASKS

The following Tasks correspond to contractual payment schedule.

TASK 1 – PROJECT PLANNING AND MANAGEMENT

Consultant shall designate a PM, who shall be the single point of contact for Consultant. The administrative project documentation, deliverables and actions (listed below) shall be produced, maintained, and made available by Consultant each week for OCTA to ensure accuracy and completeness. Adequate time shall be allotted within the schedule for OCTA's review of project documentation, revisions to be made by Consultant, and final approval by OCTA (including potentially the Project Sponsors, and Project Owners, when applicable) prior to the deadline of each document and deliverable. Upon approval, work will be authorized.

Project Schedule

- OCTA preference is to use Microsoft (MS) Project 2019. The schedule shall identify all
 tasks in sufficient detail to understand critical path. The tasks shall identify Resources
 (and Owners if applicable), Start- and End-Dates, Duration of tasks, and Predecessor
 relationships (whenever applicable). The schedule shall indicate the tasks for which
 OCTA is responsible.
- The project schedule shall need to incorporate OCTA-specified modifications, including duration and start-date modifications, as necessary, to align with their regular work-day activities, business cycles, holidays, and other work-day constraints for specific OCTA personnel who will be assigned to work on this project.
- The initial draft project schedule shall be submitted to OCTA with the Project Proposal. The project schedule may be further revised during the initial Planning phase, which shall include insertion of OCTA-specific tasks. Then, toward the end of the Design phase, the final project schedule will be approved by OCTA and then baselined to permit identification of future modifications to the schedule. The project schedule shall be updated weekly by Consultant's PM to accurately identify percent (%) physical work complete, or % effort complete (whichever is applicable).
- Cost. The applicable costs/fees shall be identified on the project schedule in a "Budget" column. Subsequently, "Amendment # 'x'" columns shall be added, as necessary, to reflect any amendments established during the project lifecycle. "Invoice # 'x'" columns shall be added, as necessary, for each project invoice. The amounts reflected within these columns shall align with the invoicing payment schedule to accurately reflect monies due based on percent (%) Complete or Milestone (whichever is applicable). Alternatively, the Budget and Cost information may be managed within a separate Microsoft Excel workbook, approved by the OCTA PM, which must tie to the Project Schedule for the purposes of tracking efforts completed, and their respective payments. Payments shall be reconciled against the project schedule. All invoices shall be accompanied by a current project schedule to show the monies tied to the project schedule.

Roles and Responsibilities (R&R) Matrix

• This matrix is to be structured in the form of a RACI (Responsible, Accountable,

Consulted, Informed), including Resource Name, Title, Role, and % Allocation to the project. Each project document and deliverable shall be identified in the RACI by phase. This matrix shall also clearly define Consultant's lines of communications during the project.

Change Orders

If there are any modifications to Scope, Resources, Budget, or Schedule, Consultant is
required to submit those requests and obtain approval from OCTA in advance of the
work being initiated. The Change Orders shall reflect all additions, deletions, or
modifications. Consultant shall provide a detailed report for each required change
including the issue number (#), title, date identified, description, alternatives,
recommended alternative and impacts to schedule, budget, and resource for the
recommended alternative.

Issues, Risks, Action Items, Bugs, Future Enhancements Log (aka Item Log)

The log shall include: item Type, Title, Date Opened, Date Updated, ETA, Opened By, Priority, Description, Assigned To, Status, Comments (updated weekly / date-stamped), and Date Closed. Risks shall be quantified (Occurrence: probability / impact; Control: effective / efficient) in a Risk Assessment. An Item Log shall be developed and maintained by the Consultant, and shall be accessible to OCTA, during post-implementation for system item-logging management purposes.

Project Status Reports

- Submitted to OCTA twice each month (and more frequently if the project is off-schedule, off-scope, or off-budget) and it will be received by noon (Pacific Time) on the Friday it is due. The format for progress reporting can be in Consultant's format. Efforts shall be delineated within the status report for each workgroup (aka project workstream) to permit a clear representation of the individual efforts. The Consultant shall present a Project Status Report template that will be used during the Project for OCTA PM approval prior to submitting the reports. The following elements must be included within the report:
 - Overall Project Status (Green, Yellow, Red). Green = project is on-track with schedule, budget, scope and/or resources, no major issues; no minor issues that will not be resolved in short-term; nothing to escalate. Yellow = project is at risk of slippage with one or more area of schedule, budget, scope, and/or resources; deviation could be 10% to 20% of plan; the project team has plan to correct the deviation. Red = project is slipping in one or more areas of schedule, budget, scope, and/or resources; management assistance is needed to re-set project.
 - Trend (Steady, Improving, Degrading). The Trend is a forecast of the probable change in Status within the upcoming one (1) to two (2) weeks.
 - o Tasks Completed during the reporting period.
 - Tasks In-Progress.
 - Next Steps / Work Planned for the next reporting period including, but not limited to, those identified per the baseline project plan.
 - Resources utilized since the previous Status Report, or those Resources needed during the next reporting period.

- o *Project Issues*, including description, viable solution(s), owner, deadline, impact if not addressed by the deadline.
- o Identification of *Short-Term Risks*, thirty (30) days or less that affects the project's progress, deliverables, or milestones. The risks shall be noted,
- potential solution(s) identified, action required for resolution, and estimated duration of solution.
- o Identification of *Long-Term Risks*, sixty (60) days or more that affects the project's progress, deliverables, or milestones. The risk shall be noted, potential solution(s) identified, and action required for resolution, and duration required.

Project Meetings

- Consultant's project team shall co-lead the Kick-Off meeting with OCTA's PM. This shall be scheduled to occur after the signing of the contract and the acceptance of the project schedule.
- All Consultant's identified team members or their alternates are required to attend the
 meeting, unless approved by the OCTA PM. Consultant's PM shall discuss the project
 approach (describing how the project will be successfully completed, and the
 implementation approach), the project's goals and objectives, scope, out-of-scope items,
 work plan, timeline, and team member roles and responsibilities during the meeting, and
 allow time for questions.
- Consultant's PM shall co-lead the ongoing Project Meetings, including the Kick-Off Meeting, and Status Meetings with OCTA's PM. The meetings shall be held at OCTA's facility in Orange, CA, but Consultant's team may attend the meeting by tele-conference. The purpose of the meetings shall be to review project status, project schedule, Item Log, resolution of issues, assess risk, determine corrective action as required, and to discuss future efforts. At a minimum, meetings with the OCTA's project team shall occur once every month to discuss project progress. Project Status Meetings with Key Stakeholders and Management shall occur at least every two (2) months, as deemed necessary by the OCTA PM. Attendance will be taken at each meeting.
- **Ongoing** (working) **Meetings** shall primarily be led by Consultant PM, or Consultant Leads throughout the course of the project lifecycle.
- **Meeting Agendas.** The content shall include a list of Topics, Start- and End-time for each Topic, Presenter, Follow-Up Items from previous meetings.
- **Meeting Minutes.** The content shall include a summary of the discussion, Decisions, and Action Items. Minutes shall be distributed after the meeting to the meeting attendees (within one (1) business day).
- Ancillary Project Deliverables. Detailed examples of any/all project-specific
 deliverables that shall be produced by Consultant during the project engagement shall
 be provided to OCTA in advance of the start of project to permit OCTA adequate time to
 assess the reasonableness of the content and approve the format and proposed content.
- Documentation Repository. OCTA will establish a MS Teams or MS SharePoint site
 for the project, to which Consultant shall have access. All 'master' versions of
 documentation shall be posted to this site by Consultant. The documents shall be

'checked-out, and –in' to provide control, versioning, and collaboration during the process of drafting the documentation. The project documentation must always be maintained within the Repository.

 All Deliverables / Documentation must be submitted to OCTA in digital formats that are compatible with the OCTA Microsoft Office suite, or as approved by the OCTA PM.

Objectives

- Effective and efficient administration of the project.
- Complete and accurate information.
- Transparency.
- Readily accessible information for the appropriate resources.

Deliverables

- Project Schedule
- Roles and Responsibilities Matrix
- Change Orders
- Item Log
- Project Status Reports
- Kick Off Meeting
- Various Meetings
- Meeting Agendas
- Meeting Minutes
- Ancillary Project Deliverables
- Documentation Repository
- Documentation Formats

TASK 2 – REQUIREMENTS GATHERING

Consultant shall gather and document OCTA and agency stakeholder requirements, including use-cases, from OCTA and stakeholder personnel to ensure the system is configured in a way that meets the needs of OCTA processes and policies. This includes gathering necessary equipment cutsheets for the traffic signal controllers and communication switches identified in Section B6 of Attachment A for OCTA approval prior to procurement, configuration, and installation.

Business Analysis Joint Application Development (JAD) sessions shall be conducted to gather the **Requirements Documentation**. This includes both the functional and the non-functional requirements. The JAD session must ensure consensus from cross-functional teams (business, technical and testing teams) by documenting complete, non-redundant, prioritized, and valid features, functions, and requirements. The requirements shall describe the problem, business case, process, and procedures (input, process, output), data model, and any other pertinent information. The ultimate deliverable shall provide the business solution that will be used for the Build/ Configuration, and by the Test Team. The final Requirements deliverable must be approved by the OCTA Business and Technical teams.

Objectives

- Consensus among cross-functional teams.
- Complete, non-redundant, prioritized valid list of features, functions, and requirements.
- Define all business rules.
- Define the business processes and procedures, including workflow routing, alerts, notifications.
- Define all data interfaces from and to solution.
- Define the user screen views.
- Define the reports required.
- Documentation that can be used during Build/Construction and Testing.

Deliverables

- Hardware cutsheets for approval.
- Detailed and approved Requirements documentation in the form of a Requirements Matrix.

TASK 3 - DESIGN AND PROCUREMENT

Design reviews shall be conducted during the Design Phase to evaluate progress, as well as to evaluate the technical adequacy of the design and conformance with performance, usability, and OCTA/agency stakeholder technical standards. Prior to each review, Consultant shall submit a design review package that includes the design and other information required for the review, including an architecture topology diagram, data flow diagram, hardware, and software versions, network, and security diagrams.

Unless Consultant proposes an alternate approach, which is acceptable to OCTA, design review shall include the following:

- Preliminary Design Review
- Final Design Review

Preliminary Design Review is designed to review the adequacy of the selected design approach and evaluate requirement conformance. The Preliminary Design Review shall represent approximately sixty-five percent (65%) completion of the total engineering effort for the system. At a minimum, the Preliminary Design Review shall include:

- Detailed technical descriptions of the system's major components, allowing a thorough understanding of the implementation of the proposed System Components.
- Interface diagrams.
- Software system level flow charts, if applicable. Software data backup and recovery procedures.

Final Design Review shall be conducted when detailed design is complete. The Final Design Review shall determine whether the detailed design will conform to the design requirements. Data submitted for the Final Design Review shall be updated to a level of detail consistent with the completed design and submitted for the Final Design Review. At a minimum, the Final Design Review shall include:

- Latest revisions of the drawings and documentation submitted for the Preliminary Design Review.
- Data documentation at the second level, including all software development.
 documentation available or used in Consultant's design process, consisting of structured
 data flow diagrams, event tables and/or dialogue diagrams (as available) to the lowest
 level of decomposition with software module descriptions (or elemental process
 descriptions) in structured narrative format. The second level of software documentation
 is one level above source code.
- Review of Consultant's final interoperability and integration with onboard systems, including verification and test plans.

The Design Review shall be to acquaint OCTA and OCTA stakeholders with Consultant's intended design and procurement activities, and resolve external interfaces. At a minimum, the Design Review shall accomplish the following:

- Confirm Consultant's management team and the scope of supply of sub-suppliers.
- Provide narrative descriptions of the major subsystems proposed by Consultant.
- Provide narrative descriptions of TSP business rules proposed for Project corridor, including recommended timing modifications to achieve the proposed operation.
- Identify information needs and decisions required from the agency.
- Confirm that Consultant is familiar with the intended operations and maintenance environment.
- Provide block diagrams showing functionality and interfaces between System Components and elements, such as OCTA's GTFS feed, that are not to be provided by Consultant but affect the system provided by Consultant.
- Review the solution design, including block diagrams and features.
- Review artificial intelligence (AI) capabilities with full descriptions of how the solution incorporates AI technology. Details should include learning models, diagrams, legal/ethical considerations, integration(s), deployment, data sources, data handling, data security/privacy, data ownership and explainability (decision making) features.
- Consultant's staff shall work closely with OCTA to accurately complete the application implementation and configuration, as well as all related services. Consultant shall also answer questions posed during the application implementation process. All decisions shall be documented.
- Consultant's technical staff shall work with OCTA's security and project team to review security requirements in the new hosted environment.
- Where necessary, Consultant's technical staff shall assist in evaluating consultant architecture and configuration as related to security and access.
- The website must be using https.

Objectives

- Perform necessary documentation on how solution will be configured/set up and implemented, including security needs.
- Answer and document application set up questions during the application implementation process.
- Procure solution and supporting field equipment per approved design.

Deliverables

- Design Documentation that includes all implementation and configuration changes.
- A comprehensive Security Plan, which is easily implemented via standard security tools, and which requires minimal maintenance to maintain OCTA's desired level of security.
- Procurement of approved signal equipment.

TASK 4 - CONFIGURE / BUILD

Consultant shall build / customize / configure the application to ensure compatibility with the system requirements. Consultant shall procure the traffic signal equipment and deliver to the respective agency stakeholders, who will be responsible for configuring and installing the traffic signal controllers and communication switches in preparation for the TSP solution. Consultant shall be responsible for implementing any TSP-related parameters and configurations into every traffic signal controller following the installation by agency stakeholder resources. Changes shall be documented and reviewed with OCTA.

Execute the build and configuration of the solution in test environment.

Objectives

- Perform application build according to the requirements.
- Fully configured, installed and operational solution in a test environment
- Create all identified data interfaces and reports.

Deliverables

- Documented System Configurations, including deviations to the system requirements.
- Test environment solution installed, configured, and developed addressing all listed.

TASK 5 - TEST

Consultant shall be required to thoroughly test the application to ensure stability, performance, and system functionality prior to making the system available for OCTA testing efforts. Consultant shall develop the Test Plan, Test Cases, and Test Scripts (if automated testing is being conducted).

Test Plan

Consultant shall develop a Testing Plan for the entire project. The Testing Plan shall address each type of testing.

 The Testing Plan shall include who is conducting the testing, what type of testing shall be conducted, when the testing shall be conducted, how long the testing shall be performed, where the testing shall be performed, the purpose of the test (why), and how to conduct the testing.

- The testing shall include unit-, system-, integration-, load-, stress-, functional-, non-functional-, device-, and network-testing.
- Testing may include backup and restore, and disaster recovery procedures.
- Consultant's technical members shall assist OCTA and agency stakeholder project staff as needed, to complete all User Acceptance Testing.

Test Cases

The Test Cases is a set of conditions or variables under which a Tester shall determine whether a system under test satisfies requirements or works correctly. The process of developing test cases can also help find problems in the requirements or design of an application. The Test Cases shall include a Description, any assumptions or pre-conditions, the steps, and the expected result.

User Acceptance Testing (UAT)

OCTA will conduct UAT of all system functionality. The duration of UAT may be determined by a specific project. It is recommended the duration of UAT be approximately five (5) weeks. Consultant shall be responsible for supporting the UAT efforts, including:

- Clarifying system functionality.
- Troubleshooting and correcting errors and invalid results.
- Updating system documentation (as applicable).

Objectives

- Testing efforts are thorough, effective, and efficient.
- All pertinent resources are clear on the testing process and efforts that will be completed.
- Acceptance Test success criteria is defined.
- Bugs are documented, prioritized, and resolved.
- Any necessary corrections or configuration changes are completed.
- All planned testing is completed successfully.

Deliverables

- Test Plan.
- Test Cases (and Test Scripts if automated testing is being conducted).
- Testing Results.
- Defect logging in Item Log.
- Stakeholder sign-off on the completed testing.

TASK 6 - TRAIN

Consultant shall develop a **Training Plan** for the entire project. The Training Plan shall include the following information: <u>who</u> is conducting and attending the training, <u>what</u> the training will include, <u>when</u> and <u>where</u> the training will be conducted, the purpose of the test (<u>why</u>), and <u>how</u> the training will be conducted.

• Approved training artifact that describes the mediums that will be used (videos, manuals, classes, etc.).

- Comprehensive training documentation shall be provided covering all system features and functionality for specific use by OCTA users, as well as partnering agencies and non-OCTA users identified in the scope of the Project. Detailed manuals, outlines, and lesson plans shall be prepared and submitted for approval. Instructional materials shall address all relevant equipment, system features, and functionalities to ensure full comprehension. The documentation shall be provided in both digital and print formats and shall include clear descriptions and explanations of all features and functions of the application, step-by-step guidance on how to operate the application, and common troubleshooting techniques. Training materials shall also include video tutorials and concise Quick Reference Guides to support both OCTA and partnering agencies in effectively utilizing the system.
- Consultant shall be required to provide training for IT (technical training), and System Administration, Super-Users, and End-User training for OCTA, agency stakeholders, and OCTA contracted employees. Specific training topics shall be focused on the audience, for example:
 - Basic administration for all users
 - Customization of user interface and customer fields
 - API or batch process integration with data specialists
 - o Configurations (i.e. TSP business rules) for administrators
 - Updates and Patch Release process with IT personnel
- Training shall be conducted at OCTA's administrative offices in Orange, CA. Other methods shall require OCTA approval.
- Consultant shall allocate sufficient training time to ensure all trainees achieve the necessary confidence and competency to perform their assigned job functions. The Consultant shall develop and submit a comprehensive training plan that provides a minimum of sixteen (16) hours of instruction, delivered over a four (4) weeks prior to User Acceptance Testing (UAT), and an additional four (4) week period prior to system golive. Each training period shall consist of four (4) training days per week, with two (2) hours of instruction per day. The proposed training delivery method, schedule, and supporting materials shall be submitted to OCTA for review and approval prior to implementation. OCTA will provide the Consultant with a list of users to be included in the training plan.

Objectives

- Ensure that the OCTA team members have an understanding to internally manage and support all technological components involved in consultant's solution.
- Provide training to OCTA project team on how to use system features and functionality.

Deliverables

- Training Plan that denotes the people providing the training, and the resources attending the training, the objectives and expectations of the training, the content that shall be provided, schedule and location, and the purpose of the training.
- Training Documentation, including Quick Reference Guide, manuals, outlines, lesson plans, etc., either paper or digital, for each training session.

TASK 7 - DEPLOY

Consultant shall be responsible for the implementation / deployment of the application into a Production Environment for OCTA to use it as a production system. The Go-Live date is the date OCTA will commence using the application as a Production system. Consultant shall coordinate closely with OCTA stakeholders to ensure the deployment of traffic signal devices is completed prior to moving forward with the TSP solution implementation.

Go-Live Assessment

Consultant's PM shall prepare a **Readiness Assessment Report** for submission to OCTA's Project Sponsors. This report shall identify any incomplete efforts, tasks, and bug fixes and prioritize their importance from a technical perspective to the cutover date, as well as the plan for addressing the incomplete tasks in the post go-live phase. Contingency plans for Go-Live will be documented.

Go-Live Plan

A meeting shall be held prior to production deployment to review the Implementation (Deployment) Plan. The Implementation Plan shall include who is participating in the deployment, what the deployment will encompass, when the deployment efforts/tasks will be conducted, where the deployment will be performed.

- Consultant and OCTA PM shall work with the project teams to draft an appropriate
 Schedule that includes the following: tasks, durations, resources, start- and endtimes, status reporting, and production Validation Tests (to ensure the
 deployment was completed successfully). This shall be included within the
 Implementation Plan.
- A **Deployment Checklist** must be documented to ensure all changes are moved to production accurately and completely.
- A Support Plan must be documented to follow a structured time allocation, with defined days of service to be provided each week. Service level expectations will be highest during the initial phase and will be systematically reduced over time. Specifically, support will be provided five (5) days per week during the initial golive period, tapering to three (3) days per week after the first month, and subsequently to one (1) day per week by the end of the third month, unless otherwise agreed upon by OCTA.
- OCTA requires that all changes to the Production environment be approved by the project sponsor, business owner and OCTA PM.

Go-Live / Deployment,

Execute the build and configuration of the solution into the production environment.

Objectives

- Complete Readiness Assessment Report.
- Identify outstanding tasks and identify estimated completion dates.
- Prepare the implementation efforts.
- Approved Change Control.

- Plan for support-related activities.
- Create schedule.
- Determine Production Validation tests.
- Fully configured, installed and operational solution in a production environment.
- Create all identified data interfaces.
- Evaluate documented Validation Test scripts.
- Summarize test script processes that did not yield desired results.
- Review and prioritize pending defects.
- Evaluate system setup and process decisions to achieve desired results.
- Completion and sign-off on testing.
- Identification of required action items for project completion.
- Production environment solution installed and configured addressing all listed requirements (including all identified interfaces).

Deliverables

- Readiness Assessment Report.
- Draft the Implementation (Deployment) Plan.
- Approved Implementation (Deployment) Plan.
- Go-Live Schedule.
- Deployment Checklist.
- Production Validation Tests.
- Go-Live Support Plan.
- Approved Change Control.
- Final Acceptance, consultant shall assist OCTA in evaluating results of Production Acceptance Testing. Based on the outcome of this testing, decisions related to setup and processes may need to be re-evaluated in order to achieve desired results.
- Approved Validation Test scripts.
- Updated System Documentation (based on deployment revisions).
- Updated Items Log that with any remaining defects that must be addressed.
- Deployment Acceptance.

TASK 8 - POST-DEPLPOYMENT SUPPORT / WARRANTY

OCTA expects Consultant to provide system warranty. Following system acceptance of the application, Consultant shall warranty their work to conform to requirements set forth in this SOW, for a minimum of sixty (60) calendar days after final software is deployed to production at Go-Live. Consultant shall correct and repair, at no cost to OCTA, any defect, malfunction, or non-conformity that prevents the application from performing in accordance with requirements set forth in this SOW.

- The warranty period shall begin on the Go-Live date if all bugs and defects previously reported during testing have been resolved to OCTA's satisfaction. Go-Live constitutes the date when the solution is formally accepted in writing and ready for deployment in OCTA's production environment. All bugs, defects, and issues.
- Previously reported during testing must be fixed to OCTA's satisfaction before the solution can be formally accepted for Go-Live and before warranty can begin. A test in production is not considered Go-Live.

- If minor issues remain and it is mutually agreed by OCTA and Consultant to proceed with
 the Go-Live in production to allow Consultant additional time past Go-Live to resolve
 these minor issues that shall not initiate the start of warranty. In this case a separate
 written acceptance will be provided to commence the warranty period after all remaining
 issues have been fixed by Consultant and accepted by OCTA.
- Consultant shall provide Help Desk Services to troubleshoot and resolve system issues
 or questions. Consultant shall provide a support phone number and website where
 issues can be raised, documented, managed, and monitored.
- Consultant shall develop and submit a comprehensive post-deployment Support Plan to OCTA for approval, to accompany the application. The Support Plan shall cover a five (5) year period following deployment and shall include provisions for application stabilization, limited enhancements, and ongoing maintenance. The Support Plan should be structured as a phased approach, with the highest allocation of support efforts in Year 1, followed by a progressive reduction in each subsequent year. The plan shall include a total number of hours reasonably proposed by Consultant and agreed to by OCTA to be allocated over the five (5)-year term.
- Consultant shall clearly define the annual support schedule and associated hourly allocations in the submitted Support Plan, which must be incorporated into the overall proposal.

Objectives

- Ensure resolution of all pre-Go-Live defects and system issues to OCTA's satisfaction.
- Support system functionality in alignment with the SOW during the warranty period.
- Deliver Help Desk services for issue resolution and end-user support plan ongoing support clearly defined.
- Provide access to a support phone line and web portal for issue tracking.
- Provide a minimum 60-calendar-day warranty beginning after Go-Live and final system acceptance.
- Develop and submit a Support Plan.

Deliverables

- Help Desk contact information, web-based tracking tool, Help Desk services and software fixes, where appropriate.
- Regular installation of software patches or releases to the application.

11. ATTACHMENT A: HARBOR BLVD TSP REQUIREMENTS

This section includes an outline of the various worksheets within Attachment A: *Harbor Blvd TSP Business Requirements.xls*.

A1: VENDOR RESPONSE INSTRUCTIONS

Definitions for Consultant Response to the Business Requirements:

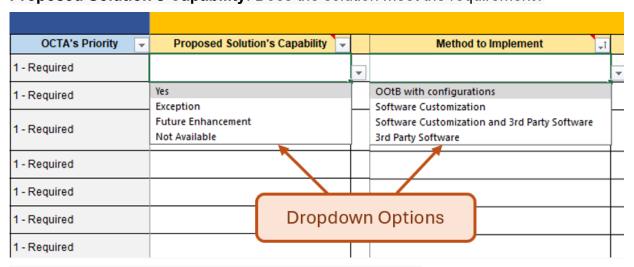
Functional and Non-Functional Requirements List				
OCTA's Priority	Description			
1 - Required	Requirement is available in organizations current solution.			
2 - Preferred / Nice to Have	Requirement is not required but is preferred.			
3 - Out of Scope	Out of scope for this RFP. No response needed.			
	Responses for both Functional and Non-Functional Requirements			
Proposed Solution's Capability	Description			
Yes	Software has the ability to meet the requirements functionality and is available in the current version of software.			
Exception	Software has the ability to meet the requirement, explanation required.			
Future Enhancement	Software feature is approved and the product roadmap and includes a timeframe.			
Not Available	Software does not have the functionality and no plans for the function in product roadmap.			
Method to Implement	Description			
OOtB with configurations	The "Out-Of-the-Box" product has this capability using system configuration(s).			
Software Customization	Requirement can be met when software is customized.			
Software Customization and 3rd Party Software	Both a product customization and 3rd party software would be required to meet this requirement.			
3rd Party Software	Other customers accomplish this requirement using 3rd party software.			

A2. FUNCTIONAL AND NON-FUNCTIONAL REQUIREMENTS

Consultant shall submit response to the Requirements in Microsoft Excel (.xls) format with Consultant's proposal. Provide a response for each individual functional and non-functional requirement relevant to how Consultant's system meets the respective requirements.

The figure below is a screen shot of the Requirements List in the Microsoft Excel file. OCTA's requirements are organized by Category, Sub-category / Process, and Priority. Consultant is expected to review these requirements in detail and indicate their understanding by populating the proposed system's capability, method to implement, costs for customizations, and third-party software, and any relevant comments and assumptions (columns G through L for functional requirements and columns F through K for non-functional requirements of the Requirements Microsoft Excel file).

Proposed Solution's Capability: Does the solution meet the requirement?



Method to Implement: How is the requirement achieved?

- Software Customization Costs & 3rd Party Software Costs shall be provided if the requirement shall be accomplished by implementing a software customization or third-party software. If a software customization or a piece of third-party software is proposed to satisfy multiple requirements, then the cost by line item is not required. Instead, Consultant shall reference the customization, or third-party software in their requirements response and include the customization or third-party software and interface development costs in the Price Summary Sheet (Exhibit B).
- Consultant Comments may be added to Consultant's response for any requirement. If customization or partial customization is indicated, then Consultant shall explain level of effort and risk. If future release is expected, Consultant shall indicate target release number and date within project timeline. If third-party software is proposed, Consultant shall indicate which software.
- Consultant Assumptions shall be identified and included, as applicable.

A3: VENDOR QUESTIONNAIRE

Use the table to identify software and hardware requirements, as well as software support responses and other system highlights. Use the table to indicate a clear response to the project implementation tasks and deliverables under Section 10 of the SOW, "Contract Tasks". This table shall be submitted in Excel format as part of Consultant's proposal.

B1: REPORTS

For the purpose of defining the reporting requirements (current or future reporting needs).

B2: INTERFACES AND DATA EXCHANGE

A listing of interfaces and data exchanges that must be supported as part of the implementation effort.

B3: SYSTEM USERS

The number of users that must be supported as part of the software licensing.

B4: PROJECT STUDY AREA

A map of the study area that identifies the signalized intersections and bus stops along the OC Bus Rapid Route 543 along the Harbor Boulevard corridor.

B5: LOCATIONS

A list of office locations for this initiative. Additionally, a list of signalized intersections on the project area as shown in B4 along with the traffic signal controller and communication switch upgrades required for this project.

B6: OCTA SYSTEM TOPOLOGY DIAGRAM

Describes the current and future state of system connectivity.

12. SOFTWARE PERFORMANCE SERVICE LEVEL AGREEMENT (SLA)

Software performance expectations are provided. Service-level requirements are provided within the Functional and Non-Functional Requirements List, as well as the additional worksheets in Attachment A.

The descriptions of issue criticality, priority level, and resolution timing are described below.

Priority Level Descriptions

P1: Production instance totally unavailable to all users at a Site. OCTA is unable to perform a critical business function at all or any sites, and no reasonable work-around. Security breach within OCTA's environment.

SLA: For critical issues OCTA expects confirmation from the Consultant regarding the issue within two (2) hours and a solution within twenty-four (24) hours of the request.

Examples:

- 1. Production instance not available for use.
- 2. Function does not work.
- **P2**: Production instance unavailable to single user. Critical function unavailable to all Users at a Site, and no reasonable workaround exists. Production performance significantly degraded causing disruption of the business operations of OCTA. Non-production instance totally unavailable.
 - SLA: OCTA expects confirmation from the Consultant regarding the issue within eight (8) business hours and a solution within three (3) business days of the request.

Examples:

- 1. Very slow production system performance.
- 2. Unable to print any reports.
- 3. Individual User unable to connect.
- 4. Creation or reset of User accounts.
- 5. Migrate major bug or enhancement code to Production Environment.

P3: Single function unavailable to all users at a site, but a reasonable workaround exists. Maintenance task in production environment that has minimal impact on OCTA.

SLA: OCTA expects confirmation from the Consultant regarding the issue within three (3) business days and a solution within five (5) business days of the request.

Examples:

- 1. Unable to print a non-critical report.
- 2. Configure a new printer.

- 3. Create developer account.
- 4. Migrate minor bug or enhancement code to production environment.

P4: Minor fault that has minimal impact on the business operations of the Customer for which an acceptable work-around exists. Maintenance task in non-production environment.

SLA: OCTA expects confirmation from the Consultant regarding the issue within five (5) business days and a solution within two (2) calendar weeks of the request.

Examples:

- 1. Migrate code to Non-Production Environment.
- 2. Refresh Non-production database.

LIMITATION ON GOVERNMENTAL DECISIONS

Nothing contained in this scope of work permits the Consultant's personnel to authorize or direct any actions, votes, appoint any person, obligate, or commit OCTA to any course of action or enter into any contractual agreement on behalf of OCTA. In addition, Consultant's personnel shall not provide information, an opinion, or a recommendation for the purpose of affecting a decision without significant intervening substantive review by OCTA personnel, counsel, and management.

Offerors who were not awarded the contract may obtain a debriefing concerning the strengths and weaknesses of their proposal. Unsuccessful Offerors, who wish to be debriefed, must request the debriefing in writing or electronic mail and the Authority must receive it within three (3) business days of notification of the contract award.

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SYSTEM REFERENCE DOCUMENTS

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- **B5: LOCATION DEMOGRAPHICS**
- **B6: OCTA SYSTEM TOPOLOGY DIAGRAMS**

Requirement Response Instructions

RFP 250014 **EXHIBIT A**

ATTACHMENT A

*Note: Please use the following table to respond.

Functional and Non-Functional Requirements List					
OCTA's Priority	Description				
1 - Required	Requirement is available in organizations current solution.				
2 - Preferred / Nice to Have	Requirement is not required but is preferred.				
3 - Out of Scope	Out of scope for this RFP. No response needed.				

Responses for both Functional and Non-Functional Requirements				
Proposed Solution's Capability	Description			
Yes	Software has the ability to meet the requirements functionality and is available in the current version of software.			
Exception	Software has the ability to meet the requirement, explanation required.			
Future Enhancement	Software feature is approved and the product roadmap and includes a timeframe.			
Not Available	Software does not have the functionality and no plans for the function in product roadmap.			
Method to Implement	Description			
OOtB with configurations	The "Out-Of-the-Box" product has this capability using system configuration(s) .			
Software Customization	Requirement can be met when software is customized.			
Software Customization and 3rd Party Software	Both a product customization and 3rd party software would be required to meet this requirement.			
3rd Party Software	Other customers accomplish this requirement using 3rd party software.			

Column Color Codes

To be filled out by OCTA To be filled out by Vendor



	INFORMATION PRO	VIDED BY OCTA			
ID	System Requirement	Category	Sub-category	Process	OCTA's Priority
1	As a user, I will have the ability to log into the transit signal priority (TSP) system using secure, authenticated credentials issued by my city or authorized agency.	Functional	Security	Role Based Access Control	1 - Required
2	As a user, I will have the ability to access the system only if my credentials are verified through multi-factor authentication (MFA) or equivalent secure login protocols.	Functional	Security	Role Based Access Control	1 - Required
3	As a user, I will have the ability to access the TSP data, metrics, and configuration tools relevant to my city with read-only access to other locations (e.g., Garden Grove users will see Fullerton intersections but will not be able to modify).	Functional	Security	Role Based Access Control	1 - Required
4	As a user, I will have the ability to be assigned a role (e.g., administrator, analyst, viewer), which determines the extent of my permissions (view-only vs. editable access).	Functional	Security	Role Based Access Control	1 - Required
5	As a user, I will have the ability to request changes to user access levels and permissions through a centralized or city-level administrator.	Functional	Security	Role Based Access Control	1 - Required
6	As a system administrator, I will have the ability to run reports that show which users are assigned to which security roles.	Functional	Security	Reporting/Analytics	1 - Required
7	roles, including permissions/functions granted.	Functional	Security	Reporting/Analytics	1 - Required
8	As a user, I will have the ability to run reports on system parameter settings (e.g., thresholds, integration configurations, defaults).	Functional	Security	Reporting/Analytics	1 - Required
9	As a system administrator, I will have the ability to run reports on workflow configurations, including steps, assigned roles, and approval paths.	Functional	Security	Reporting/Analytics	1 - Required
10	Iting specific information quickly.	Functional	Security	Reporting/Analytics	1 - Required
11	As a user, I will have the ability to export reports (e.g., PDF, Excel, CSV) for analysis, audit, and compliance purposes.	Functional	Security	Reporting/Analytics	1 - Required
12	As a system administrator, I will have the ability to onboard new users, deactivate access, and assign roles as needed for city staff or third-party contractors.	Functional	Security	Security	1 - Required
13	As a system administrator, I will have the ability to view an audit log of all user actions (e.g., changes to signal priority rules, manual overrides, dashboard access).	Functional	Security	Audit	1 - Required
14	As a system administrator, I will have the ability to monitor login activity by city, user ID, and timestamp to detect unauthorized access attempts.	Functional	Security	Audit	2 - Preferred / Nice to Have
15	As a user, I need access to workflows and configuration options relevant to my assigned role(s), ensuring secure and efficient access.	Functional	Security	Security	1 - Required
16	As a system, I must authenticate and authorize users based on their assigned roles and permissions before granting access to workflows or configuration functions.	Functional	Security	Security	1 - Required
17	As a system, I must enforce role-based access control (RBAC) to ensure users only see and perform tasks they are permitted to.	Functional	Security	Security	1 - Required
18	As a system, I must provide a centralized role and function catalog where administrators can define, assign, or revoke user roles.	Functional	Security	Security	1 - Required
19	As a system, I must support workflow visibility rules that ensure users only view workflows applicable to their role(s).	Functional	Security	Configuration	1 - Required
20	notifications) with access restricted to authorized roles (e.g., system administrators).	Functional	Security	Configuration	1 - Required
21	As a user, the system must provide audit logs and reports showing which users hold which roles and what functions they have access to.	Functional	Security	Audit	1 - Required
22	As a user, the system must capture and display changes to user roles, including who made the change, what was changed, and when.	Functional	Security	Audit	1 - Required
23	System must be able to generate workflow access reports, showing user participation, approvals, and workflow history by role.	Functional	Security	Reporting/Analytics	1 - Required
24	System must provide a configuration change log that tracks updates to key system settings, accessible to auditors and compliance officers.	Functional	Security	Reporting/Analytics	1 - Required
25	System must generate accurate and up-to-date reports on user role assignments.	Functional	Security	Reporting/Analytics	1 - Required
26		Functional	Security	Reporting/Analytics	1 - Required
27	System must generate reports on system parameter settings.	Functional	Security	Reporting/Analytics	1 - Required



	INFORMATION PRO	VIDED BY OCTA			
ID	System Requirement	Category	Sub-category	Process	OCTA's Priority
28	System must generate reports on workflow configurations (steps, participants, routing rules).	Functional	Security	Reporting/Analytics	1 - Required
29	System must provide filtering and search functions within reporting modules.	Functional	Security	Reporting/Analytics	1 - Required
30	System must provide secure export functionality (PDF, Excel, CSV) restricted to authorized roles.	Functional	Security	Reporting/Analytics	1 - Required
31	System will be capable to send real-time bus and signal data securely, using end-to-end encryption (e.g., TLS/SSL) to prevent interception or tampering.	Functional	Security	Data Transmission	1 - Required
32	System will be capable to receive real-time bus and signal data securely, using end-to-end encryption (e.g., TLS/SSL) to prevent interception or tampering.	Functional	Security	Data Transmission	1 - Required
33	System will be configurable to protect transmitted data where it matters such as; -Bus Onboard Systems (i.e., Automatic Vehicle Location AVL / CAD-AVL systems, Onboard communications modules cellular, DSRC, or 5G modems) -Traffic Signal Controllers (i.e., Local controllers at intersection) -Traffic Management Center (TMC) Systems (i.e., Cloud-hosted, on-prem systems that process requests, arbitrate priority, push signal timing adjustments.) -Transit Operations Center Systems (i.e., scheduling systems, data warehouse AVL/TSP logs, API's if integrated with traffic signals)	Functional	Security	Data Transmission	1 - Required
34	System will comply with industry standard cyber security framework (e.g. NIST 800-53, CJIS guidelines (if applicable), Local agency cybersecurity policies	Functional	Security	Compliance	1 - Required
35	Cloud Based System will have the ability to support TSP operations with ATC-compliant signal controllers, including those from major manufacturers (i.e., Econolite, McCain, Trafficware, Q-Free, and Yunex)	Functional	TSP Handling	Compliance	1 - Required
36	System will have the ability to manage signal priority operations for multiple bus routes spanning several city jurisdictions using cloud-based coordination.	Functional	Integration	Data Transmission	1 - Required
37	System shall be capable of receiving both static and real-time General Transit Feed Specification (GTFS) data from Swiftly at near real-time intervals.	Functional	Signal Request	Data Transmission	1 - Required
38	System will have the ability to interface with Swiftly data services to ingest near real-time bus location updates for use in transit signal priority (TSP) logic.	Functional	Integration	Data Transmission	1 - Required
39	System will have the ability to calculate Estimated Time of Arrival (ETA) updates as frequent as the data is received from Swiftly.	Functional	Signal Request	Reporting/Analytics	1 - Required
40	System will have the ability to associate each transit vehicle with a Swiftly "run" number and dynamically update route data in real time.	Functional	Signal Request	Reporting/Analytics	1 - Required
41	System will have the ability to generate NTCIP 1211 Priority Request messages when a bus approaches a signalized intersection under qualifying conditions.	Functional	Signal Request	Reporting/Analytics	1 - Required
42	System will have the ability to communicate with signal controllers using the NTCIP 1211 standard protocol.	Functional	TSP Handling	Compliance	1 - Required
43	System will have the ability to transmit priority requests to field signal controllers using standard traffic protocols (e.g., NTCIP 1211).	Functional	Signal Request	Data Transmission	1 - Required
44	System will have the ability to evaluate TSP conditions (e.g., lateness threshold, route eligibility, direction) before issuing a request.	Functional	Infrastructure	Data Management	2 - Preferred / Nice to Have
45	System shall support simultaneous priority requests for multiple buses operating on the same corridor for both directions as well as intersecting corridors. Conflicts for overlapping resolved based on configurable priority logic.	Functional	Signal Request	Data Transmission	2 - Preferred / Nice to Have
46	System will have the ability to host TSP logic, control rules, and data processing in a secure, cloud-based environment.	Functional	Infrastructure	Data Management	1 - Required
47	System will have the ability to ingest and integrate signal data and controller settings from multiple city central systems to the cloud.	Functional	Infrastructure	Data Management	1 - Required
48	System will have the ability to collect and store detailed logs of all TSP events, including timestamps, vehicle IDs, intersection IDs, and outcomes.	Functional	Performance Metrics	Reporting/Analytics	1 - Required



	INFORMATION PROVIDED BY OCTA				
ID	System Requirement	Category	Sub-category	Process	OCTA's Priority
49	System will have the ability to report Key Performance Indicators (KPIs) such as, but not limited to the following: -ETA accuracy and variability -TSP request success rate -Average green delay/extension time -On-time performance improvement -Reduction in bus stop delay	Functional	Performance Metrics	Reporting/Analytics	1 - Required
50	System will have the ability to report and visualize performance metrics that integrate bus and signal data for operational analysis, which may include but is not limited to the following: - Delay for main street and side street movements at signalized intersections - Green time taken from each phase per signalized intersection - TSP requests per approach per signalized intersection - Reason for denial of TSP request - Travel time comparison (e.g., before/after, between vehicles and bus on the route, etc.)	Functional	Performance Metrics	Reporting/Analytics	2 - Preferred / Nice to Have
51	System will have the ability to customize performance metric reports as define by OCTA.	Functional	Performance Metrics	Reporting/Analytics	2 - Preferred / Nice to Have
52	System will have the ability to log and process TSP data independently per city, ensuring local control of signal behavior.	Functional	System Configurability	Rules/Parameters	1 - Required
53	System will have the ability to apply TSP rules per city while still maintaining corridor-level logic for coordinated routing.	Functional	System Configurability	Rules/Parameters	1 - Required
54	System will have the ability to define and adjust activation parameters, such as: -Threshold (in seconds) to broadcast ETA and/or request priority by intersection -Minimum delay threshold (in seconds) -Time of day or day-of-week rules -Intersection-specific behavior	Functional	System Configurability	Rules/Parameters	2 - Preferred / Nice to Have
55	System will have the ability to import or edit GTFS and route configuration files to align with transit operations.	Functional	System Configurability	Rules/Parameters	2 - Preferred / Nice to Have
56	System will have the ability to apply rule changes without interrupting ongoing operations, using a web-based admin console.	Functional	System Configurability	Rules/Parameters	1 - Required
57	System will have the ability to detect communication failures with controllers or vehicles and automatically revert to normal traffic signal operation.	Functional	Failover/Recovery	Data Management	1 - Required
58	System will have the ability to alert relevant city staff in case of hardware malfunction, data latency, or rule conflicts.	Functional	Failover/Recovery	Data Management	1 - Required
59	System will have the ability to generate real-time alerts in the event of equipment malfunctions or communication failures across any component of the TSP network.	Functional	Scalability	Monitoring	1 - Required
60	System will have the ability to retry failed priority requests within a defined retry window.	Functional	Failover/Recovery	Data Management	2 - Preferred / Nice to Have
61	System will have the ability to integrate with city-level systems such as Advanced Traffic Management Systems (ATMS), transit dispatch, or 3rd-party analytics platforms.	Functional	Integration	Data Management	2 - Preferred / Nice to Have
62	System will have the ability to expose Application Programming Interfaces (APIs) for integration with Traffic Management Centers (TMCs), Advanced Traffic Management Systems (ATMS), and internally or externally developed dashboards.	Functional	Integration	Data Management	1 - Required
63	System will have the ability to export data in standardized formats (CSV, JSON, API) for external reporting or research purposes.	Functional	Integration	Data Management	1 - Required
64	System will have the ability to update individual components (e.g., bus logic module, analytics engine) without affecting overall system uptime.	Functional	Scalability	Reporting/Analytics	1 - Required
65	System will have the ability to scale horizontally to support additional intersections or bus routes in future phases.	Functional	Scalability	Reporting/Analytics	1 - Required
66	System will have the ability to compute each bus's ETA and transmit it to a minimum of the next three (3) upstream signalized intersections.	Functional	Signal Request	Reporting/Analytics	1 - Required
67	System will have the ability to calculate each bus's Estimated Time of Departure (ETD) from stops and use this value to refine ETA predictions for upcoming intersections.	Functional	Signal Request	Reporting/Analytics	2 - Preferred / Nice to Have



	INFORMATION PRO	VIDED BY OCTA			
ID	System Requirement	Category	Sub-category	Process	OCTA's Priority
68	System will have the ability to manage signal priority for both near-side and far-side bus stops, including the ability to cancel or restart TSP requests when the vehicle door opens at a near-side stop.	Functional	TSP Handling	Data Transmission	2 - Preferred / Nice to Have
	System will have the ability to allow configurable thresholds for initiating priority requests, including parameters such as schedule adherence, passenger load, route identity, and traffic volume adjusted by time-of-day or corridor-specific conditions.	Functional	System Configurability	Data Management	2 - Preferred / Nice to Have
70	specific intersections or across the entire corridor.	Functional	System Configurability	Rules/Parameters	1 - Required
71	regular fixed-route buses, rapid services, and emergency or special vehicles.	Functional	Scalability	Reporting/Analytics	2 - Preferred / Nice to Have
72	System will have the ability to expand to support additional transit modes (e.g., streetcars, shuttles, demand-response vehicles) with configurable rules for each mobility type.	Functional	Scalability	Modularity	2 - Preferred / Nice to Have



	INFORMATION PROVIDED BY C	OCTA		
ID	System Requirement	Category	Sub-category	OCTA's Priority
1	As a user, I need the ability to view my assigned user role(s) and their corresponding functions/permissions so that I understand what actions I can perform in the system.	Technical	System Credits	1 - Required
2	latency data processing.	Non-Functional / Technical	Scalability	1 - Required
3	System shall be scalable to support additional bus routes and jurisdictions without requiring major architecture changes, provided central communication link is present.	Non-Functional / Technical	Scalability	1 - Required
4	The system's web-based dashboard shall meet OCTA's non-functional standards by providing secure access, real-time data visibility, configurable controls, and status reporting with appropriate authentication, encryption, and performance guarantees.	Non-Functional / Technical	Scalability	1 - Required
5	System shall have demonstrated operational deployment in a minimum of three (3) separate jurisdictions for a duration of at least one (1) year prior to deployment.	Non-Functional / Technical	Deployment	1 - Required
6	It is required that the system is web based (SaaS).	Non-Functional /	Administration Console	1 - Required
7	Application must have a method for defining and managing User roles and access.	Non-Functional /	Application Security	1 - Required
	Software and hardware shall be commercial-off-the-shelf (COTS) product(s) for TSP.	Non-Functional /	Core Software	1 - Required
9	Ability to audit data changes based on certain criteria.	Non-Functional /	Database	1 - Required
10	All data is property of OCTA and shall be returned to OCTA within sixty (60) calendar days of the end of the contract.	Non-Functional / Technical	Database	1 - Required
	An acceptable timeframe for the production environment to be down before activating the disaster recovery (DR) site is 12 hours. Beyond 12 hours activation of DR may be required by consultation with OCTA IT Staff.	Non-Functional / Technical	Disaster Recovery	1 - Required
12	At a minimum, the Recovery Point Objective (RPO) shall be 24 hours or less.	Non-Functional / Technical	Disaster Recovery	1 - Required
13	At a minimum, the Recovery Time Objective (RTO) shall be 24 hours or less.	Non-Functional / Technical	Disaster Recovery	1 - Required
14	Both parties shall mutually agree to activate the DR site. OCTA reserves the right to request the DR to be activated sooner or later than 12 hours based on the current situation.	Non-Functional / Technical	Disaster Recovery	1 - Required
15	Development and maintenance of a runbook detailing procedures and roles to initiate DR services.	Non-Functional /	Disaster Recovery	1 - Required
16	Vendor shall provision the Data Center, hardware and software and will assist OCTA with any OCTA required hardware and software provisioning.	Non-Functional / Technical	Disaster Recovery	1 - Required
17	Vendor will annually test to review their internal procedures for activating the DR site and provide OCTA a report of the outcome. The report should include, but is not limited to, actual RPO/RTO times, issues and corrective action taken.	Non-Functional / Technical	Disaster Recovery	1 - Required
18	In the event of a disaster Vendor will provide access to the recovery center facility (setup within the United States) and provides cut-over services if required by OCTA Information systems operations.	Non-Functional / Technical	Disaster Recovery	1 - Required
19	No fee will be imposed when a disaster is called.	Non-Functional / Technical	Disaster Recovery	1 - Required
20	A monthly report will be generated by the Support/Maintenance team, including but not limited to: details of logged Help Desk calls, availability of system, maintenance activities and tuning activities.	Non-Functional / Technical	Environment	1 - Required
21	All changes to the infrastructure, hardware and software will be submitted to OCTA by a formal change request, and will be performed after OCTA provides acceptance. Vendor will work in alignment with OCTA to establish a change process.	Non-Functional / Technical	Environment	1 - Required
22	All scheduled down-time will be done at the specific window(s) determined by consultation with OCTA.	Non-Functional / Technical	Environment	1 - Required



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ID	System Requirement	Category	Sub-category	OCTA's Priority
	Apply the latest upgrades, updates and patches within 30 days of release. Major operating systems and software applications must be no more the 2 releases off current version but security upgrades and patches must all be up to date within 30 days of release.	Non-Functional / Technical	Environment	1 - Required
24	Vendor shall assist OCTA staff in the problem diagnostic process using vendor-provided tools, which may include front-end or back-end traces and other resources necessary for troubleshooting system issues.	Non-Functional / Technical	Environment	1 - Required
25	At the software level, the system shall support administration of user accounts, including creation of new accounts, deletion of accounts, and password resets, with changes reflected in near real time.	Non-Functional / Technical	Environment	1 - Required
	Vendor SaaS/hosting facility will comply with applicable laws, rules and regulations regarding a safe work environment and fire protection measures and will maintain safety and security measures in accordance with level 3 or 4 data center standards.	Non-Functional / Technical	Environment	1 - Required
	If Vendor hosting facility shall operate and maintain the Environment, including the system hardware, system network and system operating software to level 3 or level 4 data center standards.	Non-Functional / Technical	Environment	1 - Required
28	Vendor shall provision the necessary hardware, software and environment to allow OCTA to run the version of software initially licensed, and any future versions.	Non-Functional / Technical	Environment	1 - Required
29	Vendor shall repair, upgrade or replace the environment components as necessary for the system to perform properly and be compatible with any future updates and version releases.	Non-Functional / Technical	Environment	1 - Required
30	Vendor will immediately notify OCTA of a vendor or sub-contracted vendor security breach that impacts OCTA data and will provide regular status updates, at a minimum daily, until the breach is resolved.	Non-Functional / Technical	Environment	1 - Required
31	Vendor will promptly notify OCTA of any compromise to the security of the hosting facility.	Non-Functional /	Environment	1 - Required
32	Vendor will use industry standard security measures, such as firewalls and standard encryption protocols, to protect OCTA data.	Non-Functional / Technical	Environment	1 - Required
	Hosting shall be provided in a Tier2 (or greater) cloud environment.	Non-Functional / Technical	Environment	1 - Required
34	OCTA will only consider well-designed and previously implemented, proven software that is referenceable, has a demonstrated ease of use, asset management functionality consistent with Federal DOT guidelines for transit organizations, robust reporting capabilities, an advanced system integration architecture and superior product support.	Non-Functional / Technical	Environment	1 - Required
35	Perform file restorations as required.	Non-Functional / Technical	Environment	1 - Required
	Repair all errors and faults which may include a reset or reboot of the server, restart of system services, installing patches by the operating system vendor.	Non-Functional / Technical	Environment	1 - Required
37	The SaaS Environment will be available to OCTA 24 hours a day, seven days a week, 365 days a year (except for Scheduled Downtime events).	Non-Functional / Technical	Environment	1 - Required
38	The system shall be accessible 24x7x365, with 99.9% up-time, i.e., annual down-time will not exceed 525.6 minutes per year. Penalties ramp up every 15 minutes if down-time exceeds maximum. Down-time allowance is reset annually on contract anniversary.	Non-Functional / Technical	Environment	1 - Required
39	Vendor shall include in their Systems Integration narrative how their proposed SaaS-based software seamlessly integrates with OCTA's existing on-premise production systems and databases.	Non-Functional / Technical	Environment	1 - Required



	INFORMATION PROVIDED BY C	OCTA		
ID	System Requirement	Category	Sub-category	OCTA's Priority
	Vendor shall list all required technical components (hardware, communications, environmental, infrastructure, etc.) with specifications and costs that enable the proposed Technical Solution to meet the performance, capacity and responsiveness of the system requirements. OCTA may discuss alternatives with the proposer to ensure that any hardware meets both the requirements of the proposer and conforms to OCTA's technology infrastructure requirements and strategy.	Non-Functional / Technical	Environment	1 - Required
41	At a minimum, OCTA expects a Service Organization Controls (SOC) 2 compliant environment.	Non-Functional / Technical	Environment Security	1 - Required
42	If data is required from OCTA from a 3rd party network, it is preferred that the data be pushed from an OCTA system within OCTA's DMZ via VPN tunnel	Non-Functional / Technical	Environment Security	1 - Required
43	OCTA "IS Preferred Standards & Practices" should be addressed for non-OCTA managed environments when applicable.	Non-Functional / Technical	Environment Security	1 - Required
44	Only privileged accounts may access and use tools with administrative capabilities, to conform to the concept of least privilege.	Non-Functional / Technical	Environment Security	1 - Required
45	Physical destruction or degaussing of all media storage devices that retained Agency data will be done before releasing the media outside of the control of the Vendor; recording the date, time, method, and witness with a signed certificate of compliance.	Non-Functional / Technical	Environment Security	1 - Required
46	Sensitive data will be protected, both in transit and while at rest.	Non-Functional / Technical	Environment Security	1 - Required
47	System Security logs will be retained, and the Vendor shall be in compliance with all PII/PCI/HIPAA logging requirements (if applicable).	Non-Functional / Technical	Environment Security	1 - Required
48	The Vendor shall immediately notify the Agencies Cyber Security team in the event (potential or real) of any incident/event resulting the loss (potential or real) of revenue, data, or security breach has occurred.	Non-Functional / Technical	Environment Security	1 - Required
49	The Vendor shall maintain network security and confidentiality and provide the required software and monitoring tools to ensure network remains compliant with security standards, including: a. The appropriate administrative, technical, and physical safeguards designed to protect against Information Security Events. This should include regular security assessments; made available to OCTA as requested b. Compliance, as required, to the requirements of applicable Data Protection Laws c. Procedures for Change Management, patching, disaster recovery, and backups d. Provision of written information security policies for the Agency, as requested	Non-Functional / Technical	Environment Security	1 - Required
50	The vendor's technical staff will assist in evaluating OCTA's architecture and configuration as related to security and access.	Non-Functional / Technical	Environment Security	1 - Required
51	The vendor's technical staff will work with OCTA's Security and project team to review security requirements in the new environment.	Non-Functional / Technical	Environment Security	1 - Required
52	Application Updates. Vendor shall periodically update the application to ensure compatibility and functionality. These updates may also contain application updates and fixes.	Non-Functional / Technical	License, Maintenance and Support, and Hosting	1 - Required
53	At project completion, all software use licenses and subscriptions shall be consolidated into a single licensing agreement to streamline renewals. The Vendor shall disclose whether an Enterprise Licensing option is available and specify the conditions under which it becomes more cost-effective than individual licenses or subscriptions.	Non-Functional / Technical	License, Maintenance and Support, and Hosting	2 - Preferred / Nice to Have



	INFORMATION PROVIDED BY C	OCTA		
ID	System Requirement	Category	Sub-category	OCTA's Priority
54	Software user licenses or cloud subscriptions shall be provisioned in alignment with the staged implementation rollout schedule. OCTA will procure licenses as required during the implementation project. Licenses for any third-party software included in the Vendor's Technical Solution Design shall initially be provided through the Vendor, with subsequent renewals expected to be contracted directly between OCTA and the third-party provider.	Non-Functional / Technical	License, Maintenance and Support, and Hosting	2 - Preferred / Nice to Have
	Firm shall provide all-inclusive license, hosting, maintenance, support, and other services for five (5) years, beginning with OCTA's acceptance of the project.	Non-Functional / Technical	License, Maintenance and Support, and Hosting	1 - Required
56	The Vendor shall install all fixes provided in accordance with a process formally approved by OCTA	Non-Functional / Technical	License, Maintenance and Support, and Hosting	1 - Required
57	Licenses: Vendor shall provide all licenses necessary for the successful development and use of this system.	Non-Functional / Technical	License, Maintenance and Support, and Hosting	1 - Required
58	Maintenance and Support: Vendor shall respond to all maintenance requests in a prompt and timely manner suitable for the Priority level defined below and at a maximum within twenty-four (24) hours for notification and action plan. Vendor shall provide OCTA with a point of contact (both email and phone number) to report issues. The Service Level Agreements (SLAs) are defined as follows: •Priority 1: These are critical issues that impact usage of the system and for which there is no work-around. These need the fastest response and resolution. A response to OCTA shall occur within two (2) hours of the report and a plan to find and remedy the problem shall be put in place within one (1) business day. •Priority 2: These are urgent issues for which there is a temporary work-around. A response to OCTA shall occur within four (4) hours of the report and a plan to find and remedy the problem shall be put in place within four (4) business days. •Priority 3: This is the catch-all for all remaining issues or requests. A response to OCTA shall occur within twenty-four (24) hours of the report and a plan to find and remedy the problem should be put in place on an agreed-upon schedule.	Non-Functional / Technical	License, Maintenance and Support, and Hosting	1 - Required
59	Product release management services will occur throughout Project implementation timeline.	Non-Functional / Technical	License, Maintenance and Support, and Hosting	1 - Required
60	Software warranty and ongoing product support shall include security updates after the software is fully operational.	Non-Functional / Technical	License, Maintenance and Support, and Hosting	1 - Required
	Reporting from the system databases shall complete in a time proportional to the number of records read but shall be on the order of tens of thousands of records per second.	Non-Functional / Technical	Performance	1 - Required
62	System maintenance activities (Backups, batch data transfers, etc.) shall complete within one to two hours each day, and shall not interrupt normal system functioning.	Non-Functional / Technical	Performance	1 - Required
63	The software should be capable of supporting a high volume of transactions, based on the expected usage by function across the locations identified in the B6 tab. Transactions must complete within a second and/or not more than the maximum performance metric, for the expected number of simultaneous users. The proposed software and hardware solution shall meet or exceed the performance expectations.	Non-Functional / Technical	Performance	1 - Required
64	Vendor shall include in their proposal their software SLA agreement reflecting the following performance criteria; any exceptions should be so noted and justified. See the SLA tab in this Excel file.	Non-Functional / Technical	Performance	1 - Required
65	The Vendor will perform all the efforts, actions and services as described in the Project Implementation Tasks documented within the scope of work (SOW).	Non-Functional / Technical	Project Implementation	1 - Required
66	The Vendor will produce all the Deliverables and documentation as described in the Project Implementation Tasks documented within the SOW.	Non-Functional / Technical	Project Implementation	1 - Required



	INFORMATION PROVIDED BY OCTA				
ID	System Requirement	Category	Sub-category	OCTA's Priority	
67	In the event the licensed software falls below the 99.9% availability within a given month, service Credits will be applied to hosting fees. Greater than or equal to 97.0 and less than 99.9% is 10% of monthly Hosting Fees Greater than or equal to 96.5 and less than 97.0 is 20% of monthly Hosting Fees. Greater than or equal to 96.0% and less than 96.5% is 40% of monthly Hosting Fees. Greater than or equal to 95.0% and less than 96% is 50% of the monthly Hosting fees. For each .5% degradation after 95.0% of availability a 10% credit will be applied	Non-Functional / Technical	System Credits	1 - Required	
68	It is understood that Vendor will continue their best good faith effort to achieve the agreed upon service levels.	Non-Functional / Technical	System Credits	1 - Required	
69	Note: OCTA is a 24 x 7 x 375 operation and we expect the system to be available 365 days a year, no holidays for bus operations, and should be taken into consideration when calculating up time.	Non-Functional / Technical	System Credits	1 - Required	

	Vendor Information
Vendor Name:	
Contact Person:	
Vendor's Security Contact (if different):	
Date of Response:	

Category	Questionnaire	Response
	Where will OCTA (bus) and City (signal) data be stored?	
	What encryption methods are employed for data transmission and storage?	
Data Protection	Do you have backup recovery procedures in place? If Yes, describe.	
Data Protection	Do you have disaster recovery procedures in place? If Yes, describe.	
	Do you have cybersecurity insurance? If Yes, describe coverage.	
	Does your cybersecurity insurance coverage include customers? If yes, describe.	
	Describe your user authentication and authorization processes.	
Access Control	How often are access controls reviewed?	
Access Control	How often are access controls updated?	
	How do you control access to our data?	
	Do you have a Cyber Incident Response Plan?	
Incident Response	Is your Cyber Incident Response Plan regularly tested? If Yes, describe.	
	What is the notification timeline to Client/Customers in the event of a data breach?	
Compliance and	Do you meet any major compliance standards (e.g., NTCIP, ISO 27001, SOC 2)? If yes, describe.	
Certification	How do you ensure compliance with relevant data protection laws and regulations?	
	Do you have an annual compliance report? If so, can you please provide it?	
	Describe the security measures implemented in your physical and network infrastructure.	
	Physical Security Measures:	
	Intrusion detection systems to detect unauthorized access	
	Regular maintenance and inspection of the infrastructure to identify and fix vulnerabilities	
	Network Security Measures:	
	Firewall systems to prevent unauthorized access to the network	
Infrastructure Security	Intrusion detection and prevention systems to detect and block malicious traffic	
	Encryption technologies to protect sensitive data	
	Regular software updates and patching to fix security vulnerabilities	
	Access control mechanisms such as passwords, multi-factor authentication, and role-based access control	
	Network segmentation to isolate sensitive data and limit the impact of security breaches	
	How do you protect against Distributed Denial of Service (DDoS) attacks and other network threats?	
Employee Training	How do you educate/train your employees about cybersecurity awareness and best practices?	
TI: 15 1 0 "	Do you use third-party vendors? If yes, how do you ensure their security practices align with yours?	
Third-Party Security	Can you provide a list of third-party vendors involved in our services?	
	Do you contract with any offshore third-party vendors?	
Software Development	What secure coding practices do you follow during software development?	
Security	How do you address vulnerabilities and apply patches to your software?	

Category	Questionnaire	Response
	General Performance Assessment	
	What are the key performance indicators (KPIs) for this application?	
	How does the system perform under normal operating conditions?	
	Are there any performance benchmarks for comparison?	
	System Resource Utilization	
	How much CPU, memory, and disk I/O does the application consume?	
	Are there any memory leaks or high CPU usage spikes?	
	Does the system utilize multiple cores efficiently?	
	Response Time & Latency	
	What is the average response time for critical operations?	
	Are there noticeable delays in specific processes? If yes, what processes and what is the delay (in seconds) for each impacted process?	
	How does the application handle real-time requests?	
	User interface to menu selections average response time?	
	Log in response average response time?	
	Log off average response time?	
	Record Save average response time?	
	Simple Report query report average response time?	
	Complex Report query report average response time?	
	Print request average response time?	
	Dashboard refresh average response times?	
	Batch Processing average response time? (if applicable)	
Application Response	Scalability & Load Handling	
Application Nesponse	How does the system perform under peak load conditions?	
	What is the maximum number of concurrent users the system can support?	
	Does the system scale horizontally or vertically?	
	Network Performance	
	What is the average network latency for data transmission?	
	Are there any network bottlenecks affecting performance?	
	Is data compression used to optimize network usage?	
	Application Architecture	
	Is the software designed using microservices or a monolithic approach?	
	How is caching implemented to improve performance?	
	Are third-party integrations affecting system speed?	
	Error Handling & System Logs	
	Are there recurring errors or performance-related logs?	
	How are exceptions and failures handled in the system?	
	What monitoring tools are used to track errors and warnings?	
	Security & Performance Trade-offs	
	Are there security measures that impact performance (e.g., encryption, authentication)?	
	How does the system handle secure transactions without sacrificing speed?	
	Are there any performance concerns with Application Programming Interface (API) rate limiting?	
	Optimization & Future Improvements	
	Are there performance testing tools in place (e.g., JMeter, LoadRunner)?	
	How frequently is the application updated for performance enhancements?	

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customizations and/or personalizations when an upgrade is applied? Or, do the customizations / personalizations need to be manually re-applied or re-configured? Are upgrades included, or is there additional cost for upgrades? What will be required for future scability to support concurrent operations (e.g., 2000 signalized intersections on different signal controllers and 500 buses with conflicting TSP requests)? Interfaces/Integration Programming or tools used (Webservices, XML, groovy, java, etc.) Is ongoing support available or are these items under a warranty? If under warranty what is the warranty period. Total Duration of Implementation – Start/End Headquarters location of Software Firm Office location of Implementation Team		Level of Effort (High, Medium, Low)	
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warranty period. Total Duration of Implementation – Start/End Headquarters location of Software Firm Office location of Implementation Team		Programming or tools used (Webservices, XML, groovy, java, etc.)	
Total Duration of Implementation – Start/End Headquarters location of Software Firm Office location of Implementation Team			
Office location of Implementation Team			
Office location of Implementation Team	Team	Headquarters location of Software Firm	
Office location of System's Maintenance and Support Team	ream	Office location of Implementation Team	
Onico rocation of Oystem s intantichanics and outport realit		Office location of System's Maintenance and Support Team	

Category	Questionnaire	Response
	Year 1 Application Software/Licensing (support, maintenance, warranty)	
	Year 2-5 Application Software/Licensing (support, maintenance, warranty)	
Solution Costs	Third Party Software (if applicable)	
	Traffic Signal Infrastructure Upgrades (see Signal Upgrades tab for details)	
	Signal Upgrades (see Signal Upgrades tab for details)	

B1. REPORTS

Number	Name	File Type	Frequency
New	Communication status: up-time for signals and status of buses, communication success	csv,xls,pdf (exception: graphical would be pdf only but data would be csv, xls)	Weekly, 12-1 AM PST
New	Message Performace: Bus GPS location messages must be transmitted and received within 5 seconds or less to ensure real-time accuracy. The time of transaction (data handoff) across system integration points—between the bus AVL system, Swiftly, and traffic signal control—must occur within defined latency thresholds (≤ 5 seconds end-to-end). - Message Latency Definition: Average time from bus position capture to availability in traffic light control system. - Transaction Success Rate Definition: % of transactions between integration points that are completed without delay or failure. - End-to-End System Responsiveness Definition: Total time from bus location generation → integration point → traffic light response. - Exception/Error Rate Definition: % of failed or delayed transactions beyond threshold.	csv,xls,pdf	Monthly, 12-1 AM PST
New	- ETA Accuracy and Variability Definition: Difference between predicted and actual bus arrival times at intersections or stops. Purpose: Ensures reliable passenger information and supports accurate TSP activation TSP Request Success Rate Definition: Percent of valid TSP (Transit Signal Priority) requests successfully received and processed by traffic signal controllers. Purpose: Measures reliability of integration between bus systems and traffic signal systems Average Green Delay/Extension Time Definition: Average number of seconds signals are held green or extended to accommodate buses. Purpose: Ensures TSP effectiveness without excessive disruption to general traffic On-Time Performance Improvement Definition: Percent improvement in bus on-time performance (scheduled vs. actual) after TSP implementation. Purpose: Directly links TSP and synchronization to passenger service reliability Reduction in Bus Stop Delay Definition: Reduction in dwell time at stops caused by traffic-related delays (not boarding/alighting). Purpose: Demonstrates passenger benefit and efficiency gains from reduced congestion delays.	csv,xls,pdf	Weekly, 12-1 AM PST

Number	Name	File Type	Frequency
New	Trasit: Performance will be monitored using Swiftly data to measure schedule adherence, operational efficiency, on-time performance, dwell time, travel time, and traffic signal data to measure priority outcomes, TSP requests/success, arrivals on green at signalized intersections. - On-Time Performance Definition: % of buses arriving within the scheduled window (e.g., ≤1 minute early, ≤5 minutes late). Purpose: Measures reliability of service and passenger experience. - Dwell Time Definition: Average time spent at bus stops for boarding, alighting, and traffic-related hold. Purpose: Identifies efficiency of boarding and impact of congestion/traffic signals. - Travel Time Definition: Average time required to travel between defined timepoints or along a full route. Purpose: Ensures predictability of service and operational planning. - TSP Requests and Success Rate Definition: Number of TSP (Transit Signal Priority) requests made and % successfully granted by traffic controllers. Purpose: Validates integration performance and traffic signal support for buses. - Arrivals on Green Definition: % of bus arrivals at signalized intersections that occur during a green phase. Purpose: Demonstrates effective synchronization between bus movement and traffic signal timing.	csv,xls,pdf	Monthly, 12-1 AM PST
New	Traffic Signal: Evaluates the operations of signalized intersections and how they are impacted by TSP. Data from the TSP system and traffic signal infrastructure are integrated to provide insights beyond transit operations. - TSP Requests and Success Rate Definition: Number of TSP requests received from buses and the % successfully processed by traffic signal controllers. Purpose: Confirms that valid bus priority requests are being recognized and acted upon by the signal. - Green Delay/Extension Granted Definition: Average number of seconds signals are extended or delayed (held green) to accommodate buses after a TSP request. Purpose: Measures how effectively signals adjust to support bus movement while minimizing disruption to cross traffic. - TSP Transition Definition: % of TSP requests that result in signal phase change and transition timed to align with bus arrival. Purpose: Demonstrates whether buses are receiving the timely priority benefits with minimal impacts to overall traffic flow. - Intersection Delay Definition: Additional time vehicles spend at an intersection compared to uninterrupted travel. Purpose: Evaluates whether signal system changes are improving transit operations without significantly delaying other traffic movements.	csv,xls,pdf	Monthly, 12 AM PST
New	Configuration of all applicable business rules and parameters for TSP route	csv,xls,pdf	Ad-hoc
New	Configuration of cloud accounts (users)	csv,xls,pdf	Ad-hoc
New	Configuration of signals in cloud (agency signalized intersection locations on TSP route)	csv,xls,pdf	Ad-hoc



B2. INTERFACES AND DATA EXCHANGE

ID	Source	Target	Name	Interface Description	Direction	Schedule
New	Traffic Management Center	New TSP Application	Traffic Signal State and Status	Agency Traffic Management Standard Status	Inbound	Near real time
New	New TSP Application	Traffic Management Center	Priority Request	Priority Traffic	Outbound	Near real time
New	Swiftly	New TSP Application	Transit State and Status	Static and real-time transit status per GTFS open standards	Inbound	Near real time

B3. SYSTEM USERS

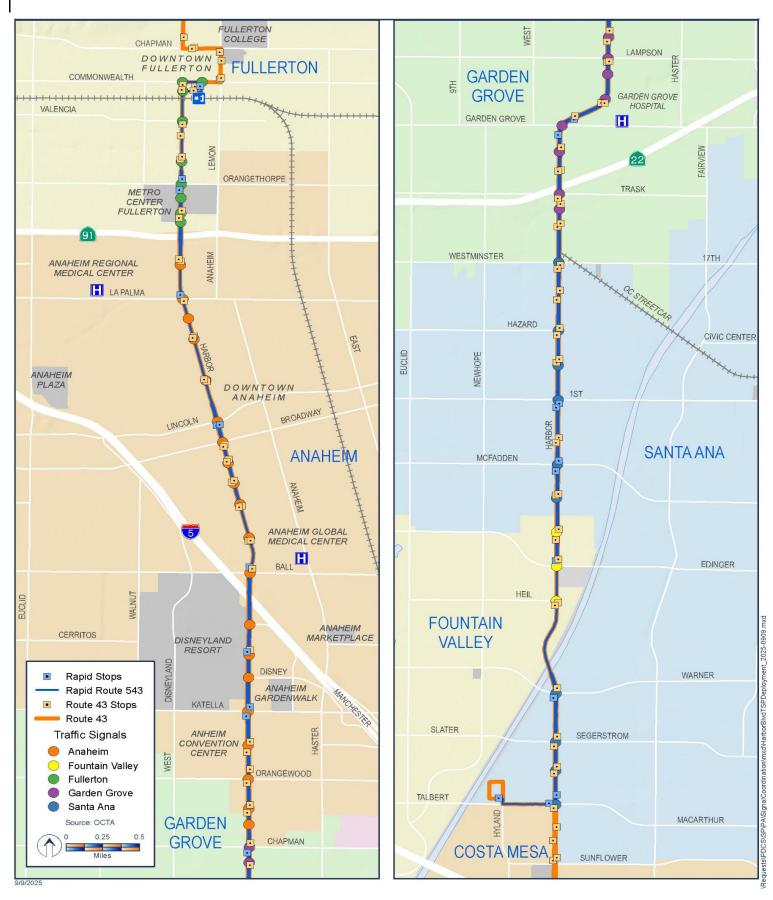
Access	Department	Number	Notes
Read Only	Other City Traffic and IT Operations	TBD	5 jurisdictions
Read Only	Transit Planning	4	
Read Only	GIS	3	
Read Only	Operations	2	
Read Only	Scheduling	2	
Super User	Traffic Operations	2	
Administrator	Traffic Operations	1	
Administrator	IS-AA	1	
	Approximately	50	

Legend:

- AA: Application Analyst
- GIS: Geographic Information System
- IS: Information Systems
- IT: Information Technology



B4. PROJECT STUDY AREA





B5. LOCATIONS

Software

OCTA ADMINISTRATION FACILITY

550 South Main Street, Orange, CA 92863

600 South Main Street, Orange, CA 92863

REMOTE

Anywhere (OCTA Domain or Other City Domains with Access)

Traffic Signalized Intersections

ш	Amanau	gency Primary Street Cross Street Controller Re		Require	Controlle	er Upgrade	Additional	Communication		
#	Agency	Primary Street	Cross Street	Existing	Firmware	Upgrade?	Model	Form Factor	Needs	Upgrades
	Fullerton	Commonwealth Ave	Pomona Ave	QFree	MaxTime	No				
	Fullerton	Harbor Blvd	Commonwealth Ave	QFree	MaxTime	No				
	Fullerton	Harbor Blvd	Santa Fe Ave	QFree	MaxTime	No				
	Fullerton	Harbor Blvd	Valencia Dr	QFree	MaxTime	No				
	Fullerton	Harbor Blvd	Southgate Ave / Costco Dwy	QFree	MaxTime	No				
6	Fullerton	Harbor Blvd	Orangethorpe Ave	QFree	MaxTime	No				
7	Fullerton	Harbor Blvd	Orangefair Mall Dwy	QFree	MaxTime	No				
	Fullerton	Harbor Blvd	Orangefair Ave	QFree	MaxTime	No				
	Fullerton	Harbor Blvd	Houston Ave	QFree	MaxTime	No		T		
	Anaheim	Harbor Blvd	Romneya Dr	Econolite		Yes		Shelfmount		Etherwan EX73934E-0VB ¹
11	,	Harbor Blvd	La Palma Ave	Econolite		Yes		Shelfmount		Etherwan EX73934E-0VB ¹
12	Anaheim	Harbor Blvd	Ped Xing	Econolite	ASC/3	Yes		Shelfmount		Etherwan EX73934E-0VB ¹
13	Anaheim	Harbor Blvd	North St	Econolite	ASC/3	Yes	2070LN w EOS	Shelfmount		Etherwan EX73934E-0VB ¹
14	Anaheim	Harbor Blvd	Sycamore St	Econolite	ASC/3	Yes	2070LN w EOS	Shelfmount		Etherwan EX73934E-0VB ¹
15	Anaheim	Harbor Blvd	Lincoln Ave	Econolite	ASC/3	Yes	2070LN w EOS	Shelfmount		Etherwan EX73934E-0VB ¹
16	Anaheim	Harbor Blvd	Broadway	Econolite	ASC/3	Yes	2070LN w EOS	Shelfmount		Etherwan EX73934E-0VB ¹
17	Anaheim	Harbor Blvd	Santa Ana St	Siemens	SEPAC	Yes	2070LN w EOS	Shelfmount		Etherwan EX73934E-0VB ¹
18	Anaheim	Harbor Blvd	Water St	Econolite	ASC/3	Yes	2070LN w EOS	Shelfmount		Etherwan EX73934E-0VB ¹
19	Anaheim	Harbor Blvd	South St	Econolite	ASC/3	Yes	2070LN w EOS	Shelfmount		Etherwan EX73934E-0VB ¹
	Anaheim	Harbor Blvd	Vermont Ave	Econolite	ASC/3	Yes	2070LN w EOS	Shelfmount		Etherwan EX73934E-0VB ¹
21	Anaheim	Harbor Blvd	Ball Rd	Econolite	ASC/3	Yes	2070LN w EOS	Shelfmount		
22	Anaheim	Harbor Blvd	Manchester Ave	Econolite	ASC/3	Yes	2070LN w EOS	Shelfmount		Etherwan EX73934E-0VB ¹
23	Anaheim	Harbor Blvd	East Shuttle Area	Econolite	ASC/3	Yes	2070L w EOS	Shelfmount		Etherwan EX73934E-0VB ¹
24	Anaheim	Harbor Blvd	Disney Way	Econolite	ASC/3	Yes	2070LN w EOS	Shelfmount		Etherwan EX73934E-0VB ¹
25	Anaheim	Harbor Blvd	Katella Ave	Econolite	ASC/3	Yes	2070 ATC w EOS	33L Rackmount		
26	Anaheim	Harbor Blvd	Convention Way	Econolite	ASC/3	Yes	2070 ATC w EOS	33L Rackmount		Etherwan EX73934E-0VB ¹
27	Anaheim	Harbor Blvd	Orangewood Ave	Econolite	ASC/3	Yes	2070LN w EOS	Shelfmount		Etherwan EX73934E-0VB ¹
28	Anaheim	Harbor Blvd	Wilken Way	Econolite	ASC/3	Yes	2070LN w EOS	Shelfmount		Etherwan EX73934E-0VB ¹
29	Anaheim	Harbor Blvd	Hotels/ Shopping Center	Econolite	ASC/3	Yes	2070LN w EOS	Shelfmount		Etherwan EX73934E-0VB ¹
30	Garden Grove	Harbor Blvd	Chapman Ave	Econolite	ASC/3	Yes	Cobalt w EOS	Shelfmount Cobalt		Cisco IE3300 ²
31	Garden Grove	Harbor Blvd	Resort Way / Target Center	Econolite	ASC/3	Yes	Cobalt w EOS	Shelfmount Cobalt		Cisco IE3300 ²



ш	Anonous	Duine our Chus of	Cross Street	Controller		Require	Controlle	er Upgrade	Additional	Communication
#	Agency	Primary Street	Cross Street	Existing	Firmware	Upgrade?	Model	Form Factor	Needs	Upgrades
32	Garden Grove	Harbor Blvd	Twintree Ave	Econolite	ASC/3	Yes	Cobalt w EOS	Shelfmount Cobalt		Cisco IE3300 ²
33	Garden Grove	Harbor Blvd	Lampson Ave	Econolite	ASC/3	Yes	Cobalt w EOS	Shelfmount Cobalt		Cisco IE3300 ²
34	Garden Grove	Harbor Blvd	Great Wolf	Econolite	ASC/3	Yes	Cobalt w EOS	Shelfmount Cobalt		Cisco IE3300 ²
35	Garden Grove	Harbor Blvd	Palm St	Econolite	ASC/3	Yes	Cobalt w EOS	Shelfmount Cobalt		Cisco IE3300 ²
36	Garden Grove	Harbor Blvd	Garden Grove Blvd	Econolite	ASC/3	Yes	Cobalt w EOS	Shelfmount Cobalt		Cisco IE3300 ²
37	Garden Grove	Harbor Blvd	Harbor Place Dwy	Econolite	ASC/3	Yes	Cobalt w EOS	Shelfmount Cobalt		Cisco IE3300 ²
38	Garden Grove	Harbor Blvd	Trask Ave	Econolite	ASC/3	Yes	Cobalt w EOS	Shelfmount Cobalt		Cisco IE3300 ²
39	Garden Grove	Harbor Blvd	Cardinal Cir	Econolite	ASC/3	Yes	Cobalt w EOS	Shelfmount Cobalt		Cisco IE3300 ²
40	Santa Ana	Harbor Blvd	Westminster Ave	Econolite	ASC/3	Yes	Cobalt w EOS ³	Rackmount Cobalt		Etherwan EX78934X-0VB ⁴
41	Santa Ana	Harbor Blvd	Hazard Ave	Econolite	ASC/3	Yes		Rackmount Cobalt		Etherwan EX78934X-0VB ⁴
42	Santa Ana	Harbor Blvd	5th St	Econolite	ASC/3	Yes	Cobalt w EOS ³	Rackmount Cobalt		Etherwan EX78934X-0VB ⁴
43	Santa Ana	Harbor Blvd	1st St	Econolite	EOS	No				
44	Santa Ana	Harbor Blvd	McFadden Ave	Cobalt	EOS	No				
45	Santa Ana	Harbor Blvd	Kent Ave	Econolite	ASC/3	Yes	Cobalt w EOS ³	Rackmount Cobalt		Etherwan EX78934X-0VB ⁴
46	Fountain Valley ⁶	Harbor Blvd	Lilac Ave	Econolite	ASC/3	Yes	Cobalt w EOS ³	Rackmount Cobalt		Etherwan ED3575-622 ⁵
47	Fountain Valley ⁶	Harbor Blvd	Edinger Ave	Econolite	ASC/3	No				
48	Fountain Valley ⁶	Harbor Blvd	Heil Ave	Econolite	ASC/3	Yes	Cobalt w EOS ³	Shelfmount Cobalt	Special Function Panel	Etherwan ED3575-622 ⁵
49	Santa Ana	Harbor Blvd	Warner Ave	Econolite	EOS	No				
50	Santa Ana	Harbor Blvd	Segerstrom Ave	Econolite	EOS	No				
51	Santa Ana	Harbor Blvd	Garry Ave	Econolite	ASC/3	Yes	Cobalt w EOS ³	Shelfmount Cobalt	Special Function Panel	Etherwan EX78934X-0VB ⁴
52	Santa Ana	Harbor Blvd	MacArthur Blvd	Econolite	EOS	No				

¹ Etherwan EX73934E-0VB (12-port 10/100/1000BASE-T(X) + 4-port 100/1000BASE SFP).

 $^{^2}$ Cisco IE3300 Hardened Switch, including 2 Cisco 1-Gbps SFP and Cisco PWR-IE50W-AC Power Supply.

³ Econolite Cobalt RackMount controller complying with latest Caltrans TEES requirements for operation within 332 cabinet. Configured with Touch Screen application package and Power Connection permanently attached cable.

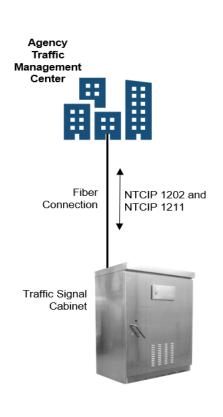
⁴ Etherwan Hardened-Managed Fiber Optic Ethernet Switch – EX78934X-0VB w/ NDR-480-48 480W 48VDC DIN-Rail Power Supply, three (3) Etherwan Hardened 1G BASE SFP Fiber Transceiver (SFPGIS20M), and one (1) Etherwan Hardened 10G BASE SFP Fiber Transceiver (SFPTIS20M)

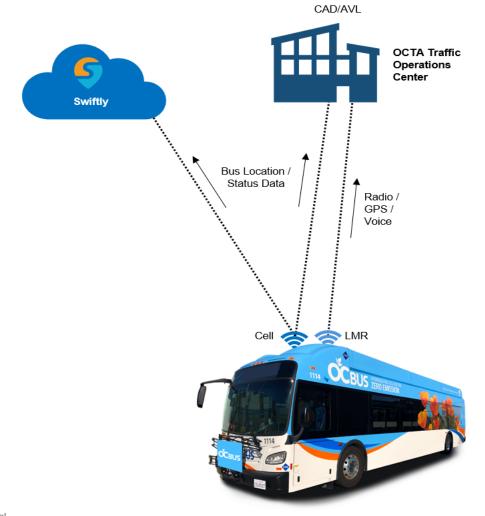
⁵ On DSL extenders - Etherwan Hardened-Managed Ethernet Switch ED3575-622 with Power Supply.

⁶ Signalized intersection is owned by the City of Fountain Valley and operated by the City of Santa Ana; therefore, the signals are connected to Santa Ana's central system.

B6. OCTA SYSTEM TOPOLOGY DIAGRAM

Cloud-Based Transit Signal Priority Topology (Current)





<u>Legend</u>

CAD/AVL Computer-Aided Dispatch and Automatic Vehicle Location

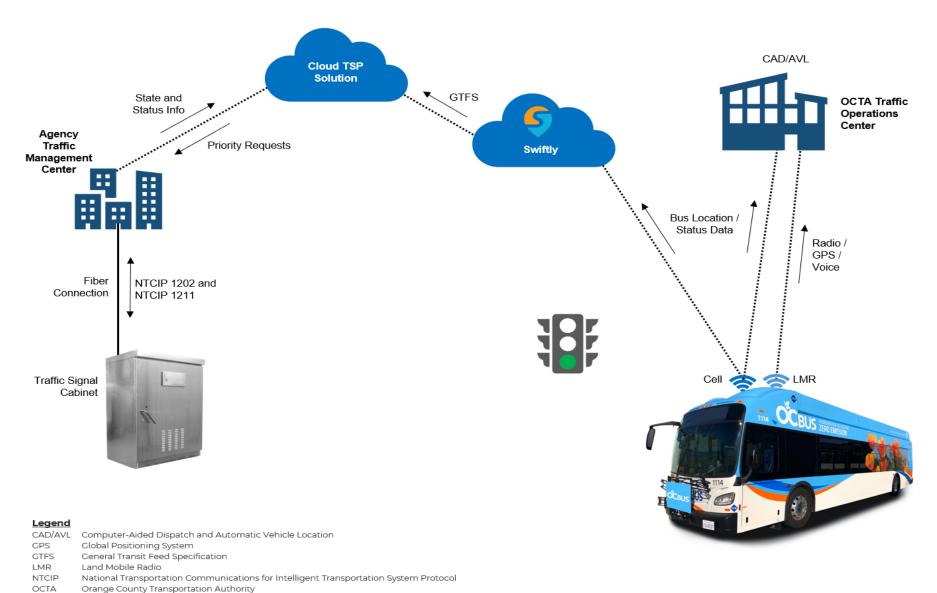
LMR Land Mobile Radio

NTCIP National Transportation Communications for Intelligent Transportation System Protocol

OCTA Orange County Transportation Authority

B6. OCTA SYSTEM TOPOLOGY DIAGRAM

Cloud-Based Transit Signal Priority Topology (Future)



PRICE SUMMARY SHEET

Enter below the proposed price for the services described in the Scope of Work, Exhibit A. Prices shall include direct costs, indirect costs, tax, and profits. The Authority's intention is to award a firm-fixed price contract for a five-and-a-half (5.5)-year term.

Effective through December 31, 2031

Contract Item	One-time Cost	Recurring Cost	Comments
Application Software / Licensing	\$	\$	Includes licensing cost for up to five [5] years
3 rd Party Software (if applicable)	\$	\$	This includes third party software.
Traffic Signal Upgrades	\$	\$	Includes signal controllers, switches, etc. needed for the proposed solution.
Project Implementation Effort			
1. Task 1 \$			
2. Task 2 \$			
3. Task 3 \$			
4. Task 4 \$	\$		
5. Task 5 \$	Ψ		
6. Task 6 \$			
7. Task 7 \$			
8. Task 8 \$			
Other Costs (if applicable)	\$	\$	Total of any additional cost not listed.
Development (on-going)	\$	\$	
Environment – Hosting Services	\$	\$	Include list of env. Supplied (i.e, DEV, UAT, PRD)
Grand Total for Entire Solution*	\$	\$	(one-time and recurring costs)

^{*} Grand Total for Entire Solution shall reflect the Grand Total for the six (6)-month implementation, plus five (5)-years as a production system, for a total of a five-and-a-half (5)-year term.

RFP 250014 EXHIBIT B

The undersigned, upon acceptance, agrees to provide the service in accordance with the terms, conditions, and requirements as contained in RFP 250014 and the supporting documents for all prices proposed.

1.	I acknowledge receipt of RFP 2	50014 and Addenda No.(s)
2.	This offer shall remain firm for _ (days from the date of proposal.
COI	MPANY NAME	
ADE	DRESS	
TEL	EPHONE	
FAC	CSIMILE#	
EMA	AIL ADDRESS	
SIG	NATURE OF PERSON	
TUA	THORIZED TO BIND OFFEROR	
NAN	ME AND TITLE OF PERSON	
ΑU٦	THORIZED TO BIND OFFEROR	
DAT	TE SIGNED	

PROPOSED SOFTWARE LICENSE AGREEMENT

THIS AGREEMENT is effective this date	ay of, 2026 ("Effective Date"), by and
between the Orange County Transportation Authority	, 550 South Main Street, P.O. Box 14184, Orange, California
92863-1584, a public corporation of the State of California	ornia (hereinafter referred to as "Customer" or "Authority") and
located at , (hereinafter referred to as "Licensor"), each individually known as "Party" and collectively known as
the "Parties."	

WITNESSETH:

WHEREAS, Customer requires assistance from Licensor to deliver the Harbor Boulevard Transit Signal Priority Deployment; and

WHEREAS, said work cannot be performed by the regular employees of Customer; and

WHEREAS, Licensor has represented that it has the requisite personnel, experience and software solution and is capable of licensing certain software products and performing such services; and

WHEREAS, Licensor wishes to license certain software products and perform these services;

NOW, THEREFORE, it is mutually understood and agreed by Customer and Licensor as follows:

1.0 Definitions

- **1.1** "Acceptance Test Procedures" means the benchmarks and other performance criteria used to measure the effectiveness of the Software and the means used to test such performance. Acceptance Test procedures shall be developed by Customer and Licensor jointly.
- 1.2 "Customer Data" means all information processed or stored on computers or other electronic media by Customer or on Customer's behalf, or provided to Licensor for such processing or storage, as well as any information derived from such information. Customer Data includes, without limitation: (a) information on paper or other non-electronic media provided to Licensor for computer processing or storage, or information formerly on electronic media; (b) information provided to Licensor by customer's customers or other users or by other third parties; and (c) personally identifiable information from such customers, users, or other third parties.
- 1.3 "Data Breach" means (1) the failure by Licensor to properly handle, manage, store, destroy or otherwise control, or the unauthorized disclosure by Licensor of: (a) Customer Data or (b) third party corporate information in any format specifically identified as confidential and protected under a confidentiality agreement or similar contract; (2) an unintentional violation of Licensor's privacy policy or misappropriation that results in the violation of any applicable data privacy laws or regulations; or (3) any other act, error, or omission by Licensor in its capacity as such which is reasonably likely to result in the unauthorized disclosure of Personal Data.
- **1.4** "Documentation" means the user manuals and any other materials in any form or medium customarily provided by Licensor to the users of the Software which will provide to Customer sufficient information to operate, diagnose, and maintain the Software properly, safely and efficiently.
- **1.5** "Final Acceptance" means successful completion of Phase Three described in the <u>Acceptance</u> Testing Article.
- **1.6** "Installation Date" means the date upon which the procedures described in <u>Deliver and Installation</u> Article are completed.
- 1.7 "Maintenance" means (i) the provision of all generally available improvements, new functions and additions to the functionality of the Software, (ii) maintenance of the Software so that it operates in conformance with all Specifications, (iii) detection and correction of any software errors discovered by Customer or otherwise made known to Licensor, (iv) the implementation of all program changes, updates, upgrades, and installation of additional programs provided under this Agreement, and (v) prompt response to Customer inquiries regarding the use and functionality of the Software.

Last Rev: 12/19/2024

- **1.8** "Personal Data" means any information that identifies or describes an individual, including, but not limited to, his or her name, social security number, physical description, home address, home telephone number, education, financial matters, and medical or employment history.
- **1.9** "Preliminary Acceptance" means successful completion of Phase Two described in the <u>Acceptance</u> Testing Article.
- **1.10** "Product" means any deliverable including, but not limited to, all Software and Software-related items provided by Licensor to Customer.
- **1.11** "Customer Information" means all of Customer's plans, processes, products, business information, proprietary information, data, technology, computer programs and documentation and the like.
- **1.12** "Recommended Hardware Configuration" means the data processing hardware (including all terminals, auxiliary storage, communication, and other peripheral devices) to the extent utilized by Customer as recommended by Licensor.
- **1.13** "Services" means the services described in Exhibit A.
- **1.14** "Specifications" means the Software operating parameters and performance capabilities as represented to Customer by Licensor in the Documentation, sales proposals or otherwise.
- **1.15** "Software" includes any and all Software and Documentation to which Customer obtains or is granted any rights under this Agreement.
- **1.16** "Warranty Period" means period of 12 months from Final Acceptance.

2.0 License

2.1 Grant of License

On the terms and conditions set forth herein, Licensor hereby grants to Customer a fully paid-up, irrevocable, non-exclusive, worldwide, perpetual, royalty-free license to use the Software and Documentation, on an enterprise-wide basis, including all modifications and enhancements thereto, plus any Software which shall be added during the term of this Agreement, on or in connection with any Central Processing Unit (CPU) utilized by Customer. The license granted also includes (i) the right to permit third parties to use the Software and Documentation for Customer's operations so long as the use is in accordance with the terms of this Agreement, and (ii) the right to use the Software in connection with the offering of services to third parties, specifically bundled applications hosting, management and/or monitoring.

Except as permitted in this Agreement, Customer shall not: (a) modify, create derivative works from, or sub-license the software; or (b) reverse engineer, decompile, disassemble, or otherwise attempt to derive any of the Software's source code.

2.2 Copies

Customer is permitted to make a reasonable number of copies of the Documentation and written materials for distribution to employees using the Software, and to make and retain a copy of the Software for disaster recovery, backup and archival purposes.

3.0 Services

3.1 Scope of Work

Licensor agrees to provide the Services described in Exhibit A, entitled "Scope of Work," attached to and, by this reference, incorporated in and made a part of this Agreement.

3.2 Key Personnel

Licensor shall provide the personnel listed below to perform the above-specified services, which persons are hereby designated as key personnel under this Agreement.

Names	<u>Functions</u>

No person named in this Article, or his/her successor approved by Customer, shall be removed or replaced by Licensor, nor shall his/her agreed-upon function or level of commitment hereunder be changed, without the prior written consent of Customer. Should the services of any key person become no longer available to Licensor, the resume and qualifications of the proposed replacement shall be submitted to Customer for approval as soon as possible, but in no event later than seven (7) calendar days prior to the departure of the incumbent key person, unless Licensor is not provided with such notice by the departing employee. Customer shall respond to Licensor within seven (7) calendar days following receipt of these qualifications concerning acceptance of the candidate for replacement.

4.0 Maintenance

4.1 Maintenance Duration

Maintenance shall commence upon expiration of the Warranty Period under the Warranties Article and shall be renewable by Customer on an annual basis. Licensor shall invoice Customer for Maintenance no later than sixty (60) days prior to the expiration of the warranty and each subsequent Maintenance period on an annual basis.

4.2 Maintenance Response Times

Licensor shall provide Maintenance on-call 24 hours a day, seven days per week. Qualified support personnel shall provide maintenance with expertise in software. Unless Maintenance response times are already addressed in the Scope of Work under Exhibit A, the first response to a malfunction shall be within two (2) hours of notification by telephone or other means that shall be mutually agreed upon. A temporary program fix or work around shall be provided within twenty-four (24) hours of such notification. A permanent fix or work around shall be provided within three (3) days of such notification. Customer shall furnish reasonable assistance in completing any of the above described fixes or work arounds.

4.3 Maintenance Fees/Cap

The cost for each renewal term Licensor agrees that rate increases in subsequent terms will not exceed three percent (3%) of the then current year rate or the Consumer Price Index for all Urban Consumers ("CPI-U") using the rate for all items as reported by the U.S. Department of Labor on their web site at www.bls.gov/cpi, whichever is less. Any such price increase shall occur at a maximum of once per calendar year and a minimum of twelve (12) months since the last increase and shall in no event be more than Licensor's published price.

4.4 Revision Levels

Customer is not obligated to implement updates, changes, modifications, or enhancements if said revisions interfere with Customer's level of intended usage or operating system environment. However, Licensor and Customer shall work together with mutual best efforts in order to implement and install all revisions so that they function properly at the level of Customer's intended usage and within Customer's operating system environment.

4.5 Periods of Inoperability

In the event that the Software, or a material function of the Software, becomes inoperable for a period of up to five (5) days, the Maintenance period may, at Customer's option, be suspended for the period of the inoperability, and the amount of time that such period is suspended shall be added to the end of the then-current Maintenance period. Such temporary suspension shall not relieve Licensor of any obligations of this Agreement.

4.6 Reinstatement

If Customer elects to discontinue Maintenance at any time, and subsequently elects to reinstate Maintenance, the Maintenance Renewal Fee shall not exceed ten percent (10%) of the then-current License Fee, with no additional cost or penalty, except to reimburse Licensor for its direct distribution costs necessary to supply Customer with one copy of the current version of all Software, plus any intermediate versions required by virtue of Licensor's maintenance strategy that may be required to migrate Customer's programs and data from the versions under which Customer is running to the then current versions.

4.7 Liquidated Damages

Licensor and Customer agree that the impact of non-availability of the Software is impossible to determine in exact dollar amounts for each occurrence, but recognize that Customer will suffer significant damages through lost productivity plus other costs necessary to ensure continued Customer service for each unscheduled period of non-availability. Therefore, Licensor and Customer agree that during the term of this Agreement and any period that Licensor is providing Maintenance Services, if the Software fails for any reason due to a failure of any item provided by Licensor under this Agreement and is unavailable for more than thirty (30) minutes in a twenty-four (24) hour period, Licensor will pay, as liquidated damages and not a penalty, the amount of ______ per hour for each hour of unscheduled non-availability. This remedy of liquidated damages is in addition to any remedy to which Customer is entitled for any other breach of this Agreement.

5.0 <u>Compensation</u>

5.1 License Fee

In consideration of the license granted to Customer hereunder and the performance of the Services, Customer shall pay to Licensor for each purchase made under this Agreement which will be invoiced as specified below.

Contract Item	Cost
Application Software/Licensing	\$
3 rd Party Software (if applicable)	\$
Traffic Signal Upgrades	\$
Project Implementation Effort	\$
1. Task 1 \$	
2. Task 2 \$	
3. Task 3 \$	
4. Task 4 \$	
5. Task 5 \$	
6. Task 6 \$	
7. Task 7 \$	
8. Task 8 \$	
Other Costs (if applicable)	\$
Development (on-going)	\$
Environment – Hosting Services	\$
Grand Total for Entire Solution	\$

5.2 Invoice and Payment

At the conclusion of each Payment Event indicated above, Licensor will invoice Customer for the appropriate amount, and Customer shall remit payment within thirty (30) calendar days of the receipt and approval of each invoice. Licensor shall also furnish such other information as may be requested by Customer to substantiate the validity of an invoice. At its sole discretion, Customer may decline to make full payment for any services until such time as Licensor has documented to Customer's satisfaction that Licensor has fully completed all work required. Each invoice shall include the following information:

- a. Agreement No. C-250014;
- b. Specify the task for which payment is being requested;
- c. The time period covered by the invoice;
- d. Total monthly invoice (including project-to-date cumulative invoice amount);
- e. Certification signed by the Licensor or his/her designated alternate that a) The invoice is a true, complete and correct statement of reimbursable costs and progress; b) The backup information included with the invoice is true, complete and correct in all material respects; c) All payments due and owing to subcontractors and suppliers have been made; d) Timely payments will be made to subcontractors and suppliers from the proceeds of the payments covered by the certification and; e) The invoice does not include any amount which Licensor intends to withhold or retain from a subcontractor or supplier unless so identified on the invoice.
- f. Any other information as agreed or requested by Customer to substantiate the validity of an invoice.

5.3 Maximum Obligation

Notwithstanding any provisions of this Agreement to the contrary, Customer and Licensor mutually agree that Customer's maximum cumulative payment obligation (including obligation for Licensor's profit) shall be ______ Dollars (\$____.00) which shall include all amounts payable to Licensor for its subcontracts, leases, materials and costs arising from, or due to termination of, this Agreement.

6.0 **Proprietary Information**

6.1 Licensor shall:

- a. Not use or disclose Customer Information to any third party except as is clearly necessary to provide the Services with prior written approval from Customer.
- b. Not attempt to access any portion of Customer Information, without authorization of Customer. If unauthorized access is nevertheless obtained, whether inadvertently or otherwise, Licensor shall have a duty to promptly report to Customer, in writing, each instance thereof, setting out the extent and circumstances of such access.
- c. Not attempt to defeat any security provisions maintained by Customer for the protection of Information Resources or information contained therein.
- d. Not remove, copy, alter, or install any software or information or data on any Customer computer unless specifically authorized by Customer in connection with the Services or make any attempt to learn or document passwords or other information, which could facilitate unauthorized access to Customer Information.
- e. Require each of its employees, contractors and agents needing access to Customer Information to obtain passwords from Customer's authority responsible for the security of Customer Information, to use and protect passwords as required by Customer, and to follow such protocols governing access as may be set out by Customer.
- 6.2 Customer agrees it shall not, during the term of this Agreement or thereafter, disclose, make commercial or other use of, give or sell to any person, firm, or corporation, any information of Licensor that is treated and identified in writing to Customer by Licensor as confidential, except Customer can disclose such information if (i) required to do so pursuant to applicable law; (ii) it was rightfully in the possession of Customer from a source other than Licensor prior to the time of disclosure of said information to Customer hereunder; (iii) it was in the public domain prior to the time of receipt; (iv) it

became part of the public domain after the time of receipt by any means other than an unauthorized act or omission on the part of Customer; (v) it is supplied to Customer after the time of receipt without restriction by a third party who is under no obligation to Licensor to maintain such information in confidence; (vi) it was independently developed by Customer prior to the time of receipt; or (vii) it was developed by Licensor at Customer's expense.

6.3 Licensor hereby acknowledges and agrees that Customer's remedies at law for a breach by Licensor of its obligations under this Article may be inadequate and Customer shall, in the event of any such breach, be entitled to equitable relief (including without limitation preliminary and permanent injunctive relief and specific performance) in addition to all other remedies provided hereunder or available at law.

6.4 Licensor Modifications

Error corrections and/or modifications to the Software by Licensor may result in the creation of a new version(s) of the Software, under the same or one or more different names (collectively, "Licensor Modifications"). Licensor Modifications shall in all cases be new versions of existing Products, and not new Products.

In the event that Licensor deletes functions from the Software and offers those functions in other or new Products, the portion of those other or new Products which contain the functions in question, or the entire Product, if the functions cannot be separated out, shall be provided to Customer under the terms of this Agreement, at no cost to Customer and shall be covered under Maintenance at no cost to Customer.

As long as the Software is under Maintenance provided by Licensor, Licensor shall make available to Customer, at no extra charge, a copy of the modified object code for any Licensor Modifications not later than thirty (30) days following general availability of such Licensor Modifications. Customer shall not be obligated to use any Licensor Modifications. In the event that Customer determines to use any Licensor Modifications, it shall be deemed Software for purposes of this Agreement. Licensor shall promptly amend the Specifications to reflect any Licensor Modifications, and promptly deliver to Customer all related revisions to the Documentation.

Licensor warrants that the Software as modified by a Licensor Modification shall operate free from defect in the manner described in the Documentation for the greater of ninety (90) days from the date of installation of such modification or the Warranty Period. Warranted defects in such modifications will be corrected promptly by Licensor without charge, but not later than five (5) business days from notice from Customer.

7.0 <u>Data Security</u>

- 7.1 Licensor shall exercise commercially reasonably efforts to prevent unauthorized exposure or disclosure of Customer Data. In addition, and without limiting the generality of the preceding sentence, Licensor shall:
 - a. Maintain, implement, and comply with a written data security program (the "DataSec Program") that requires commercially reasonable policies and procedures to ensure compliance with this Section 7.0 (Data Security). The DataSec Program's policies and procedures shall contain administrative, technical, and physical safeguards, including without limitation: (a) guidelines on the proper disposal of Customer Data after it is no longer needed to carry out the purposes of the Agreement; (b) access controls on electronic systems used to maintain, access, or transmit Customer Data; (c) access restrictions at physical locations containing Customer Data; (d) encryption of electronic Customer Data; (e) dual control procedures; (f) testing and monitoring of electronic systems; and (g) procedures to detect actual and attempted attacks on or intrusions into the systems containing or accessing Customer Data. Licensor shall review the DataSec Program and all other Customer Data security precautions regularly, but no less than annually, and update and

maintain them to comply with applicable California and Federal laws, regulations, technology changes, and best practices.

- b. Implement and maintain a program for managing unauthorized disclosure or exposure of Customer Data stored by or accessible through the Software ("Data Breaches"). In the event of a Data Breach, or in the event that Licensor suspects a Data Breach, Licensor shall (a) promptly notify Customer by telephone and (b) cooperate with Customer and law enforcement agencies, where applicable, to investigate and resolve the Data Breach, including without limitation by providing reasonable assistance to Customer in notifying injured third parties. In addition, Licensor shall provide one (1) year of credit monitoring service to any affected individual, unless the Data Breach resulted from Customer's act or omission. Licensor shall give Customer prompt access to such records related to a Data Breach as Customer may reasonably request; provided such records shall be Licensor's proprietary information, and Licensor shall not be required to provide Customer with records belonging to, or compromising the security of, its other customers. The provisions of this Subsection (d) do not limit Customer's other rights or remedies, if any, resulting from a Data Breach.
- 7.2 To the extent a Data Breach is caused by the fault of Licensor, the limits set forth in Section 10 ("Limitation of Liability") shall not apply to amounts incurred by Licensor resulting from its compliance with Section 7.1 above regarding data protection and responding to, and remediating a Data Breach, where Licensor shall be liable up to the scope of the coverage amount of its cyber security liability policy.
- 7.3 For purchased customized applications, (1) outsourced software development shall be supervised and monitored for security policy compliance, (2) purchased software applications shall possess the capability to validate the system input for acceptable values, (3) Information Systems Operations shall require that validation checks are incorporated into custom applications that can detect information corruption due to processing errors or deliberate acts, and (4) software application shall require the ability to guarantee message authenticity and integrity.

8.0 Indemnification

8.1 General

Licensor agrees to indemnify, hold harmless and defend Customer and its employees, directors, agents, successors, and assigns ("Indemnified Parties") from and against any and all claims, liens, demands, damages, liability, actions, causes of action, losses, judgments, costs, and expenses of every nature; including investigation costs and expenses, settlement costs, and attorney fees and expenses ("Claims"), sustained by or asserted against Indemnified Party arising out of, resulting from, or attributable to the willful misconduct, negligence, errors, or omissions of Licensor, its employees, subcontractors, consultants, representatives, and agents; provided, however, such indemnification shall not apply to the extent that such Claim results from the sole negligence or willful misconduct of an Indemnified Party.

8.2 Intellectual Property

Licensor will defend, indemnify and hold Indemnified Parties harmless from and against any Claims arising out of or in connection with any claim that the Software infringes or violates any intellectual property right of any third party. Customer agrees to promptly notify Licensor of the Claim and give Licensor control of the defense of the Claim and negotiations for its settlement or compromise. If a final judgment prohibits Customer from continued use of any Software, or if at any time Licensor is of the opinion that any Software is likely to become the subject of a claim, Licensor shall: (a) obtain for Customer the right to use the Software; (b) replace or modify such Software so that it is no longer subject to the Claim but performs the same functions in an equivalent manner as determined by Customer; or (c) in the event that Licensor is unable or determines, in its reasonable judgment, that it is commercially unreasonable to do either of the aforementioned, Licensor shall recover such Software from Customer, in which event in addition to the foregoing indemnification: (i) the license of such Software shall be void as between Licensor and Customer as of the date Licensor retakes

possession; and, (ii) Licensor shall reimburse to Customer the full cost for such Software and shall, if applicable, cancel Customer's then current Maintenance service, if any, for such Software so returned and issue to Customer a prorated refund of any Maintenance fees paid, if any, to Licensor with respect to such Software.

8.3 Exclusion from Intellectual Property Indemnification

Licensor's obligations set forth in Section 8.2 (Intellectual Property Indemnification) do not apply to the extent that an Indemnified Claim regarding intellectual property infringement arises out of:

- Customer's breach of this Agreement.
- b. Use of the Software in combination with hardware or software not provided by Licensor, unless the Specifications refers to a combination with such hardware or software (without directing the user not to perform such combination) or such combination achieves functionality described in the Specifications.

9.0 Limitation of Liability

IN NO EVENT SHALL EITHER PARTY BE LIABLE TO THE OTHER FOR INDIRECT, INCIDENTAL, SPECIAL, OR CONSEQUENTIAL DAMAGES ARISING OUT OF THIS AGREEMENT FOR THE EXISTENCE, FURNISHING, FUNCTIONING, OR CUSTOMER'S USE OF THE SOFTWARE, DOCUMENTATION, OR TOOLS PROVIDED BY LICENSOR. A PARTY'S AGGREGATE LIABILITY TO THE OTHER FOR ANY DIRECT DAMAGES ARISING OUT OF OR RELATING TO ITS PERFORMANCE OR FAILURE TO PERFORM UNDER THIS AGREEMENT, WHETHER BASED ON AN ACTION OR CLAIM IN CONTRACT, EQUITY, NEGLIGENCE, TORT, OR OTHERWISE FOR ALL EVENTS, ACTS, OR OMISSIONS UNDER THIS AGREEMENT SHALL NOT EXCEED \$______, AND PROVIDED, FURTHER, THAT THE FOREGOING LIMITATION OF LIABILITY SHALL NOT APPLY TO (I) CLAIMS FOR DAMAGES FOR PERSONAL INJURY OR WRONGFUL DEATH; (II) CLAIMS FOR DAMAGES FOR WHICH LICENSOR HAS INDEMNIFIED CUSTOMER; (III) CLAIMS FOR DATA BREACH CAUSED BY THE FAULT OF LICENSOR; (IV) CLAIMS AGAINST LICENSOR FOR THE PRESENCE OF ILLICIT CODE; AND (V) CLAIMS BY CUSTOMER PURSUANT TO THE FOLLOWING ARTICLES: MAINTENANCE AND PROPRIETARY INFORMATION.

10.0 Warranties

Licensor warrants the following:

10.1 Media Defects

The media on which the Software is provided shall be free of defects in material and workmanship.

10.2 Function and Features

The Software shall possess all material functions and features as described in the Specifications.

10.3 Performance

The Software shall operate in conformance with the Specifications for the Warranty Period. If Customer shall give Licensor oral or written notice or nonconformance during the Warranty Period, Licensor shall investigate such nonconformance as soon as possible but not later than two (2) hours after receipt of such notice and will classify the problem with concurrence by Customer as either a problem preventing normal operations (Category A), or other problem (Category B). Licensor will provide a temporary fix or work around for all Category A problems within four (4) hours of receipt of such notice and provide a permanent fix or work around within twenty-four (24) hours unless Customer agrees in writing to a longer time. Category B problems will be corrected within five (5) days. At any time during the first one hundred eighty (180) days of the Warranty Period, if Licensor has failed to correct any nonconformance within thirty (30) days of notification thereof, Customer may elect to terminate the Agreement and request a refund of all fees paid to Licensor pursuant to this Agreement, provided Customer returns to Licensor all software licensed hereunder after Customer has had a reasonable time to procure substituted software from a third party. The provisions of Response Times, Service Tracking and Reporting, Revision Levels, and Periods of

Inoperability as described in the Maintenance Article shall also apply to the warranty services provided by Licensor during the Warranty Period.

10.4 Compatibility

The Software shall be compatible with Customer's Operating System, application programs, CPUs, and networks specified in the Documentation.

10.5 Ninety-Day Return

Customer shall have the right for ninety (90) days after execution of this Agreement to return the Software and receive a refund of all license and maintenance fees paid to Licensor pursuant to this Agreement in the event the Products do not meet the programming requirements of Customer in its sole discretion.

10.6 Hardware Configuration

The Recommended Hardware Configuration shall be adequate in all aspects for the Software to function in accordance with the Specifications and to fulfill the current and reasonably anticipated future information processing needs of the Software.

10.7 Free and Clear Title

Licensor has and will continue to have free and clear title (including all proprietary rights) to any Products delivered to Customer and the right to license, transfer, or assign any and all Software.

10.8 No Infringement

Licensor represents and warrants that it is not aware of any copyright, patent or other intellectual property right infringed by the Software, and that it is not aware of any claim of intellectual property infringement related to the Software.

10.9 Good and Workmanlike Manner

All services performed under this Agreement will be performed in a good and workmanlike manner.

10.10 Illicit Code

Licensor warrants that (a) unless authorized in writing by Customer, or (b) necessary to perform valid duties under this Agreement, all Software shall: (i) contain no hidden files; (ii) not replicate, transmit, or activate itself without control of a person operating computing equipment on which it resides; (iii) not alter, damage, or erase any data or computer programs without control of a person operating the computing equipment on which it resides; (iv) contain no key, node lock, time-out or other function, whether implemented by electronic, mechanical, or other means, which restricts or may restrict use or access to any programs or data developed under this Agreement, based on residency on a specific hardware configuration, frequency or duration of use, or other limiting criteria; (v) contain no virus malware, or similar items, whether known or unknown to Licensor. At the request of Customer, Licensor must remove any Illicit Code from the Software at Licensor's expense.

10.11 Disclaimer of Warranties

EXCEPT FOR THE EXPRESS WARRANTIES MADE OR REFERENCED IN THIS AGREEMENT, NEITHER PARTY MAKES ANY OTHER WARRANTIES, EXPRESS OR IMPLIED, CONCERNING THE SUBJECT MATTER OF THIS AGREEMENT, INCLUDING WITHOUT LIMITATION ANY IMPLIED WARRANTIES OR MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.

11.0 Terms and Termination

11.1 Term

This Agreement shall commence upon execution by both parties and shall continue in full force and effect through _____, unless earlier terminated or extended as provided in this Agreement.

11.2 Termination for Cause

Either Party may terminate this Agreement if the other Party breaches any provision of this Agreement and fails to cure such breach within thirty (30) days after notice of the breach from the non-breaching Party.

11.3 Termination for Convenience

Customer may terminate this Agreement for any reason at any time with thirty (30) days written notice. Upon such termination, Customer shall have no claim for return of any license fees paid to Licensor.

12.0 Survival Upon Termination

The terms, provisions, representations, and warranties contained in this Agreement including but not limited to the following Articles, <u>License</u>, <u>Advertising and Publicity</u>, <u>Warranties</u>, <u>Proprietary Information</u>, <u>Equitable Relief and Survival of Restrictions and Obligations</u>, <u>Indemnification</u>, <u>Illicit Code</u>, <u>Assignment</u>, <u>Taxes</u>, and <u>Miscellaneous</u>, shall so survive the completion of performance and termination of this Agreement, including the making of any and all payments due hereunder, the Secrecy and Nondisclosure agreements, insurance, any rights and obligations conveyed by Licensor, and any cause of action that accrued prior to termination.

13.0 Dispute Resolution

Except as otherwise provided in this Agreement, when a dispute arises between Licensor and Customer, the project managers shall meet to resolve the issue. If project managers do not reach a resolution, the dispute will be decided by Customer's Director of Contracts Administration and Materials Management (CAMM), who shall reduce the decision to writing and mail or otherwise furnish a copy thereof to Licensor. The decision of the Director, CAMM, shall be the final and conclusive administrative decision.

Pending final decision of a dispute hereunder, Licensor shall proceed diligently with the performance of this Agreement and in accordance with the decision of Customer's Director, CAMM. Nothing in this Agreement, however, shall be construed as making final the decision of any Customer official or representative on a question of law, which questions shall be settled in accordance with the laws of the State of California.

14.0 Notice

All notices hereunder and communications regarding the interpretation of the terms of this Agreement, or changes thereto, shall be effected by delivery of said notices in person or by depositing said notices in the U.S. mail, registered or certified mail, returned receipt requested, postage prepaid and addressed as follows:

Customer:	Licensor:
Orange County Transportation Authority 550 South Main Street P.O. Box 14184 Orange, CA 92863-1584	
ATTENTION: Iris Deneau	ATTENTION:
Title: Section Manager, Procurement	Title:
Phone: (714) 560 - 5786	Phone:
Email: ideneau@octa.net	Email:

15.0 Order of Precedence

Conflicting provisions hereof, if any, shall prevail in the following descending order of precedence: (1) the provisions of this Agreement, including all exhibits; (2) the provisions of RFP 250014; (3) Licensor's proposal dated ______; (4) all other documents, if any, cited herein or incorporated by reference.

16.0 Audit and Inspection of Records

Licensor shall provide Customer, or other agents of Customer, such access to Licensor's accounting books, records, payroll documents and facilities, as Customer deems necessary. Licensor shall maintain such

books, records, data and documents in accordance with generally accepted accounting principles and shall clearly identify and make such items readily accessible to such parties during Licensor's performance hereunder and for a period of four (4) years from the date of final payment by Customer. Customer's right to audit books and records directly related to this Agreement shall also extend to all first-tier subcontractors identified in this Agreement. Licensor shall permit any of the foregoing parties to reproduce documents by any means whatsoever or to copy excerpts and transcriptions as reasonably necessary.

17.0 Prohibited Interest

Licensor covenants that, for the term of this Agreement, no director, member, officer or employee of Customer during his/her tenure in office or for one (1) year thereafter shall have any interest, direct or indirect, in this Agreement or the proceeds thereof.

18.0 Users

There shall be no limit on the number of machines, number of users, number of locations or size of CPU on which Customer can operate the Software. Customer shall have the right to receive free of charge additional copies of the Software as required by Customer for use on additional or alternate computers for Customer's business operations.

19.0 Platform Specifications

Customer shall have the right, at no additional cost, to operate simultaneously on, move, or upgrade the Software to other hardware or software platforms on which the software may operate.

20.0 <u>Delivery and Installation (if applicable)</u>

20.1 Delivery and Risk of Loss

All deliveries under this Agreement shall be F.O.B. destination. Title and risk of loss of all Software and media on which said Software is delivered shall remain with Licensor at all times until Final Acceptance with Licensor.

20.2 Installation by Licensor

If Customer has agreed in writing for installation by Licensor, then

- a. Installation shall occur not more than ten (10) days after delivery of the Software to Customer, unless otherwise specified and agreed to by both Parties.
- b. Licensor shall conduct its standard diagnostic evaluation at Customer's site to determine that the Software is properly installed and fully ready for productive use subject to testing as provided in <u>Acceptance Testing</u> Article and shall supply Customer with a copy of the results of the diagnostic evaluation promptly after completion thereof.
- c. The Software shall be deemed to be installed upon successful completion of the diagnostic test and Customer's approval of the results thereof. The installation procedures of this Article are in addition to all procedures required under Acceptance Testing Article hereof.

20.3 Installation by Customer

If installation is to be performed by Customer, the Software shall be deemed to be installed when all programs, program libraries, and user interfaces are copied to and initialized on the appropriate CUP(s) and when Customer demonstrates that Software is executable by invoking the primary function of each major component on the platform. The installation procedures of this Article are in addition to all Acceptance Test Procedures required under <u>Acceptance Testing</u> Article hereof.

21.0 Insurance

- 21.1 Licensor shall procure and maintain insurance coverage during the entire term of this Agreement. Coverage shall be full coverage and not subject to self-insurance provisions. Licensor shall provide the following insurance coverage:
 - a. Commercial General Liability, to include Products/Completed Operations, Independent Contractors', Contractual Liability, and Personal Injury Liability, and Property Damage with a minimum limit of \$1,000,000 per occurrence and \$2,000,000 general aggregate;

- Automobile Liability Insurance to include owned, hired and non-owned autos with a combined single limit of \$1.000.000 each accident;
- c. Workers' Compensation with limits as required by the State of California including a waiver of subrogation in favor of Authority, its officers, directors, employees or agents;
- d. Employers' Liability with minimum limits of \$1,000,000;
- e. Professional Liability with minimum limits of \$1,000,000 per claim; and
- f. Cyber Liability with minimum limits of \$2,000,000 per claim. Coverage by this insurance this insurance policy shall include without limitation: (a) costs to notify individuals whose Personal Data was lost or compromised; (b) costs to provide credit monitoring and credit restoration services to individuals whose Personal Data was lost or compromised; (c) costs associated with third party claims arising from the Data Breach or loss of Personal Data, including litigation costs and settlement costs; and (d) any investigation, enforcement or similar miscellaneous costs.
 - a. Such insurance must address all of the foregoing without limitation if caused by an employee of Licensor or an independent contractor working on behalf of Licensor in performing services under this contract. Policy must provide coverage for wrongful acts, claims, and lawsuits anywhere in the world. Insurer must have a A.M. Best rating of "A- VII" or better. Any material change in the policy or cancellation must be reported to the Client with not less than thirty (30) days prior written notice with ten (10) days notice for non-payment. The policy must be kept in force during the life of the contract and for five (5) years (either as a policy in force or extended reporting period) after contract termination.
- 21.2 Proof of such coverage shall be provided to Customer, in the form of a certificate of insurance, that names Customer, its officers, directors, employees and agents, designated as additional insureds as required by this Agreement. In addition, provide an insurance policy blanket additional insured endorsement. Both documents must be received by Customer prior to commencement of any work. Proof of insurance coverage must be received by Customer within ten (10) calendar days from the effective date of this Agreement. Such insurance shall be primary and non-contributive to any insurance or self-insurance maintained by Customer. Furthermore, Customer reserves the right to request certified copies of all related insurance policies.
- **21.3** Licensor shall also include in each subcontract the stipulation that subcontractors shall maintain insurance coverage in the amounts required from Licensor as provided in this Agreement.
- **21.4** Licensor shall be required to immediately notify Customer of any modifications or cancellation of any required insurance policies.
- 21.5 Licensor shall submit required insurance certificates to Authority's insurance tracking contractor, InsureTrack. Licensor shall respond directly to InsureTrack's request for updated insurance certificates and other insurance-related matters by email to octa@instracking.com.
- **21.6** Licensor shall include on the face of the certificate of insurance, the following information:
 - a. The Agreement Number C-250014 and, the Section Manager's Name, Iris Deneau.
 - b. For Certificate Holder: The Orange County Transportation Authority, its officers, directors, employers and agents, c/o InsureTrack, P.O. Box 60840 Las Vegas, NV 89160.

22.0 Acceptance Testing

22.1 Live Environment Testing

As soon as practical after installation, Customer may in its discretion begin utilizing the Software in a live environment and has thirty (30) days to accept the Software in writing to Licensor. Nothing contained in this Article or any other provision of this Agreement shall be deemed to prevent Customer from using any portion of the Software in a live environment for productive processing prior to Final Acceptance of the Software and any such use shall not alter, amend, or modify any of Licensor's obligations pursuant to this Agreement.

22.2 Correction of Specification Nonconformities

Licensor shall promptly correct any nonconformance with the Specifications revealed during any phase of acceptance testing, and appropriate Documentation for such correction shall be produced and delivered to Customer within thirty (30) days of such correction.

22.3 Acceptance Testing

Upon completion of installation, Licensor and Customer shall perform acceptance testing of all Software in the following three (3) phases. The acceptance testing requirements of this Article also apply to substitute, replacement, and conversion Products that are acquired by Customer after the Software has passed earlier acceptance testing.

Phase One

Licensor shall initially perform its standard test procedures for Customer's personnel and shall certify to Customer in writing that all components and each applicable module are operating in accordance with Specifications. In the event Licensor is unable to, or does not, so certify to Customer within thirty (30) calendar days from the Installation Date, the Software will be deemed not to have completed Phase One.

Phase Two

With the advice and assistance of Licensor's representatives, Customer will operate the Software for five (5) business days, using all portions of the Software necessary for the Software to function as specified in this Agreement, to perform: (i) the Software routine business transactions; (ii) transactions performed during pre-acceptance testing benchmark or other demonstration included, referenced, or incorporated into the Acceptance Test Procedures; and (iii) such other transactions as may be specified in the Acceptance Test Procedures. In the event the Software fails to perform in accordance with the Specifications and within two percent (2%) of applicable benchmark or other demonstration results stated in the Acceptance Test Procedures for a period of five (5) consecutive business days, Customer shall operate the Software for additional consecutive business days until the Software so performs for a period of five (5) consecutive business days. In the event such failure continues in whole or in part for a period of more than thirty (30) calendar days from the Installation Date, the Software will be deemed not to have completed Phase Two.

Phase Three

With the advice and assistance of Licensor's representatives, Customer will continue to operate the Software for an additional period commencing on the date the System successfully completes Phase Two and shall end when the Software has performed in accordance with the Specifications for a period of sixty-two (62) consecutive days at an effectiveness level of ninety-nine percent (99%) or better. In the event the System or any module thereof fails to so perform within ninety (90) days of the Installation Date the Software will be deemed not to have completed Phase Three.

22.4 Failure to Complete Acceptance Testing Successfully

In the event the Software is deemed not to have successfully completed any phase of the acceptance testing, then Customer may, in its sole discretion, elect one (1) of the following options, which election shall be effective upon written notification to Licensor by Customer.

- a. Customer may terminate this Agreement and request the removal of the Software failing to meet the applicable phase of acceptance testing, in which event Customer may pursue any remedy hereunder or available at law or in equity, or seek to enforce any damages, including any liquidated damages that may be specifically set forth in this Agreement.
- b. Licensor shall install at Licensor's sole expense, within such time period as may be mutually agreed in writing by Customer and Licensor, a direct replacement of the Software failing to meet the applicable phase of the acceptance testing. Such replacements shall be subject to acceptance testing as provided in this Article. Licensor shall use due care in the removal and replacement of Software.

23.0 Documentation and Training

23.1 Documentation

Licensor shall provide to Customer user manuals and related materials sufficient to allow Customer to utilize fully the Software in accordance with the Specifications. Documentation will include (but is not limited to) overview descriptions of all major functions and detailed step-by-step operating procedures for each screen and activity. The Documentation to be provided by Licensor is in addition to any on-line help which is part of the Software user interface. Licensor shall deliver to Customer upon execution of this Agreement copies of the Documentation as well as a copy of the Documentation in CD-ROM or other media format as requested by Customer. Licensor shall revise such Documentation as necessary to reflect any modifications made by Licensor to the Software. Licensor warrants and represents that the Documentation and all modifications or amendments thereto and any other Documentation that Licensor is required to provide pursuant to this Agreement shall (i) be sufficient in detail and content to allow an appropriately skilled programmer to understand fully, modify, enhance, and correct errors in the Software without reference to any other materials or information. If any user manual or portion thereof is the proprietary materials or intellectual property of a third party, Licensor shall convey to Customer the right (to the extent possible under law) to make copies and to use the material, as Customer deems necessary.

23.2 Training

Licensor shall be responsible for providing Customer and its employees with such training in the operation and maintenance of the Software as Customer may reasonably request from time to time during the term of the Agreement. Such training shall be provided at Customer's principal place of business or other site selected by Customer, through instructors satisfactory to Customer in the reasonable exercise of its discretion. Training will be performed "hands-on" using the actual system and the user manual. The courses will train Customer-designated employees or agents, who can then train the Software operators, such that Customer will have an ongoing in-house Software training capability. Without limitation of the foregoing right, Licensor and Customer shall prepare and agree upon a proposed training schedule for submissions to Customer not later than the date specified in the Scope of Work. Customer shall be entitled to have any number of its employees attend any training session held pursuant to this Article. All training shall be conducted at Licensor's sole expense including, but not limited to, training materials, travel, meals and lodging for instructors. Licensor's employees shall follow all of Customer's work rules, confidentiality rules, and drug policies, including the nondisclosure obligations of the Proprietary Information Article hereof.

24.0 Escrow Agreement

Licensor agrees to place in escrow with an escrow agent copies of the most current version of the source code for the applicable Software, including all updates, improvements, and enhancements thereof from time to time developed by Licensor necessary to internally support (i.e. maintain and / or repair) the Software for the benefit of Customer. Licensor agrees that upon the occurrence of any event or circumstance which demonstrates with reasonable certainty the inability or unwillingness of Licensor to fulfill its obligations to Customer under this Agreement, Customer shall be able to obtain the source code of the then-current Software from the escrow agent. The provisions of this Section shall survive the termination of this Agreement.

25.0 <u>Assignments and Subcontracts</u>

25.1 Neither this Agreement nor any interest herein nor claim hereunder may be assigned by Licensor either voluntarily or by operation of law, nor may all or any part of this Agreement be subcontracted by Licensor, without the prior written consent and endorsement of Customer, which consent shall not be unreasonably withheld. Consent by Customer shall not be deemed to relieve Licensor of its obligations to comply fully with all terms and conditions of this Agreement.

25.2 Customer hereby consents to Licensor's subcontracting portions of the Scope of Work to the parties identified below for the functions described in Licensor's proposal. Licensor shall include in the subcontract agreement the stipulation that Licensor, not Customer, is solely responsible for payment to the subcontractor for the amounts owing and that the subcontractor shall have no claim, and shall take no action, against Customer, its officers, directors, employees or sureties for nonpayment by Licensor.

Subcontractor Name/Addresses

Subcontractor Amounts \$0.00

26.0 Time is of the Essence

Time is of the essence with regard to Licensor's deadline for delivering the Software. Any failure of Licensor to deliver the Software by the due date constitutes a material breach of this Agreement.

27.0 <u>Miscellaneous</u>

27.1 Amendment

This Agreement shall not be amended except by an instrument in writing signed by both Parties.

27.2 Governing Law; Choice of Forum and Attorney's Fees

Any dispute arising out of or relating to this Agreement or the breach thereof shall be governed by the laws of the State of California without regard to or application of choice of law rules or principles. Both Parties hereby consent to the exclusive jurisdiction of the Orange County Superior Court and expressly waive any objections or defense based upon lack of personal jurisdiction or venue. The prevailing Party shall be entitled to recover its reasonable attorney's fees incurred in connection with any action or proceeding arising out of this Agreement.

27.3 Independent Contractor

- a. Licensor's relationship to Customer in the performance of this Agreement is that of an independent contractor. Licensor 's personnel performing services under this Agreement shall at all times be under Licensor 's exclusive direction and control and shall be employees of Licensor and not employees of Customer. Licensor shall pay all wages, salaries and other amounts due its employees in connection with this Agreement and shall be responsible for all reports and obligations respecting them, such as social security, income tax withholding, unemployment compensation, workers' compensation and similar matters.
- b. Should Licensor's personnel or a state or federal agency allege claims against Customer involving the status of Customer as employer, joint or otherwise, of said personnel, or allegations involving any other independent contractor misclassification issues, Licensor shall defend and indemnify Customer in relation to any allegations made.

27.4 Cumulative Remedies

Except as specifically provided, no remedy made available to Customer hereunder is intended to be exclusive of any other remedy, and each and every remedy shall be cumulative and shall be in addition to every other remedy provided hereunder or available at law or in equity.

27.5 Waiver

Performance of any obligation required of a Party hereunder may be waived only by a written waiver signed by the other Party, which waiver shall be effective only with respect to the specific obligation described therein. Failure by either Party to insist in any one or more instances upon the performance of any terms of conditions of this Agreement shall not be construed as a waiver or relinquishment of that Party's right to such performance or future performance of such terms or conditions.

27.6 Entire Agreement

This Agreement constitutes the entire understanding and contract between the Parties and supersedes any and all prior or contemporaneous oral or written representations or communications with respect to the subject matter hereof.

27.7 Severability of Provisions

In the event any provision hereof is found invalid or unenforceable pursuant to a final judgment or judicial decree of a court of competent jurisdiction, the remainder of this Agreement shall remain valid and enforceable according to its terms.

27.8 Licensor Bankruptcy

All rights and licenses granted under or pursuant to this Agreement by Licensor to Customer are, and shall otherwise be deemed to be, for the purposes of Section 365(n) of the United States Bankruptcy Code, or replacement provision therefore (the "Code"), licenses to rights to "intellectual property" as defined in the Code. The Parties agree that Customer, as licensee of such rights under this Agreement, shall retain and may fully exercise all of its rights and election under the Code. The Parties further agree that, in the event of the commencement of bankruptcy proceedings by or against Licensor under the Code, Customer shall be entitled to retain all of its rights under the Agreement.

27.9 Conflict of Interest

Licensor agrees to avoid organizational conflicts of interest. An organizational conflict of interest means that due to other activities, relationships or contracts, the Licensor is unable, or potentially unable to render impartial assistance or advice to the Customer; Licensor's objectivity in performing the work identified in the Scope of Work is or might be otherwise impaired; or the Licensor has an unfair competitive advantage. Licensor is obligated to fully disclose to the Customer in writing Conflict of Interest issues as soon as they are known to the Licensor. All disclosures must be submitted in writing to Customer pursuant to the Notice provision herein. This disclosure requirement is for the entire term of this Agreement.

27.10 Advertising and Publicity

Licensor shall not use the name of or refer to Customer directly or indirectly in any advertisement, news release, or professional or trade publication without prior written approval from Customer. Licensor shall not use the Customer's logo directly or indirectly in any advertisement, news release, or professional or trade publication. Licensor may include Customer on its customer lists upon receipt of Customer's written consent.

27.11 Code of Conduct

Licensor agrees to comply with the Customer's Code of Conduct as it relates to Third-Party contracts which is hereby referenced and by this reference is incorporated herein. Licensor agrees to include these requirements in all of its subcontracts.

27.12 Force Majeure

Either Party shall be excused from performing its obligations under this Agreement during the time and to the extent that it is prevented from performing by an unforeseeable cause beyond its control, including but not limited to: any incidence of fire, flood; acts of God; commandeering of material, products, plants or facilities by the federal, state or local government; national fuel shortage; or a material act or omission by the other Party; when satisfactory evidence of such cause is presented to the other Party, and provided further that such nonperformance is unforeseeable, beyond the control and is not due to the fault or negligence of the Party not performing.

27.13 Health and Safety Requirement

Licensor shall comply with all the requirements set forth in Exhibit ___, Level 1 Safety Specifications.

IN WITNESS WHEREOF, the parties hereto have caused this Agreement No. C-250014 to be executed as of the date of the last signature below.

ORANGE COUNTY TRANSPORTATION AUTHORITY

By:	By: Darrell E. Johnson Chief Executive Officer
	APPROVED AS TO FORM:
	By: James M. Donich General Counsel
	APPROVED:
	By: Rose Casey Executive Director, Planning

PART I - GENERAL

1.1 GENERAL HEALTH, SAFETY & ENVIRONMENTAL REQUIREMENTS

- A. The Contractor, its subcontractors, suppliers, and employees have the obligation to comply with all Authority health, safety and environmental compliance department (HSEC) requirements of this safety specification, project site requirements, bus yard safety rules, as well as all federal, state, and local regulations pertaining to scope of work, contracts or agreements with the Authority. Additionally, manufacturer requirements are considered incorporated by reference as applicable to this scope of work.
- B. Observance of repeated unsafe acts or conditions, serious violation of safety standards, non-conformance of Authority health, safety and environmental compliance department (HSEC) requirements, or disregard for the intent of these safety specifications to protect people and property, by Contractor or its subcontractors may be cause for termination of scope or agreements with the Authority, at the sole discretion of the Authority.
- C. The health, safety, and environmental requirements, and references contained within this scope of work shall not be considered all-inclusive as to the hazards that might be encountered. Safe work practices shall be planned and performed, and safe conditions shall be maintained during this work scope.
- D. The Authority Project Manager shall be responsible to ensure a safety orientation is conducted of known potential hazards and emergency procedures for all Contractor personnel, subcontractors, suppliers, vendors, and new employees assigned to the project prior to commencement of the project.
- E. The Contractor shall ensure that all Contractor vehicles, including those of its subcontractors, suppliers, vendors and employees are parked in designated parking areas, and comply with traffic routes, and posted traffic signs in areas other than the employee parking lots.
- F. California Code of Regulations (CCR) Title 8 Standards are minimum requirements; each Contractor is encouraged to exceed minimum requirements. When the Contractor's safety requirements exceed statutory standards, the more stringent requirements shall be applied for the safequard of public and employees.

1.2 REGULATORY

A. Injury/Illness Prevention Program

The Contractor shall comply with CCR Title 8, Section with California Code of Regulations (CCR) Title 8, Section 3203. The intent and elements of the IIPP shall be implemented and enforced by the Contractor and its sub-tier contractors, suppliers, and vendors. The program shall be provided to the Authority's Project Manager, upon request, within 72 hours.

B. Substance Abuse Prevention Program

Contractor shall comply with the Policy or Program of the Company's Substance Abuse Prevention Policy that complies with the most recent Drug Free Workplace Act. The program shall be provided to the Authority's Project Manager, upon request, within 72 hours.

C. Heat Illness Prevention Program

Contractor shall comply with CCR Title 8, Section, Section 3395, Heat Illness Prevention. The program shall be provided to the Authority's Project Manager, upon request, within 72 hours.

D. Hazard Communication Program

Contractor shall comply with CCR Title 8, Section 5194 Hazard Communication Standard. Prior to use on Authority property and/or project work areas Contractor shall provide the Authority Project Manager copies of SDS for all applicable chemical products used, if any. The program shall be provided to the Authority's Project Manager, upon request, within 72 hours.

- All chemicals including paint, solvents, detergents and similar substances shall comply with South Coast Air Quality Management District (SCAQMD) rules 103, 1113, and 1171.
- E. Storm Water Pollution Prevention Plan

The Contractor shall protect property and water resources from fuels and similar products throughout the duration of the contract. Contractor shall comply with Storm Water Pollution Prevention Plan (SWPPP) requirements. The program or plan if required by scope shall be provided to the Authority's Project Manager, upon request, within 72 hours.

1.3 INCIDENT NOTIFICATION AND INVESTIGATION

- A. The Authority shall be promptly notified of any of the following types of incidents including but not limited to:
 - 1. Damage incidents of property (incidents involving third party, contractor or Authority property damage);
 - 2. Reportable and/or Recordable injuries (as defined by the U. S. Occupational Safety and Health Administration), a minor injury, and near miss incidents;
 - 3. Incidents impacting the environment, i.e. spills or releases on Authority projects or property.
 - Outside Agency Inspections; agencies such as Cal/OSHA, DTSC, SCAQMD, State Water Resources Control Board, FTA, CPUC, EPA, USACE and similar agencies.
- B. Notifications shall be made to Authority representatives, employees and/or agents. This includes incidents occurring to contractors, vendors, visitors, or members of the public

that arise from the performance of Authority contract work. An immediate verbal notice followed by an initial written incident investigation report shall be submitted to the Authority's Project Manager within 24 hours of the incident.

- C. A final written incident investigative report shall be submitted within seven (7) calendar days and include the following information. The Current Status of anyone injured, photos of the incident area, detailed description of what happened, Photos of the existing conditions and area of the injury/incident, the contributing factors that lead to the incident occurrence, a copy of the company policy or procedure associated with the incident and evaluation of effectiveness, copy of task planning documentation, copy of the Physician's first report of injury, copy of Cal/OSHA 300 log of work related injuries and illnesses, the Cal/OSHA 301 Injury Illness Incident Report, and corrective actions initiated to prevent recurrence. This information shall be considered the minimum elements required for a comprehensive incident report provided to OCTA.
- D. A Serious Injury, Serious Incident, OSHA Recordable Injury/Illness, or a Significant Near Miss shall require a formal incident review at the discretion of the Authority's Project Manager. The incident review shall be conducted within seven (7) calendar days of the incident. This review shall require a company senior executive, company program or project manager from the Contractors' organization to participate and present the incident review as determined by the OCTA Project Manager. The serious incident presentation shall include action taken for the welfare of the injured, a status report of the injured, causation factors that lead to the incident, a root cause analysis (using 5 whys and fishbone methods), and a detailed recovery plan that identifies corrective actions to prevent a similar incident, and actions to enhance safety awareness.
 - 1. <u>Serious Injury:</u> includes an injury or illness to one or more employees, occurring in a place of employment or in connection with any employment, which requires inpatient hospitalization for a period in excess of twenty-four hours for other than medical observation, or in which an employee suffers the loss of any member of the body, or suffers any serious degree of physical disfigurement. A serious injury also includes a lost workday or reassignment or restricted injury case as determined by the Physician's first report of injury or Cal/OSHA definitions.
 - Serious Incident: includes but not limited to property damage of \$500.00 or more, an incident requiring emergency services (local fire, paramedics and ambulance response), news media or OCTA media relations response, and/or incidents involving other agencies (Cal/OSHA, EPA, AQMD, DTSC, Metrolink, FTA, FRA etc.) notification or representation.
 - 3. OSHA Recordable Injury / Illness: includes and injury / illness resulting in medical treatment beyond First Aid, an injury / illness which requires restricted duty, or an injury / illness resulting in days away from work.
 - 4. <u>Significant Near Miss Incident;</u> includes incidents where no property was damaged and no personal injury sustained, but where, given a slight shift in time or position, damage and/or injury easily could have occurred.

1.4 DESIGNATED HEALTH AND SAFETY REPRESENTATIVE

- A. Upon contract award, the contractor within 10 business days shall designate a health and safety representative and provide a resume and qualifications to the Authority project manager, upon request, within 72 hours.
- B. This person shall be a competent or qualified individual as defined by the Occupational, Safety, and Health Administration (OSHA), familiar with applicable CCR Title 8 Standards (Cal/OSHA) and has the authority to affect changes in work procedures that may have associated cost, schedule and budget impacts.

1.5 PERSONAL PROTECTIVE EQUIPMENT

- A. The Contractor, its subcontractors, suppliers, and employees are required to comply with applicable personal protective equipment (PPE) requirements while performing work at any Authority project or property. Generally minimum PPE requirements include eye protection; hearing protection, head protection, class 2 or 3 safety reflective vests, and appropriate footwear.
- B. The Contractor, its subcontractors, suppliers, and employees are required to provide their own PPE, including eye, head, foot, and hand protection, safety vests, or other PPE required to perform their work safely on Authority projects or property. The Authority requires eye protection on construction projects and work areas that meet ANSI Z-87.1 Standards.

1.6 REFERENCES

- A. CCR Title 8 Standards (Cal/OSHA)
- B. FCR Including 1910 and 1926 Standards
- C. NFPA, NEC, ANSI, NIOSH Standards
- D. Construction Industry Institute (CII)
- E. OCTA Yard Safety Rules

END OF SECTION





October 13, 2025

Members of the Board of Directors To:

Andrea West, Clerk of the Board From:

Subject: Coastal Rail Resiliency Study Update

Regional Transportation Planning Committee Meeting of October 6, 2025

Present: Directors Foley, Go, Harper, Klopfenstein, Stephens, and

Tavoularis

Absent: **Director Federico**

Committee Vote

This item was passed by the Members present.

Director Foley abstained from voting on this item.

Committee Recommendation(s)

Direct staff to advance the study with the refined range of Alternative Concepts, continue collaborating with key stakeholders for further analysis, and actively engage the public to solicit input.



October 6, 2025

To: Regional Transportation Planning Committee

From: Darrell E. Johnson, Chief Executive Officer

Subject: Coastal Rail Resiliency Study Update

Overview

The Orange County Transportation Authority initiated the Coastal Rail Resiliency Study in fall 2023, focusing on both short- and mid-term solutions to protect the rail line and preserve rail operations. Through this study, staff has developed Alternative Concepts that would protect the rail line in place for up to 30 years. An update on the refined Alternative Concepts for the Coastal Rail Resiliency Study and a summary of the public meetings hosted in July 2025 is provided herein.

Recommendation

Direct staff to advance the study with the refined range of Alternative Concepts, continue collaborating with key stakeholders for further analysis, and actively engage the public to solicit input.

Background

The Orange County Transportation Authority (OCTA) owns and maintains approximately 47 miles of operating railroad right-of-way, with 42 miles along the Orange Subdivision and 5.5 miles along the Olive Subdivision. A map of both subdivisions is provided as Attachment A. This rail corridor is part of the Los Angeles – San Diego – San Luis Obispo Rail Corridor that serves intercity and commuter passenger and freight rail service.

Beginning in fall 2021, several bluff failures, landslides on the inland side, and diminishing beaches on the seaward side in the City of San Clemente have resulted in a series of rail service disruptions, totaling nearly one year of rail operating impacts.

In late 2023, OCTA initiated the South Coast Rail Infrastructure Feasibility Study and Alternative Concepts Analysis (also known as the Coastal Rail Resiliency

Study [Study]) which focuses on the seven-mile stretch of coastal rail line in south Orange County. The Study was undertaken to assess existing and future risks, challenges, and potential solutions to protect the rail line in place. During the first half of 2024, nearly three dozen meetings were held with stakeholders, regulatory agencies, and the public to gather feedback on the Study and early action items. These include four imminent high-risk areas that if not immediately addressed, may result in additional unforeseen emergencies that further impact rail operations. Input included requests to integrate natural solutions, consideration of the impacts of armoring actions, consulting with relevant experts, and maintaining reliable passenger rail service, etc.

The Study explores opportunities to protect the rail corridor for the short- to mid-term, defined as up to 30 years, between the City of Dana Point and the Orange County/San Diego County Line. It also identified four immediate early actions that are required to minimize further service disruptions. These early action areas are all located within the City of San Clemente, and continue to experience storm surges, bluff failures, erosion, and other factors. Early actions include riprap repairs at three sites, a catchment wall, demolition of the Mariposa Beach bridge and restoration of the trail, targeted sand nourishment, and other stabilization efforts to further buffer the rail line. OCTA has secured over \$300 million in state and federal funding along with local funds to support these early action efforts to help ensure continued safe and reliable rail operations.

Draft Alternative Concepts for the short – to mid-term effort were presented to the OCTA Board of Directors (Board) in February 2025. They included eight beachside, nine bluffside, and three rail concepts to serve as a list of pre-screened options for application along seven typical segments of the seven-mile corridor, which have similar land-use characteristics (Attachment B). The primary objective of these concepts is to protect the rail operations against bluff erosion, coastline retreat, and rail vulnerabilities. Bluffside example concepts include various wall types, stabilization measures, and drainage improvements. Beachside example concepts include riprap placement, engineered rock revetment, and beach sand nourishment. Rail example concepts include elevating the track profile, alternative materials for critical railroad assets such as signal houses, masts, positive train control equipment, and track bed stabilization. As part of this item, the Board directed staff to proceed with refinement of the Alternative Concepts and continue collaboration with key stakeholders.

Discussion

In July 2025, OCTA hosted two public meetings to solicit additional public input on the draft Alternative Concepts. The first meeting was held in-person at the San Clemente City Hall on Tuesday, July 15, 2025. The second meeting was held virtually on Tuesday, July 29, 2025, with 63 and 87 participants, respectively. Attendees included residents, community-based organizations, key stakeholders, media, agencies, and participants from previous listening sessions. Spanish interpretation was provided for both meetings, and in-person attendees were able to review informational display boards and speak with the project team beforehand.

Following each of the stakeholder, regulatory, and public meetings, the technical team worked to refine the range of draft Alternative Concepts and developed evaluation criteria to assess a range of concepts with the primary goal of protecting the rail line in place over the next several decades. The evaluation process produced a list of highest scoring concepts from each category to be carried forward for further development as part of the Study.

The evaluation criteria consisted of five categories, each with their own respective percentage weights based on design life (up to 30 years), ability to protect the rail line, and how well the concepts meet the goals and objectives of the Study. In addition, it should be noted that while a concept may score well in one category, it may score poorly in another. The overall scoring of each topic reflects a concept's average across all scoring criteria.

The evaluation criteria is summarized below. A more detailed description is provided in Attachment C.

Evaluation Topic/Description	Weight
Coastal Resilience and Rail Reliability: service disruptions during maintenance, sensitivity to storm surge, sea level rise, beach erosion, longevity of concept (30-year design life), as well as track resilience provided from bluff erosion	25 percent
Implementability and constructability: ROW requirements, schedule and speed of implementation, minimize construction impacts, complexity of constructability, and the ability to meet design criteria	25 percent
Costs: construction, maintenance, and lifecycle costs for consideration	20 percent

Evaluation Topic/Description	Weight
Public Assets and Environmental Impacts: local resources, public facilities, utilities, grade crossings, surfing and swimming, multi-use paths and pedestrian access, beach/coastal access, permitting, sensitive habitats, as well as Section 4(f) resources	20 percent
Related/Planned Projects: alignment with local, state, federal planning efforts. Determine whether concepts support and/or supplement initiatives by other agencies to address coastal erosion challenges	10 percent

Scoring Results - Rail

Of the three rail alternative concepts, two are recommended for further consideration. Alternative materials for critical railroad infrastructure to improve the resiliency of the rail line, as well as reducing lifecycle costs, are the least challenging, can be phased, and limits impacts to surrounding communities and environmental assets. Ground improvement (track-bed stabilization) has the best influence on railroad resiliency and can be combined with bluffside ground improvements to further stabilize area, although it may impact railroad operations during construction. Elevation of the tracks comes at a high cost with construction outweighing benefits comparatively.

Bluffside

Of the nine Bluffside Alternative Concepts, two are recommended for further consideration: catchment walls and tieback/soil nail/pin-pile walls, which are cost-effective, low-maintenance, and fit within existing ROW. Stabilization grading and hydraugers are not recommended due to construction challenges and community impacts. Drainage measures (cut-off drains, basins, outlets, matting, vegetation) are generally not recommended because of limited applicability and lack of corridor-wide benefit, and ground improvements (track stabilization) are only recommended in combination with rail-related ground improvements. Deflection walls in tributaries may support the goals of this Study; however, natural beach replenishment can take years with several influencing factors, such as the frequency and strength of storms and waves, which would require regional collaboration and possible implementation by other agencies.

Beachside

Of the five Beachside Alternative Concepts, three are recommended for further consideration, and generally consist of beach nourishment with either a combination of seawall and rock shoreline protection structure, seawall, and/or riprap. These concepts are recommended due to construction limitations within the existing ROW and the proven nature of such structures to protect the railroad while also improving beach access when combined with sand placement. Sand

retention measures are not recommended due to impacts on recreational users (surfing/swimming) and a challenging environmental approval process. Beach nourishment only (not combined with any other solution) and watershed modifications are not recommended due to lead time, funding, sourcing, and monumental coordination and permitting efforts, requiring implementation by other agencies. Beach nourishment as a stand-alone solution would require repeated large-scale sand placements and extensive sourcing/testing, as shown by other initiatives.

Key Project Risk and Challenges

Any improvements that are being planned would be subject to the immediate risk of additional bluff failures during the project development process which could lead to immediate rail service closure and require rescoping of planned improvements underway. As the proposed improvements progress through the project development process, some of the key challenges will include:

- Identification and permitting of a sufficient sand replenishment source location
- Developing and securing a timely sand transport and delivery method
- Coordination, approvals, and permitting required for additional revetment

Next Steps

With direction from the Board, the Study team will continue public and stakeholder engagement on the short-listed concepts through in-person and virtual meetings. The short-listed Alternative Concepts will be further developed for future project implementation. Staff will return to the Board in summer 2026 with the Draft Feasibility Study Report. Following the conclusion of this short- and mid-term planning Study, OCTA will begin the alternatives analysis, preliminary engineering, and environmental clearance phase for the various concepts identified through this effort. This Study will also help to determine the priority of the identified improvements. Staff will continue to identify funding and project streamlining opportunities as well as work with regulatory agencies to expedite the permitting processes.

Attachments

- A. Orange and Olive Subdivisions Map
- B. Typical Sections Map
- C. Scoring Weights, Considerations, and Rankings

Prepared by:

Rebekah Soto Senior Project Manager, Regional Rail Planning (714) 560-5501

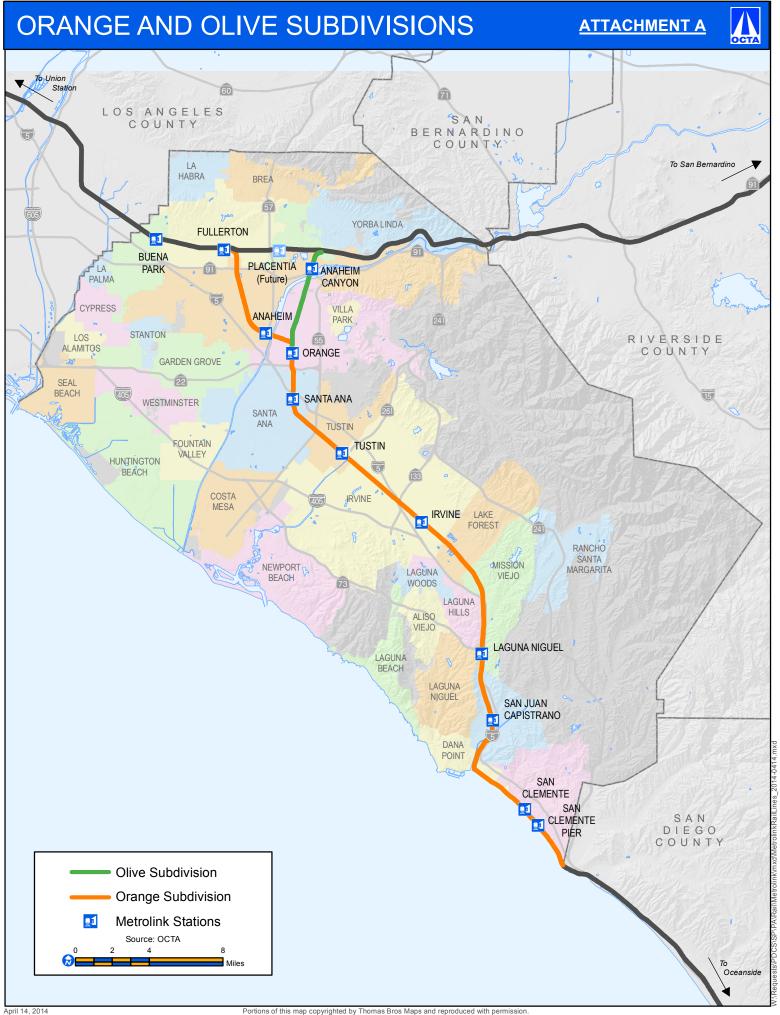
al Rail Planning (714) 560-5729

Approved by:

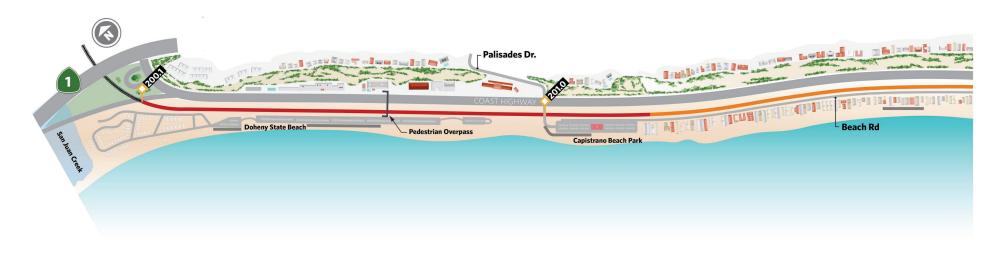
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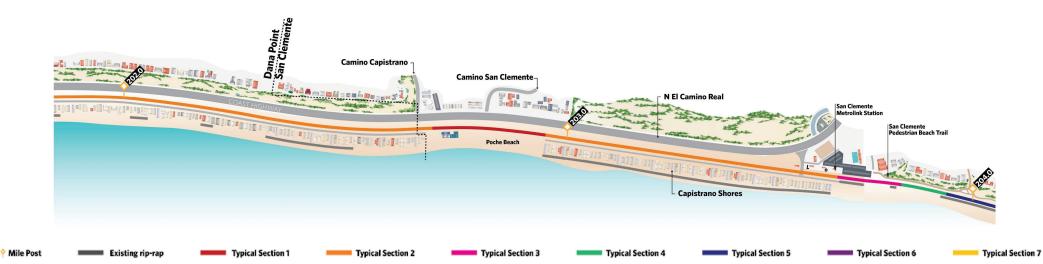
Executive Director, Planning

Rose Casey

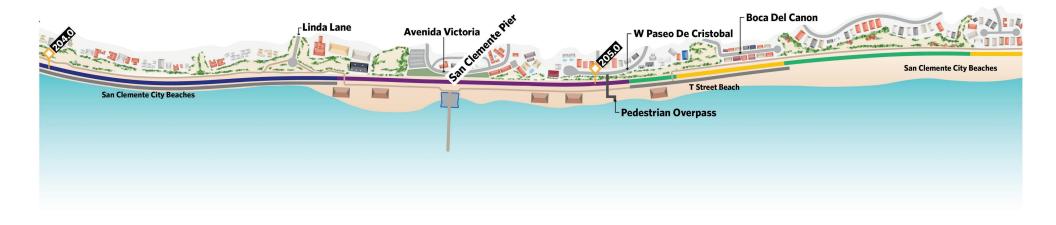


ATTACHMENT B





COASTAL RAIL RESILIENCY STUDY





COASTAL RAIL RESILIENCY STUDY

Scoring Weights, Considerations, and Rankings

Weights and Considerations

The scoring results produced a list of highest scoring concepts from each category to be carried forward for further development as part of the Coastal Rail Resiliency Study (Study).

The evaluation criteria consists of five categories, each with their own respective percentage weights based on design life (up to 30 years), ability to protect the rail line, and how well the concepts meet the goals and objectives of the Study. In addition, it should be noted that while a concept may score well in one category, it may score poorly in another. The overall scoring of each topic reflects a concept's average across all scoring criteria.

Evaluation Category	Weight
Coastal Resilience and Rail Reliability	25 percent
Implementability and Constructability	25 percent
Cost	20 percent
Public Assets and Environmental Impacts	20 percent
Related/Planned Projects	10 percent

Coastal Resilience and Rail Reliability

This criterion and associated weight evaluate how well each Alternative Concept stabilizes the railroad and keeps it protected in place for up to the next 30 years, reflecting the Study's primary objective. Scoring factors for consideration under this category include service disruptions during maintenance, sensitivity to storm surge, sea level rise, beach erosion, longevity of concept (30-year design life), as well as track resilience provided from bluff erosion.

Implementability and Constructability

This criterion and associated weight evaluate the ease and timing of implementation. Scoring factors for consideration under this topic include right-of-way requirements, schedule and speed of implementation, ability to maintain service during construction, constructability, as well as the ability to meet design criteria.

Cost

This criterion and associated weight evaluate the estimated overall cost to implement each concept using high-level rough order of magnitude cost estimates developed for each concept. If the cost is found to be prohibitive and/or particularly challenging, the scoring results reflect this. This includes construction, maintenance, and lifecycle costs for consideration.

1

Public Assets and Environmental Impacts

This criterion and associated weight evaluate the impacts of each concept on access to public assets and the environment, reflecting the importance of minimizing such impacts in scoring results. This includes local resources, public facilities, utilities, grade crossings, surfing and swimming, multi-use paths and pedestrian access, beach/coastal access, permitting, sensitive habitats, as well as Section 4(f) resources.

Related/Planned Projects

This criterion and associated weight evaluate how well each concept aligns with local jurisdictions' policies, as well as federal and state sustainability planning efforts. This topic ultimately considers whether each concept supports and/or supplements initiatives by other agencies to address coastal erosion challenges.

Scoring and Ranking Results

Rail

Of the three draft Alternative Concepts under the rail category, two are recommended to be carried forward for further consideration. Alternative materials for critical railroad infrastructure to reduce lifecycle costs, which can be difficult to predict and often far more costly over time, are the least challenging and can be phased, in addition to limiting impacts to surrounding communities and environmental assets. Ground improvement (track-bed stabilization) has the best influence on railroad resiliency and can be combined with bluffside ground improvements to further stabilize area, although it may impact railroad operations during construction. Elevation of the tracks comes with a high cost with construction impacts exceeding the benefits comparatively.

Rail Concept	Rank	Carry Forward
Raised track embankment	3 rd	No
Alternative materials for critical railroad infrastructure to reduce lifecycle costs	1 st	Yes
3. Ground improvement (track-bed stabilization)	2 nd	Yes

Bluffside

Of the nine draft Alternative Concepts under the bluffside category, two are recommended to be carried forward. Catchment walls along with tieback/soil nail/pin-pile walls are both proven to be a cost-effective approach that falls mostly (if not completely) within the existing right-of-way to protect tracks without requiring long-term maintenance. Stabilization grading and hydraugers are not recommended due to difficult construction and impacts to adjacent properties and communities. Drainage solutions, such as up-gradient cut-off drains, improvement via grading/detention basins/undertrack outlets, as well as surface matting and deep-rooted vegetation planting generally not recommended due to limited applicability and not being a corridor-wide solution, and ground improvements (track stabilization) are only recommended in combination with rail-related ground improvements. While deflection walls in tributaries may support the goals of this Study, it will take years to naturally replenish beach sand and must be implemented by other agencies.

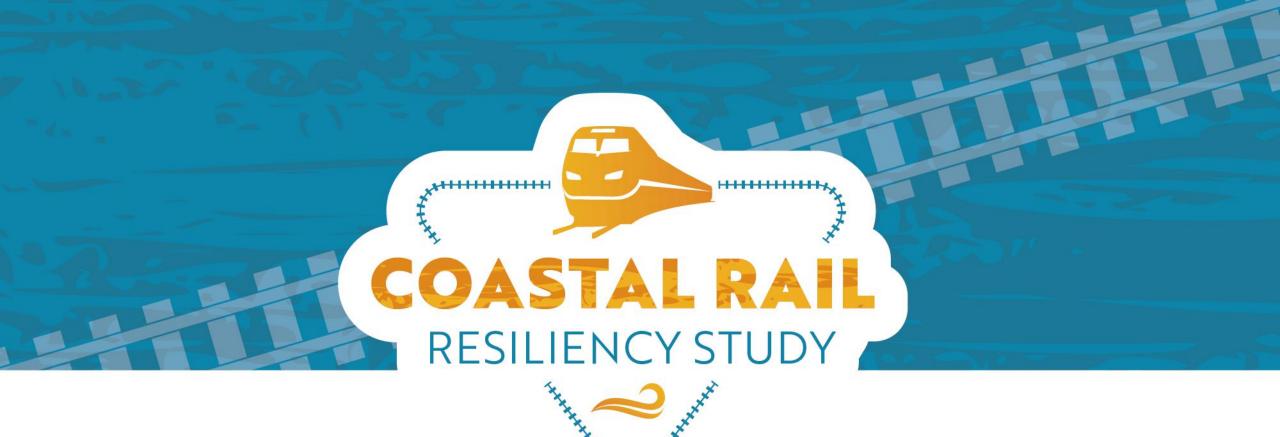
Bluffside Concept	Rank	Carry Forward
Catchment walls	1 st	Yes
2. Stabilization grading	7 th	No
3. Tieback/soil nail/pin-pile walls	2 nd	Yes
4. Ground improvement (bluff stabilization)	5 th	No
5. Surface matting & deep-rooted vegetation planting	3 rd	No
6. Drainage improvement via grading/detention basins/ undertrack outlets	6 th	No
7. Deflection walls in tributaries	8 th	No
8. Up-gradient cut-off drains	4 th	No
9. Hydraugers	9 th	No

Beachside

Of the five draft Alternative Concepts under the beachside category, three are recommended to be carried forward, and generally consist of beach nourishment combined with either a hybrid shoreline protection structure, seawall, and/or riprap due to construction limitations within the existing right-of-way and the proven-nature of such structures to protect the railroad while also improving beach access when combined with sand placement. Sand retention measures are not recommended due to impacts to recreational users (surfing/swimming) and challenging environmental approval processes. Beach nourishment only (not combined with any other solution) and watershed modifications are not recommended due to lead time, funding, sourcing, and coordination, and permitting efforts would be monumental, requiring implementation by other agencies. Beach nourishment, in particular, would require cyclical sand placements with ongoing efforts to source and test sand sites, with vast amounts of quantity needed for each placement in order for it to be effective, as demonstrated by other initiatives.

Beachside Concept	Rank	Carry Forward
Beach nourishment with planned replenishment (by others)	8 th	No
2.1 Beach nourishment with Riprap	3 rd	Yes
2.2 Beach nourishment with engineered rock revetment	4 th	No
2.3 Beach nourishment with seawall	2 nd	Yes
2.4 Beach nourishment with a hybrid shoreline protection structure	1 st	Yes
Beach nourishment with sand retention and no shoreline protection	10 th	No

Beachside Concept	Rank	Carry Forward
4.1 Beach nourishment with sand retention measures and Riprap shoreline protection structure	11 th	No
4.2 Beach nourishment with sand retention measures and engineered rock revetment	7 th	No
4.3 Beach nourishment with sand retention measures and seawall	9 th	No
4.4 Beach nourishment with sand retention measures and combination of seawall and rock	5 th	No
5. Watershed modification	6 th	No



Coastal Rail Resiliency Study Update



Coastal Rail Remediation Efforts

Emergency Rail Projects past projects

- Cyprus Shore (9/22 4/23)
 slope secured with ground anchors
- Casa Romantica (4/23 7/23)
 temporary catchment wall built
- Mariposa Point (1/24 3/24) temporary catchment wall built
- Remove temporary catchment walls at Casa Romantica and Mariposa Point when appropriate
- Mitigation discussions are ongoing for the Cyprus Shore emergency work

Coastal Rail Stabilization Priority Project

- Address imminent threats
- Four priority reinforcement areas identified
- Actions include armoring, catchment wall, trail restoration and sand replenishment
- Secured over \$300M in state, federal, and local funds.
- Accomplishments to date include riprap repair, start of trail restoration and catchment wall, and initial placement of sand in North Beach

Coastal Rail Resiliency Study short- to mid-term solutions

- Evaluate concepts to protect seven miles of coastal rail infrastructure for up to 30 years
- Scoring and selection of short-listed concepts to be carried forward
- Two to three short-listed concepts per category carried forward for further evaluation

Coastal Rail Long-Term Solutions Study Iong-term solutions

- State-led study
- Develop options for long-term solutions including potential rail line relocation
- Create an action plan for key elements
- Partner with Los Angeles-San Diego-San Luis Obispo Rail Corridor Agency, state, and federal agencies
- Engage key stakeholders

Community Input

Public meetings held:

- July 15, 2025, at San Clemente City Hall
- July 29, 2025, virtual meeting via Zoom
- Shared information and gathered community feedback on draft alternative concepts for the short- to mid-term (30-year) timeframe
- Meeting notifications were distributed via newspaper ads, bilingual flyers, e-blasts, project website updates, social media ads, social media posts, and press releases
- Public participants:
 - 63 (in-person)
 - 87 (virtual)

Community comments on feasible concepts:

- Strong support for sand nourishment
- Emphasized the importance of restoring and preserving safe, continuous access to beaches and coastal trails
- Concerns about shoreline protection structures (i.e., rock revetments, seawalls, and riprap)

Action taken to respond to comments:

- One-time sand nourishment has been added to all shoreline protection structure concepts to help buffer the rail corridor and support community benefits
- A sand-only concept has been evaluated

Alternative Concept Development Process

Ongoing Stakeholder Engagement

Purpose and Need

- Determine the problem to be solved
- Develop evaluation criteria to meet the project needs

Identifying Feasible Concepts by Category and Typical Section

- 1. Rail concepts
- 2. Bluffside concepts
- 3. Beachside concepts

Evaluate Concepts

- Score concepts based on evaluation criteria
- One to three short-listed concepts per category carried forward into further study

Results

 Further develop concepts to support implementation



Community input received



Future community input opportunities



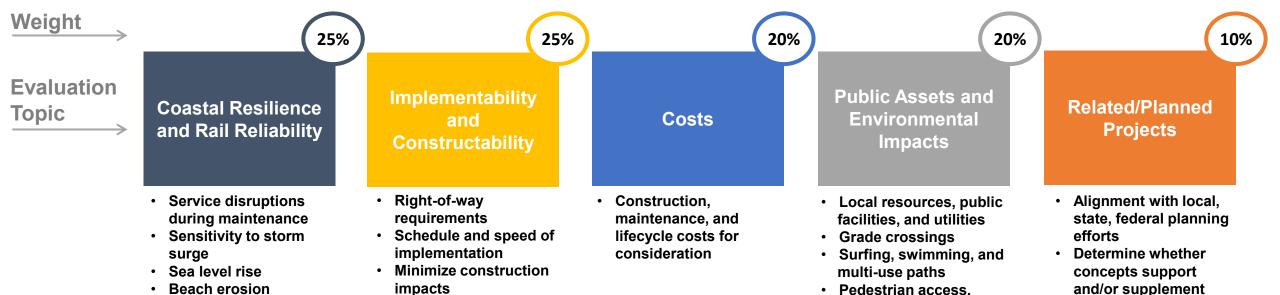
We are here

Alternative Concept Evaluation Process – Screening Criteria

· Constructability and

criteria

ability to meet design



Longevity of concept

Track resilience

erosion

(30-year design life)

provided from bluff

initiatives by other

coastal erosion

challenges

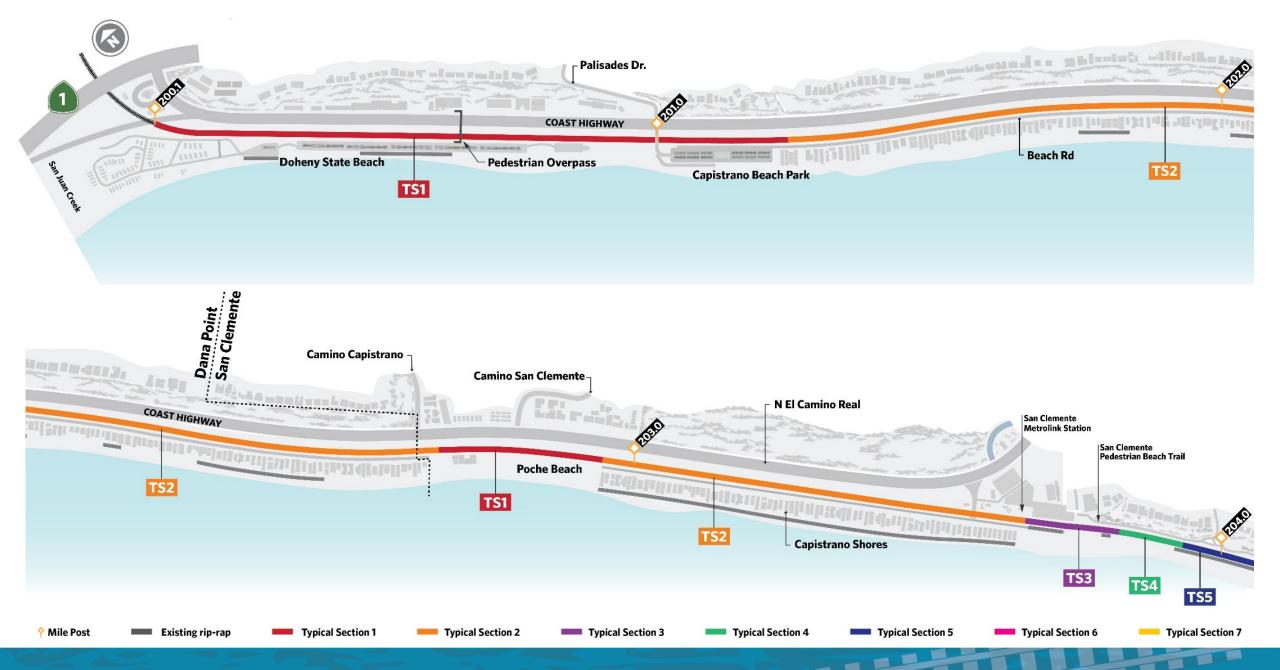
agencies to address

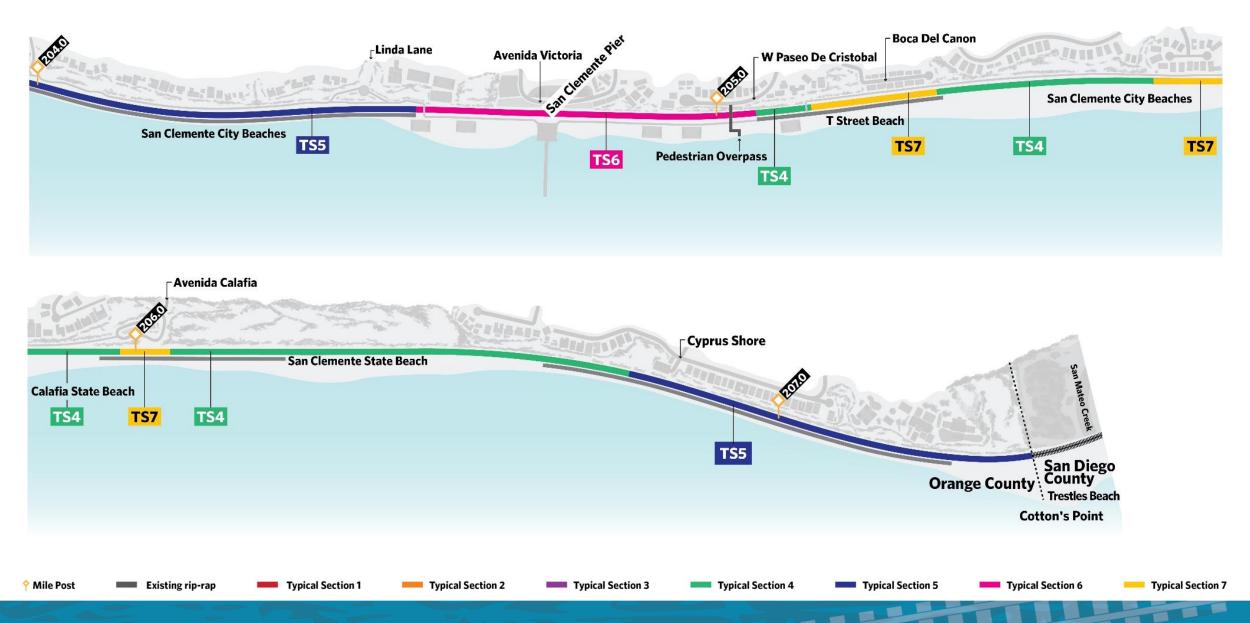
beach/coastal access

Sensitive habitats

Section 4(f) resources

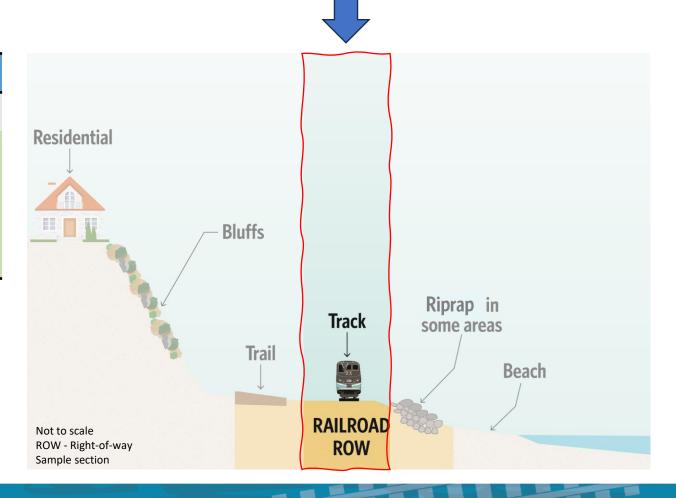
Permitting





Evaluation Results – Rail Concepts

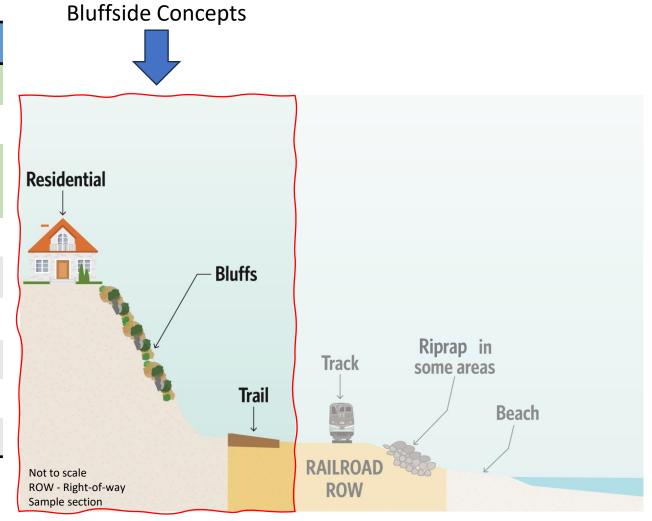
Rail Concept	Carry Forward	Mile Post
Raised Track Embankment	No	
Alternative materials for critical railroad infrastructure to reduce lifecycle costs	Yes	200.2 - 207.0 (All typical sections)
Ground improvement (track-bed stabilization)	Yes	203.72 - 203.92 204.42 - 204.54 205.16 - 205.22 206.02 - 206.66 (Typical section 4)



Rail Concepts

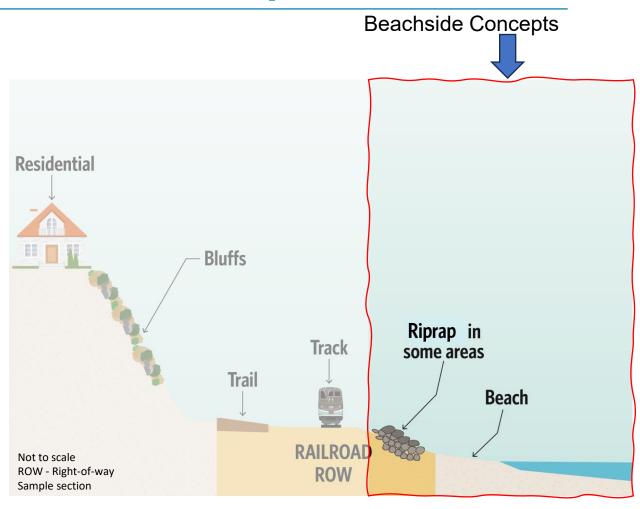
Evaluation Results – Bluffside Concepts

Bluffside Concept	Carry Forward	Mile Post
Catchment walls	Yes	203.72 – 207.25 (Typical sections 4 - 6)
Stabilization grading	No	
Tieback / soil nail / pin-pile walls	Yes	203.72 - 204.54 205.16 - 205.22 206.02 - 207.25 (Typical sections 4 & 5)
Ground improvement (bluff stabilization)	No	
Surface matting and deep-rooted vegetation planting	No	
Drainage improvement via grading/detention basins/undertrack outlets	No	
Deflection walls in tributaries	No	
Up-gradient cut-off drains	No	
Hydraugers	No	



Evaluation Results – Beachside Concepts

Beachside Concept	Carry Forward	Mile Post
Beach nourishment with planned replenishment (by others)	No	
Beach nourishment with riprap	Yes	203.62 - 203.92 204.42 - 204.54 205.16 - 205.22 206.02 - 206.66 (Typical sections 3 - 5)
Beach nourishment with engineered rock revetment	No	
Beach nourishment with seawall	Yes	203.62 - 203.92 204.42 - 204.54 205.16 - 205.22 206.02 - 206.66 (Typical sections 3 - 5)
Beach nourishment with combination of seawall and rock shoreline protection structure	Yes	203.62 - 203.92 204.42 - 204.54 205.16 - 205.22 206.02 - 206.66 (Typical sections 3 - 5)
Beach nourishment with sand retention and no shoreline protection	No	
Beach nourishment with sand retention measures and riprap shoreline protection structure	No	
Beach nourishment with sand retention measures and engineered rock revetment	No	
Beach nourishment with sand retention measures and seawall	No	
Beach nourishment with sand retention measures and combination of seawall and rock	No	
Watershed modification	No	



Recommended Short-listed Concepts to Advance

Two Rail Concepts carried forward:

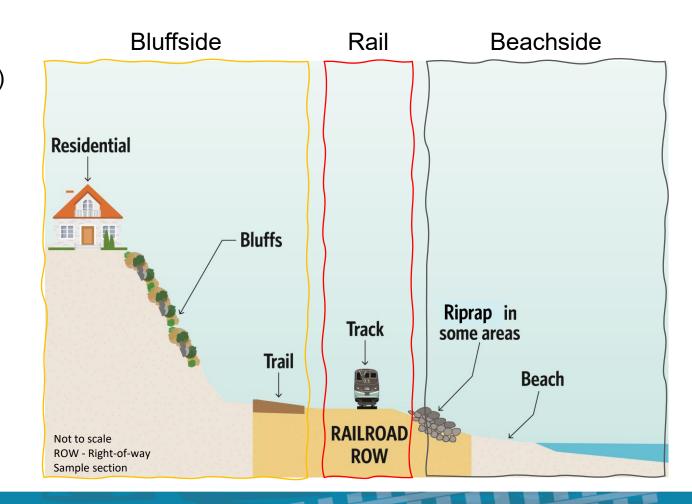
- Alternative materials for critical railroad infrastructure to reduce lifecycle costs
- Ground improvement (track-bed stabilization)

Two Bluffside Concepts carried forward:

- Catchment walls
- Tieback/soil nail/pin-pile walls

Three Beachside Concepts carried forward:

- Beach nourishment with riprap shoreline protection structure
- Beach nourishment with seawall shoreline protection structure
- Beach nourishment with combination of seawall and rock shoreline protection structure



*No order of preference

Next Steps

PURPOSE & NEED/ EVALUATION CRITERIA • Draft: summer 2024

 Informed by listening session feedback

DRAFT CONCEPT DEVELOPMENT

- Draft Alternative
 Concepts: summer to
 fall 2024
- Obtain feedback from public, stakeholders and interest groups: fall 2024 to summer 2025

REFINEMENT OF CONCEPTS

- Refined Alternative Concepts: summer to fall 2025
- Obtain feedback from public, stakeholders, and interest groups: fall 2025 to winter 2026

DRAFT FEASIBILITY STUDY REPORT

- Draft report: winter 2026 to spring 2026
- Obtain feedback from public, stakeholders, and interest groups: summer 2026

FINAL FEASIBILITY STUDY REPORT

- Final report: summer 2026
- Present to Board/ publish final report: fall 2026



Board: Board of Directors





October 13, 2025

To: Members of the Board of Directors

Andrea West, Clerk of the Board From:

Subject: Amendments to the Master Plan of Arterial Highways

Regional Transportation Planning Committee Meeting of October 6, 2025

Present: Directors Foley, Go, Harper, Klopfenstein, Stephens, and

Tavoularis

Absent: Director Federico

Committee Vote

This item was passed by the Members present.

Committee Recommendation(s)

- Conditionally approve the following amendments to the Master Plan of Α. Arterial Highways:
 - City of Dana Point Modify ten MPAH arterials within City of Dana Point city limits as discussed herein.
 - City of Laguna Niguel Reclassify La Paz Road from a primary (fourlane, divided) to a divided collector (two-lane, divided) arterial between Aliso Creek Road and Crown Valley Parkway.
- B. Direct the Executive Director of Planning to file a Notice of Exemption from the California Environmental Quality Act for the Master Plan of Arterial Highways amendments in the City of Dana Point.
- C. Direct the Executive Director of Planning to file a Notice of Exemption from the California Environmental Quality Act in support of the Master Plan of Arterial Highways amendment in the City of Laguna Niguel.
- D. Receive and file a status report on the active Master Plan of Arterial Highways amendments.



October 6, 2025

To: Regional Transportation Planning Committee

From: Darrell E. Johnson, Chief Executive Officer

Subject: Amendments to the Master Plan of Arterial Highways

Overview

The Orange County Transportation Authority administers the Master Plan of Arterial Highways, including the review and approval of amendments requested by local agencies. The cities of Dana Point and Laguna Niguel have requested amendments to the Master Plan of Arterial Highways that are recommended for approval. A status update is also provided on Master Plan of Arterial Highways amendments that are in process.

Recommendations

- A. Conditionally approve the following amendments to the Master Plan of Arterial Highways:
 - City of Dana Point Modify ten MPAH arterials within City of Dana Point city limits as discussed herein.
 - City of Laguna Niguel Reclassify La Paz Road from a primary (four-lane, divided) to a divided collector (two-lane, divided) arterial between Aliso Creek Road and Crown Valley Parkway.
- B. Direct the Executive Director of Planning to file a Notice of Exemption from the California Environmental Quality Act for the Master Plan of Arterial Highways amendments in the City of Dana Point.
- C. Direct the Executive Director of Planning to file a Notice of Exemption from the California Environmental Quality Act in support of the Master Plan of Arterial Highways amendment in the City of Laguna Niguel.
- D. Receive and file a status report on the active Master Plan of Arterial Highways amendments.

Background

The Master Plan of Arterial Highways (MPAH) coordinates roadway system planning across Orange County jurisdictions. The MPAH was first adopted by the County of Orange in 1956, and the Orange County Transportation Authority (OCTA) assumed administration responsibilities in 1995.

OCTA is responsible for maintaining the integrity and continuity of the MPAH system as it evolves to fulfill transportation circulation needs by reviewing changes proposed by local jurisdictions. The reviews consider potential transportation-related concerns and ensure interagency collaboration to avoid unintended impacts in neighboring jurisdictions or regional transportation systems. The requested amendments by the City of Dana Point (Dana Point) and City of Laguna Niguel (Laguna Niguel) are provided in Attachment A and Attachment B, respectively. Details on the requested amendments are presented below, along with a status report of MPAH amendments that are in process.

Discussion

Dana Point

Between 2006 and 2023, Dana Point coordinated with OCTA on a series of agreements permitting lane reductions on MPAH facilities to accommodate active transportation improvements while preserving the planned MPAH classifications. As part of these agreements, the City committed to monitoring traffic conditions along Street of the Golden Lantern, Crown Valley Parkway, Niguel Road, and Coast Highway, with a requirement to restore the original lane configurations should conditions fall below Level of Service (LOS) C.

Dana Point has now requested amendments to the MPAH primarily to align MPAH classifications with the current configurations. This will more permanently accommodate the implemented active transportation facilities. The proposed changes are summarized in the table below and illustrated in Attachment C.

Segment	MPAH Classification (Number of Lanes)	Requested Classification (Number of Lanes)	Current Configuration
Del Prado Avenue			
Pacific Coast Highway (PCH) (West) to Golden Lantern	Secondary Arterial (4)	Divided Collector (2)	2-lane, divided
Golden Lantern to PCH (East)/Copper Lantern	Secondary Arterial (4)	Divided Collector (2)	3-lane, divided

Segment	MPAH Classification (Number of Lanes)	Requested Classification (Number of Lanes)	Current Configuration	
Crown Valley Parkway				
PCH to Camino Del Avion	Major Arterial (6)	Primary Arterial (4)	4-lane, divided	
Niguel Road				
PCH to Camino Del Avion	Major Arterial (6)	Primary Arterial (4)	4-lane, divided	
Selva Road				
PCH to Chula Vista Avenue	Undivided Collector (2)	Divided Collector (2)	2-lane, divided	
Golden Lantern				
PCH to Selva Road	Major Arterial (6)	Primary Arterial (4)	4-lane, divided	
Selva Road to Stonehill Drive	Major Arterial (6)	Primary Arterial (4)	5-lane, divided	
Stonehill Drive to Camino Del Avion	Major Arterial (6)	Primary Arterial (4)	4-lane, divided	
Coast Highway				
Doheny Park Road to Palisades Drive	Primary Arterial (4)	Divided Collector (2)	2-lane, divided	
Pacific Coast Highway				
Crown Valley Parkway to Del Prado Avenue (West)	Major Arterial (6)	Primary Arterial (4)	4-lane, divided	
Del Prado Avenue (West) to Del Prado Avenue (East)/Copper Lantern	Secondary Arterial (4)	Primary Arterial (4)	4-land, divided	
Coast Highway Connector	<u>f</u>			
San Juan Creek Trail to Coast Highway/Doheny Park Road	Primary Arterial (4)	Collector (1)	1-lane, undivided	
Dana Point Harbor Drive				
Golden Lantern Street to Western Terminus	Primary Arterial (4)	Remove from MPAH	2-lane, divided	
Camino De Estrella				
Camino Capistrano to Calle Hermosa	Primary Arterial (4)	Divided Collector (2)	4-lane, divided	

Analysis of 2025 and 2050 conditions was conducted using the Orange County Transportation Analysis Model version 5.1. Most of the proposed roadway reclassifications are forecasted to operate at LOS C or better under the 2050 buildout conditions. While several segments on PCH are forecasted to operate

at LOS D, these conditions are not expected to significantly degrade in the future and traffic volumes are not expected to affect neighboring jurisdictions. Based on these findings, the proposed amendments are not expected to adversely impact the integrity of the MPAH network and are recommended for approval.

Laguna Niguel

In December 2023, OCTA and Laguna Niguel entered into an agreement to reconfigure La Paz Road between Rancho Niguel Road and Kings Road in response to earth movement and a local emergency declaration. This agreement allowed Laguna Niguel to convert the southbound lanes to accommodate two-way traffic (one lane in each direction), effectively operating as a two-lane divided collector.

Laguna Niguel has since received grant funding and initiated the preliminary design phase for the repairs. As part of this effort, Laguna Niguel proposes amending the MPAH classification for La Paz Road between Aliso Creek Road and Crown Valley Parkway (encompassing the segment in the agreement) from a four-lane primary arterial to a two-lane divided collector. The requested amendment aligns with Laguna Niguel's goals to enhance safety, improve circulation, and support multimodal transportation, including the future implementation of a bikeway. A map of the proposed change is provided in Attachment D.

Forecasted conditions for 2050 indicate that the proposed amendment will result in La Paz Road operating at LOS C with projected volumes ranging from 13,000 to 15,000 daily vehicles. Therefore, the proposed reclassification will have a minimal effect on traffic operations. Based on these findings, the proposed amendment is not expected to adversely impact the integrity of the MPAH network and is recommended for approval.

California Environmental Quality Act (CEQA)

Amendments to the MPAH will be reflected on the MPAH map once OCTA receives documentation confirming that all affected general plans are consistent with the proposed amendment and are compliant with CEQA. If such documentation is not provided within three years of the Board of Directors' (Board) approval, the request will expire.

If the proposed amendment is modified during the local agency's General Plan process, the revised amendment must be returned to the Board for reconsideration and action.

Amendments to the MPAH are exempt from CEQA review. Accordingly, if the Board approves the recommendations, OCTA will file two CEQA Notice of Exemptions (one for Dana Point's amendments and a separate one for Laguna Niguel's amendment) in support of the proposed MPAH amendments.

MPAH Status Update

There are currently 26 active amendments proposed for the MPAH. Several of the active amendments are awaiting local agencies' actions to amend their respective general plans. Others are either under review, in the cooperative study process, or pending resolution of issues with other agencies as listed in Attachment E.

Summary

The cities of Dana Point and Laguna Niguel have requested amendments to the MPAH. Based upon information provided by both cities, the requirements of the MPAH have been satisfied. Therefore, staff recommends Board approval of the requested amendments. A summary of pending MPAH amendments is also provided.

Attachments

- A. Letter from Mr. Matthew Sinacori, P.E., Director of Public Works & Engineering, City of Dana Point, to Ms. Ivy Hang, Senior Transportation Analyst, Orange County Transportation Authority, Dated August 29, 2025, re: Request for Amendment to the Master Plan of Arterial Highways (MPAH) in Dana Point
- B. Letter from Ms. Jacki Scott, Public Works Director/City Engineer, City of Laguna Niguel, to Mr. Kia Mortazavi, Executive Director, Planning, Orange County Transportation Authority, Dated March 6, 2025, re: Master Plan of Arterial Highways Amendment Request La Paz Road
- C. City of Dana Point MPAH Amendments Map
- D. City of Laguna Niguel MPAH Amendment Map
- E. Status Report on Active Master Plan of Arterial Highways Amendments

Prepared by:

Ivy Hang

Senior Transportation Analyst

(714) 560-5684

Approved by:

Rose Casey

Executive Director, Planning

(714) 560-5729

Lose Carry

CITY OF DANA POINT



August 29, 2025

Ms. Ivy Hang
Orange County Transportation Authority (OCTA)
550 South Main Street
Orange, CA 92868

Re: Request for Amendment to the Master Plan of Arterial Highways (MPAH) in Dana Point

Dear Ms. Hang,

The City of Dana Point is requesting an amendment of the MPAH for multiple road segments within the City as part of the General Plan Circulation Element Update. The purpose of these changes is to update the designations to reflect the current roadway configurations and the City's intent on retaining the existing lane configurations and access control.

The City engaged with Fehr & Peers to conduct a city-wide traffic assessment which is included as **Attachment A** in this request. Their analysis shows that nearly all roadway segments and intersections are forecasted to operate at LOS C or better under Future Year (2050) conditions with the proposed amendments. Roadway segments that currently operate at LOS D are not expected to significantly degrade in the future.

All of the requested changes are within the City of Dana Point; however, several roadways do connect with adjacent jurisdictions including Laguna Niguel, Laguna Beach, San Juan Capistrano, San Clemente, and Caltrans. Fehr & Peers' analysis concludes that traffic is not expected to shift to other roadways in adjacent jurisdictions as roadways in the City have sufficient capacity and geographical conditions limit the availability of alternate routes.

REQUESTED CHANGES

Table 1 lists the proposed changes. The technical report includes maps that show the existing and proposed designations. As noted in the table, most changes do not result in a reduction in the number of travel lanes. These changes were reviewed by OCTA staff at a scoping meeting on May 20, 2025.

Table 1: Proposed MPAH Amendments

Roadway	Extent	Existing # of Lanes	Existing Designation (# of lanes)	Proposed Designation (# of lanes)	Change Results in Reduction of Lanes
Del Prado Avenue	PCH (West) to Golden Lantern	2	Secondary Arterial (4)	Divided Collector (2)	No
	Golden Lantern to PCH (East)/Copper Lantern	EB: 2 WB: 1 Total: 3	Secondary Arterial (4)	Divided Collector (2)	Yes

Roadway	Extent	Existing # of Lanes	Existing Designation (# of lanes)	Proposed Designation (# of lanes)	Change Results in Reduction of Lanes
Crown Valley Parkway	PCH to Camino Del Avion	4	Major Arterial (6)	Primary Arterial (4)	No
Niguel Road	PCH to Camino Del Avion	4	Major Arterial (6)	Primary Arterial (4)	No
Selva Road	PCH to Chula Vista Avenue	21	Undivided Collector (2)	Divided Collector (2)	No
	PCH to Selva Road	4	Major Arterial (6)	Primary Arterial (4)	No
Street of the Golden Lantern	Selva Road to Stonehill Drive	NB: 3 SB: 2 Total: 5	Major Arterial (6)	Primary Arterial (5)	No
	Stonehill Drive to Camino Del Avion	4	Major Arterial (6)	Primary Arterial (4)	No
Coast Highway	Doheny Park Road to Palisades Drive	21	Primary Arterial (4)	Divided Collector (2)	No
Pacific Coast	Crown Valley Parkway to Del Prado Avenue (West)	4	Major Arterial (6)	Primary Arterial (4)	No
Highway	Del Prado Avenue (West) to Del Prado Avenue (East)/Copper Lantern	4	Secondary Arterial (4)	Primary Arterial (4)	No
Coast Highway Connector	San Juan Creek Trail to Coast Highway/Doheny Park Road	Coast 1 (EB Primary Undivided phway/Doheny Only) Arterial (4) Collector (1)		No	
Dana Point Harbor Drive	West of Golden Lantern	2	Primary Arterial (4)	Remove from MPAH	No
Camino De Estrella	Camino De Camino Capistrano		Primary Arterial (4)	Divided Collector (2)	Yes

Notes:

1. City recently completed road diet along this segment. Source: City of Dana Point, 2025.

The changes are consistent with the proposed roadway classifications in the City's Draft General Plan Circulation Element (June 2025). The General Plan is anticipated to be approved by City Council in October.

If you have any questions regarding the requested changes, please contact me at msinacori@danapoint.org or (949) 248–3574. Questions regarding the technical analysis prepared by Fehr & Peers can be directed to Brian Wolfe at b.wolfe@fehrandpeers.com or (949) 308–6313.

Sincerely,

Matthew Sinacori, P.E.

Director of Public Works & Engineering

City of Dana Point

msinacori@danapoint.org

(949) 248-3574

Attachments:

Attachment A: MPAH Amendment Technical Study

Attachment B: OCTAM Model Files

CITY COUNCIL

Mayor Ray Gennawey
Mayor Pro Tem Gene Johns
Council Member Kelly Jennings
Council Member Stephanie Oddo
Council Member Stephanie Winstead

March 6, 2025

Mr. Kia Mortazavi Executive Director, Planning Orange County Transportation Authority 550 South Main Street Orange, CA 92863

Subject: Master Plan of Arterial Highways Amendment Request – La Paz Road

Dear Mr. Mortazavi:

The City of Laguna Niguel (City) is requesting an amendment to the Master Plan of Arterial Highways (MPAH) for La Paz Road. La Paz Road is identified on the MPAH as a 4-lane Primary Arterial between Aliso Creek Road and Crown Valley Parkway. In December 2023, OCTA approved a temporary reconfiguration of La Paz Road between Rancho Niguel Road and Kings Road, reducing the roadway from four lanes to two lanes in response to earth movement and a local emergency declaration. Since then, the City has received grant funding to permanently repair the roadway and earth movement, and the preliminary design phase of the project is underway. As part of the permanent repairs, the City respectfully requests that the MPAH be formally amended to reclassify La Paz Road between Aliso Creek Road and Crown Valley Parkway as a 2-lane Divided Collector roadway. Attachment "A" illustrates the proposed amendment limits.

The City is currently amending its General Plan Circulation Element to reflect the requested reclassification of La Paz Road from Primary Arterial to Divided Collector. The reclassification will support the City's objective to enhance safety and circulation along La Paz Road. The reclassification will also accommodate multi-modal improvements along La Paz Road, including but not limited to the future implementation of an enhanced bikeway.

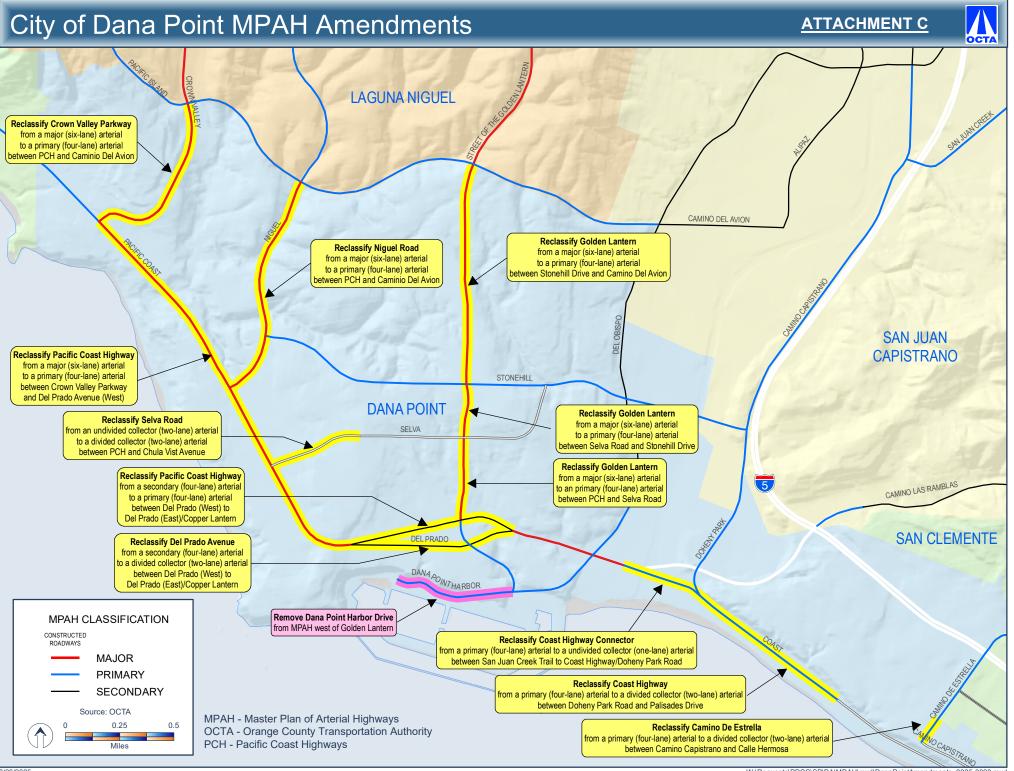
The lane reduction from four lanes to two lanes is feasible based on Average Daily Traffic (ADT) data collected by the City in 2021 (Attachment "B") and 2022 (Attachment "C"). This data demonstrates that the segment of La Paz Road between Aliso Creek Road and Crown Valley Parkway consistently serves less than 13,000 ADT. This is well within the range of 9,000 to 15,000 ADT for a Divided Collector in the MPAH, yielding a Level of Service C or better.

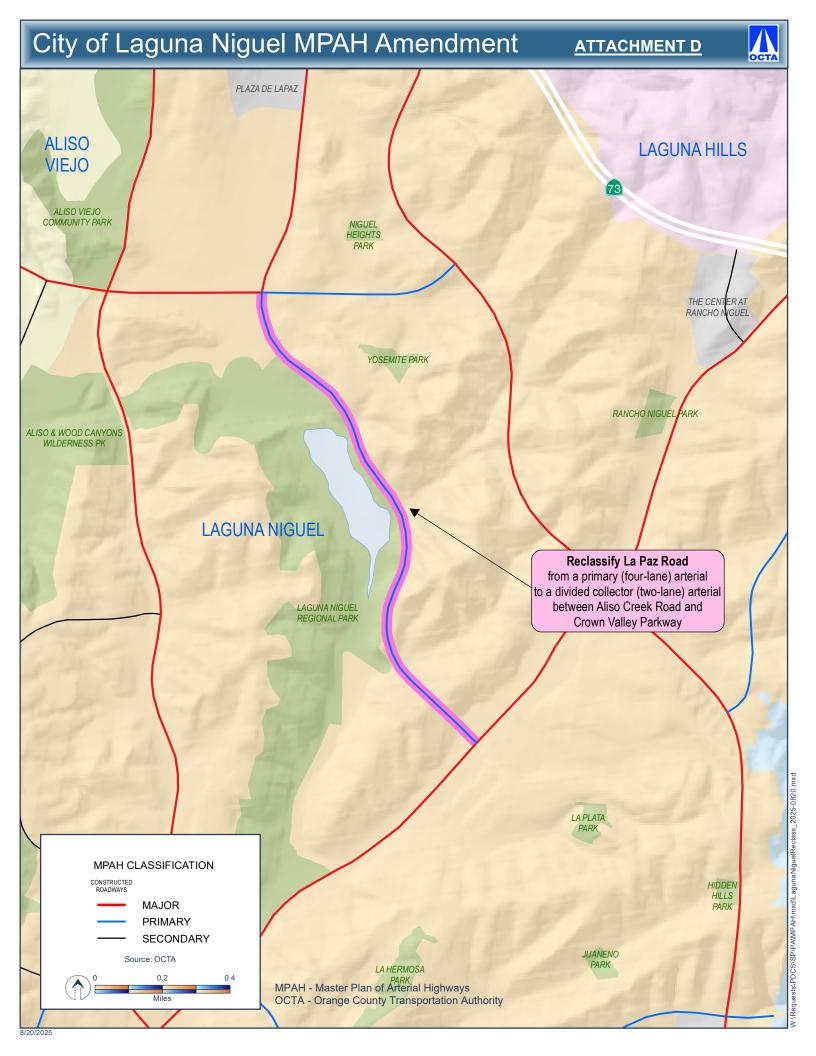
Thank you for your attention to this important matter. If you have any questions regarding this request, please contact Kathy Kelley, Engineering Services Manager, at kkelley@cityoflagunaniguel.org or (949) 362-4341.

Sincerely

Jacki Scott

Public Works Director/City Engineer





Status Report on Pending Master Plan of Arterial Highways Amendments

#	City	Street	From	То	Type of Amendment	Status	Board Approval Date
1	Costa Mesa	Bluff Road	19th Street	Victoria Street	Delete	On hold pending final consensus between the cities of Costa Mesa and Newport Beach on circulation plans. A study is being conducted.	
2	Costa Mesa	19th Street	Placentia Avenue	west city limit	Reclassify	On hold pending final consensus between the cities of Costa Mesa and Newport Beach on circulation plans. A study is being conducted.	
3	County of Orange / Irvine	Jeffrey Road	SR-241	Santiago Canyon Road	Delete	The amendment was conditionally approved by the Board. Waiting for documentation confirming completion of CEQA and general plan change.	5/8/2017
4	Santa Ana/Orange	Fairhaven Avenue	Grand Avenue	Tustin Avenue	Reclassify	The amendment was conditionally approved by the Board. Waiting for documentation confirming completion of CEQA and general plan change.	11/9/2020
5	Irvine	Red Hill Avenue	MacArthur Boulevard	Main Street	Reclassify	The amendment was conditionally approved by the Board. Waiting for documentation confirming completion of CEQA and general plan change.	4/10/2023
6	Fullerton	Associated Road	Bastanchury Road	Imperial Highway	Reclassify	The amendment was conditionally approved by the Board. Waiting for documentation confirming completion of CEQA and general plan change.	4/10/2023
7	County	Villa Park Road	Hewes Street	Cannon Street	Reclassify	The amendment was conditionally approved by the Board. Waiting for documentation confirming completion of CEQA and general plan change.	9/9/2024
8	County	Bucker Way	Ranch Canyon Road	Coyotes Road	Reclassify	The amendment was conditionally approved by the Board. Waiting for documentation confirming completion of CEQA and general plan change.	9/9/2024
9	County	Ranch Canyon Road	Bucker Way	Cow Camp Road	Reclassify	The amendment was conditionally approved by the Board. Waiting for documentation confirming completion of CEQA and general plan change.	9/9/2024
10	Fullerton	Harbor Boulevard	Bastanchury Road	Berkeley Avenue	Reclassify	The amendment was conditionally approved by the Board. Waiting for documentation confirming completion of CEQA and general plan change.	9/9/2024
11	Laguna Hills	Paseo De Valencia	Alicia Parkway	Cabot Road	Reclassify	The amendment was conditionally approved by the Board. Waiting for documentation confirming completion of CEQA and general plan change.	9/9/2024
12	Laguna Hills	Cabot Road	Paseo De Valencia	El Paseo	Reclassify	The amendment was conditionally approved by the Board. Waiting for documentation confirming completion of CEQA and general plan change.	9/9/2024
13	Irvine	Yale Avenue	University Drive	Michelson Drive	Reclassify	The amendment was conditionally approved by the Board. Waiting for documentation confirming completion of CEQA and general plan change.	4/14/2025
14	Costa Mesa	Merrimac Way	Fairview Road	Harbor Boulevard	Reclassify	The amendment was conditionally approved by the Board. Waiting for documentation confirming completion of CEQA and general plan change.	4/14/2025

Status Report on Pending Master Plan of Arterial Highways Amendments

#	City	Street	From	То	Type of Amendment	Status	Board Approval Date
15	Stanton	Orangewood Avenue	Santa Rosalia Street	Eastern city boundary	Reclassify	The amendment was conditionally approved by the Board. Waiting for documentation confirming completion of CEQA and general plan change.	4/14/2025
16	Laguna Niguel	La Paz Road	Aliso Creek Road	Crown Valley Parkway	Reclassify	Amendment will be presented to the Board for consideration 10/13/2025.	
17	Dana Point	Del Prado Ave	Pacific Coast Highway (West)	Copper Lantern	Reclassify	Amendment will be presented to the Board for consideration 10/13/2025.	
18	Dana Point	Crown Valley Parkway	Pacific Coast Highway	Camino Del Avion	Reclassify	Amendment will be presented to the Board for consideration 10/13/2025.	
19	Dana Point	Niguel Road	Stonehill Drive	Camino Del Avion	Reclassify	Amendment will be presented to the Board for consideration 10/13/2025.	
20	Dana Point	Selva Road	Pacific Coast Highway	Chula Vista Avenue	Reclassify	Amendment will be presented to the Board for consideration 10/13/2025.	
21	Dana Point	Street of the Golden Lantern	Pacific Coast Highway	Camino Del Avion	Reclassify	Amendment will be presented to the Board for consideration 10/13/2025.	
22	Dana Point	Coast Highway	Doheny Park Road	Palisades Drive	Reclassify	Amendment will be presented to the Board for consideration 10/13/2025.	
23	Dana Point	Pacific Coast Highway	North West City Limit	Del Prado Avenue (East)/Copper Lantern	Reclassify	Amendment will be presented to the Board for consideration 10/13/2025.	
24	Dana Point	Coast Highway Connector	Sasn Juan Creek Trail	Coast Highway/Doheny Park Road	Reclassify	Amendment will be presented to the Board for consideration 10/13/2025.	
25	Dana Point	Dana Point Harbor Drive	West of Golden Lantern	End of Terminus	Delete	Amendment will be presented to the Board for consideration 10/13/2025.	
26	Dana Point	Camino De Estrella	Camino Capistrano	Calle Hermosa	Reclassify	Amendment will be presented to the Board for consideration 10/13/2025.	

Board - Board of Directors

CEQA – California Environmental Quality Act

SR-241 – State Route 241





October 13, 2025

Members of the Board of Directors To:

Andrea West, Clerk of the Board From:

Subject: 2026 State Transportation Improvement Program

Regional Transportation Planning Committee Meeting of October 6, 2025

Present: Directors Foley, Go, Harper, Klopfenstein, Stephens, and

Tavoularis

Absent: Director Federico

Committee Vote

This item was passed by the Members present.

Committee Recommendation(s)

- Approve the 2026 State Transportation Improvement Program submittal of Α. eight projects for \$151.742 million, from fiscal year 2026-27 through fiscal year 2030-31.
- В. Authorize staff to make all necessary amendments to the State Transportation Improvement Program and the Federal Transportation Improvement Program and execute any necessary agreements to facilitate the recommendations above.



October 6, 2025

To: Regional Transportation Planning Committee

From: Darrell E. Johnson, Chief Executive Officer

Subject: 2026 State Transportation Improvement Program

Overview

Every two years, the Orange County Transportation Authority develops a program of projects for funding through the State Transportation Improvement Program based on Board of Directors' approved policies and state guidelines. Project recommendations for the 2026 program are presented for Board of Directors' consideration and approval.

Recommendations

- A. Approve the 2026 State Transportation Improvement Program submittal of eight projects for \$151.742 million, from fiscal year 2026-27 through fiscal year 2030-31.
- B. Authorize staff to make all necessary amendments to the State Transportation Improvement Program and the Federal Transportation Improvement Program and execute any necessary agreements to facilitate the recommendations above.

Background

The State Transportation Improvement Program (STIP) provides formulaic state-administered funding for transportation improvements throughout California. The STIP spans a rolling five-year period. Every two years, state and federal transportation revenues are forecasted and programmed for the new five-year period. The 2026 STIP covers the five-year period from fiscal year (FY) 2026-27 to FY 2030-31.

A fund estimate (FE) is developed for each STIP cycle to determine funding shares for each county in California. For the 2026 STIP, Orange County's new capacity is \$24.718 million. On September 8, 2025, the Orange County Transportation Authority (OCTA) Board of Directors (Board) received the 2026 STIP overview that provided background information on the STIP and updates to the guidelines and included the latest STIP funding share for Orange County.

The revenue that supports the STIP is primarily derived from an excise tax on gasoline. According to estimates developed by the California Department of Transportation (Caltrans), revenues are declining due to the growing number of fuel efficient, hybrid, and electric vehicles, which have reduced fuel tax collections.

OCTA is responsible for developing the priorities for the STIP funding for Orange County, which must be submitted to the California Transportation Commission (CTC) in late 2025 for approval and adoption in early 2026. Consistent with the Board adoption of the Capital Programming Policies on December 13, 2021, OCTA dedicates STIP funds for eligible transit capital, freeway, traffic system management, complete streets, commuter rail, fixed-guideway projects, as well as planning/programming and complementary activities, which seek an equitable balance among all modes and are consistent with state goals.

Discussion

The overall strategy for programming the 2026 STIP is to maintain support for existing projects and develop a multimodal package of projects. For the 2026 STIP, several projects were considered, including freeway, managed lane, active transportation, and transit capital improvements. The recommended capital projects meet the requirements for STIP funding and serve as a balanced and multimodal approach to meet the transportation needs of Orange County. The 2026 package retains commitments from prior cycles to advance freeway improvements, improve goods movement, expand the bicycle and pedestrian facilities network, and provide for efficient rail transit operations. A map of the 2026 STIP projects is provided as Attachment A.

The OCTA 2026 STIP proposal totals \$151.742 million, exceeding the funding target of \$130.720 million over the five-year period by \$21.022 million. Per the STIP FE and guidelines, the CTC may approve and program STIP funding above the targets. If approved, the \$21.022 million will be advanced from the 2028 STIP cycle, reducing new funding capacity from the future 2028 FE, but will allow Orange County to put the STIP funds toward projects earlier. A significant portion of this funding (\$106.002 million) is already committed through the Board-approved and CTC-adopted 2024 STIP to existing projects.

OCTA staff is recommending the projects and funding amounts for the 2026 STIP as presented in the table and discussed in further detail below. Additional information is included in Attachment B, which provides a brief description of each project and more details of the proposed funding changes.

STIP Projects (\$000)	2024 STIP	Proposed Increase	2026 STIP
Carry-Over and Augmented Projects			
SR-74 Ortega Highway Gap Closure and Multimodal Improvements (CON)	\$24,600		\$24,600
OC Loop Segment A (La Habra) (ROW & CON)	\$38,233	\$4,156	\$42,389
SR-57 Truck Climbing Lane Phase II – Lambert Road to County Line (PS&E & ROW)	\$18,000	\$5,000	\$23,000
OC Maintenance Facility (Phase 1) (CON)	\$20,000	-	\$20,000
Planning, Programming, and Monitoring	\$5,169	\$1,824	\$6,993
Proposed New Projects			
PCH Coastal Rail Bridge (CON)	\$0	\$15,000	\$15,000
I-5 Improvement from County Line to Avenida Pico (ROW)	\$0	\$13,611	\$13,611
OC Loop - Segment B (Brea) (CON)	\$0	\$6,149	\$6,149
Total	\$106,002	\$45,740	\$151,742

CON – Construction HOV – High-Occupancy Vehicle I-5 – Interstate 5 PCH – Pacific Coast Highway

PS&E – Plans, Specifications, and Estimates ROW – Right-of-Way SR-57 – State Route 57 SR-74 – State Route 74

The SR-74 Ortega Highway Gap Closure and Multimodal Improvements is an existing STIP project. The project will add travel and bicycle lanes in both directions, a new north-side sidewalk, and will reconstruct the south-side sidewalk. This project is a multimodal gap closure that will alleviate a chokepoint in the arterial system in southern Orange County and improve interregional connectivity. This is one of several key projects that have been identified that will relieve congestion in south Orange County. With this funding and based on current estimates, the project is fully funded, and construction is expected to start before the end of 2026.

The OC Loop is a 66-mile regional active transportation corridor integrating Class I off-street trails and Class II/III on-street bicycle facilities to create a continuous, multi-jurisdictional network. The OC Loop Segment A, the La Habra Rails to Trails OC Loop Gap Closure Project, is an existing project in the STIP. The project will close a 3.1-mile gap in the OC Loop by constructing a Class I bikeway multi-use path along an existing rail line from the western La Habra city limit to Palm Street. Based on estimates provided by the City of La Habra and reviewed by OCTA, it was determined that the ROW phase requires additional funding. Staff is seeking approval of \$4.156 million in STIP funds for the ROW phase in FY 2026-27. The STIP funding in construction is consistent with current estimates and is recommended to remain at the current funding level.

The SR-57 Truck Climbing Lane Phase II is a carryover project proposed to receive additional STIP funds for the ROW phase. The project will construct a truck climbing lane on the SR-57 from the Lambert Road interchange to just north of the Orange County/Los Angeles County Line. The project is part of Measure M2 (M2) Project G, included in the M2 Next 10 Delivery Plan, and will complement the SR-57 Lambert Road Interchange Project which recently completed construction. Based on the estimate provided in the latest funding needs summary, staff is seeking approval for \$5.000 million in STIP for the ROW phase in FY 2029-30. Adjustments may be required as estimates are refined in the environmental and design phases. Staff will return to the Board with funding recommendations for the construction phase and any updates to the ROW phase at a later date.

The Orange County Maintenance Facility (OCMF) is a carryover transit project. The project is part of the Metrolink Southern California Optimized Rail Expansion program. The project allows for layover and light servicing of locomotives and rail cars in Orange County to reduce system operating costs. The OCMF will provide space and equipment to inspect, clean, and maintain locomotives and rail cars. Staff is not proposing any changes to the \$20 million in STIP funds for the construction phase but will request that the CTC delay the funding from FY 2027-28 to FY 2029-30 to align with an updated schedule.

The PCH Coastal Rail Bridge Project is a new project in the STIP and will be constructed in coordination with the Southern California Regional Rail Authority. OCTA is currently seeking funds for pre-construction phases and estimates the project may be ready for construction by FY 2030-31. This project will replace an existing 100-year rail bridge spanning PCH between the San Juan Capistrano and San Clemente rail stations. Contingent on final design, the new structure is planned to be a single-track steel plate girder bridge with an 85-foot-long span. The project will maintain a state of good repair, improve safety, and avoid rail line closures. Staff is seeking approval for \$15 million in STIP funds to partially fund the construction phase in FY 2030-31. Staff are also pursuing external grants to support the remaining funding need for construction.

The Interstate 5 (I-5) Improvement from County Line to Avenida Pico Project is a new freeway project in the STIP. Primarily federal funds are planned to be used for the environmental and design phases. STIP funds are proposed for the ROW phase of the project. The project will construct new HOV lanes to connect to the existing HOV lanes at Avenida Pico. The project would widen or replace several bridges, implement ramp improvements, where feasible, and construct lanes. The project also includes Transportation **Systems** Management/Transportation Demand Management features. Staff recommending \$13.611 million for the ROW phase in FY 2029-30. This is an extension of and complementary to Project C, which extended the HOV lanes between San Juan Creek Road and Avenida Pico and was completed in 2018.

OC Loop Segment B, the Western Extension to the Tracks at Brea, is a new project proposed in the STIP. In coordination with the City of Brea, the project will close a 1.3-mile gap in the OC Loop bikeway from the Brea Canyon Flood Channel to Palm Street, along the Union Pacific Railroad Corridor, creating a 4.7-mile continuous bike facility. This gap closure will improve access, mobility, and safety for bicyclists and pedestrians in the City of Brea and neighboring communities. It also brings the regional OC Loop project one step closer to completion. Staff is recommending \$6.149 million in STIP funds in FY 2029-30 for the construction phase.

Attachment C provides a table that depicts the projects proposed for the 2026 STIP and is part of the submittal that will be provided to the CTC. Attachment D provides the updated Capital Funding Plan, which is a summary of the funding information for all OCTA's capital projects.

Per STIP guidelines, CTC staff may request changes due to revised funding capacity or timing constraints related to state and federal funding. As such, adjustments to the recommended program may be necessary, and staff will continue to work with the CTC, Caltrans, and other appropriate agencies to ensure the projects continue to move toward the 2026 STIP adoption by spring 2026. Staff will keep the Board apprised if material changes are necessary.

As part of the STIP process described in the 2026 STIP overview, the STIP is divided into two major funding categories, the Regional Transportation Improvement Program described in this staff report and the Interregional Transportation Improvement Program (ITIP). Caltrans is responsible for submitting requests for funding for the ITIP and primarily submits projects that are significant for interregional transportation with a focus on highways and intercity rail. Caltrans and OCTA staff have met to discuss their submittal for District 12, and their plan is to submit the I-5 Managed Lanes Project from Red Hill Avenue to the Los Angeles County Line. Caltrans District 12 submitted the same project in the 2024 STIP. OCTA is required to identify the highest priority for our region for the ITIP from the Caltrans list of projects. The I-5 corridor continues to be a critical transportation link in Orange County and is the only project being put forth by Caltrans for ITIP funding at this time, and therefore the high priority ITIP project for Orange County.

Next Steps

With Board approval, staff will finalize and submit the 2026 STIP to the Southern California Association of Governments for quantification of regional benefits, and to the CTC by December 15, 2025. The CTC will hold public hearings on the proposed 2026 STIP on January 28, 2026, in Northern California and on February 5, 2026, in Southern California. The CTC is expected to adopt the program at the March 19-20, 2026, CTC meeting. A 2026 STIP development schedule is included as Attachment E.

Summary

OCTA is responsible for the development and programming of the STIP for Orange County. Staff is recommending that OCTA submit eight projects for \$151.742 million in STIP funds for FY 2026-27 through FY 2030-31. The use of STIP funds for these projects supplements the local M2 Program and will provide a range of benefits to Orange County.

Attachments

- A. OCTA 2026 State Transportation Improvement Program, Proposed Projects
- B. 2026 State Transportation Improvement Program, Project Descriptions
- C. Draft Funding Plan for Proposed 2026 STIP
- D. Capital Funding Program Report
- E. 2026 State Transportation Improvement Program Development Schedule

Prepared by:

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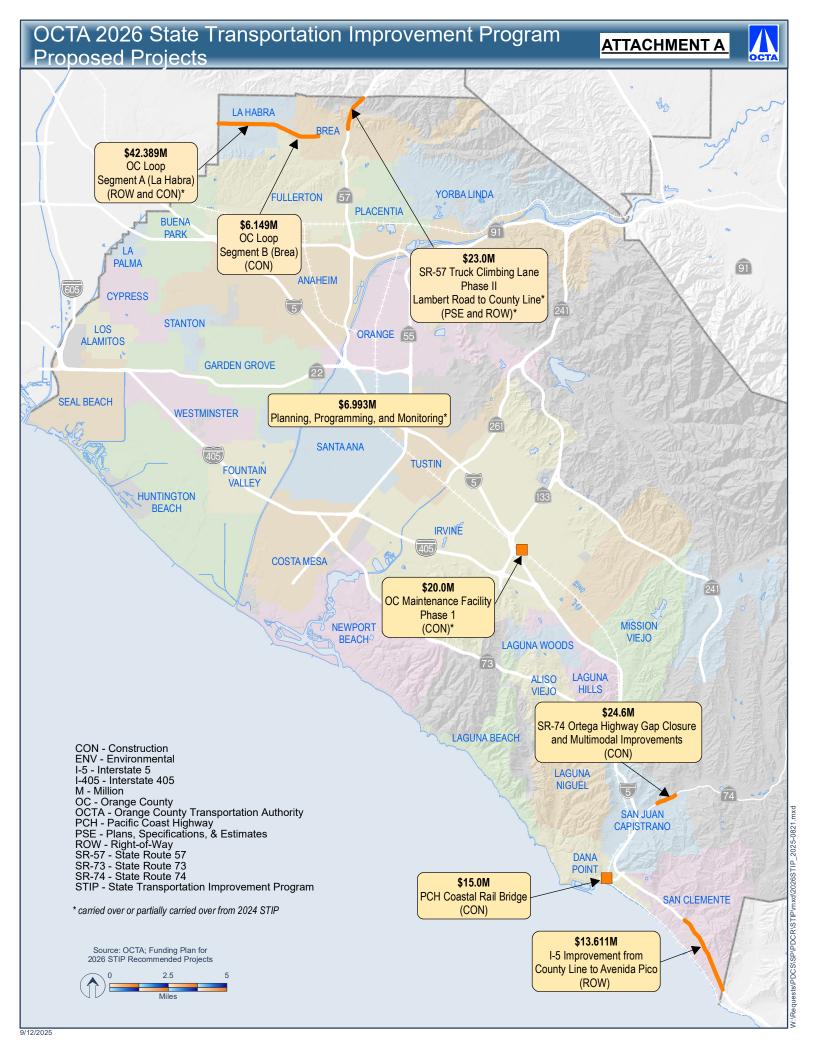
Approved by:

Russ Cassy

Rose Casey

Executive Director, Planning

(714) 560-5741



State Route 74 (SR-74) Ortega Highway Gap Closure and Multimodal Improvements

This project will improve the SR-74/Ortega Highway from two to four lanes by adding vehicular lanes, bicycle lanes, and reconstructing sidewalks in each direction in the City of San Juan Capistrano from Calle Entradero (postmile 1.0) to Reata Road (postmile 2.1). The project includes installing a traffic signal at Via Cordova and Hunt Club Drive, providing a 12-foot-wide striped median, a five- to eight-foot shoulder on each side to accommodate a Class II bicycle lane, and reconstructing the existing sidewalk. The project also requires seven retaining walls.

The SR-74/Ortega Highway Gap Closure and Multimodal Improvements Project is one of the most heavily utilized local arterials in the area and currently, the existing traffic demand exceeds capacity. The project has also received funding through the Measure M2 (M2) Project O - Regional Capacity Program. This is a project of interregional significance, and in the past, the California Department of Transportation submitted this project for the Interregional Improvement Program portion of the State Transportation Improvement Program (STIP). This project is included in the approved 2024 STIP. The project is scheduled to start construction in late 2026. Staff are not recommending any changes to this project.

Existing funding is shown in the table below.

Existing Funding (\$000s)	STIP	Cycle ΓΙΡ	STBG/ Earmark	M2	L	ocal	SH	OPP	Total
PA/ED	\$ 5,513	\$ -	\$ -	\$ 1,950	\$	400	\$	250	\$ 8,113
PS&E	\$ -	\$ 800	\$ 1,500	\$ 5,250	\$	1,750	\$	1	\$ 9,300
ROW	\$ 13,000	\$ -	\$ -	\$ -	\$	-	\$	1	\$ 13,000
CON	\$ 24,600	\$ -	\$ 32,500	\$ -	\$	1,000	\$	-	\$ 58,100
TOTAL	\$ 43,113	\$ 800	\$ 34,000	\$ 7,200	\$	3,150	\$	250	\$ 88,513

CON - Construction

PA/ED – Project Approval/Environmental Documents PS&E – Plans, Specifications, and Estimates

ROW - Right-of-Way

SHOPP - State Highway Operation and Protection Program

STBG - Surface Transportation Block Grant

Orange County (OC) Loop - Segment A (La Habra) (ROW & CON)

The OC Loop vision is 66 miles of seamless connections and an opportunity for people to bicycle, walk, and connect to some of California's most scenic beaches and inland reaches. Currently, nearly 58 miles use existing off-street trails along the San Gabriel River, Coyote Creek, Santa Ana River, and the Coastal/Beach Trail. OC Loop is divided into several segments.

OC Loop Segment A, the La Habra Rails to Trails Gap Closure Project, will close a 3.1-mile gap in the OC Loop with a Class I multi-use path along a currently blighted rail-to-trail. This project completes Segment A of the OC Loop and lies entirely within the boundaries of the City of La Habra. To improve the safety and convenience of residents

commuting and to increase walking and bicycling, the project includes widening an existing paved pathway in Guadalupe Park, constructing a Class I multi-use path, and enhanced safety features to protect bicyclists and pedestrians. Staff are seeking approval for \$4.156 million in STIP funds for the ROW phase to complement the previously approved \$38.233 million in STIP funds for the CON phase. Using STIP funds for the project is consistent with the Capital Programming Policies (CPP) which allows the use of STIP funds for complete streets.

The existing and proposed funding plans are provided below:

Existing Funding (in 000s)	ATP		IAQ/ mark	Lo	ocal	S	TIP	Т	otal
PA/ED	\$	50	\$ -	\$	9	\$	-	\$	59
PS&E	\$	290	\$ 453	\$	119	\$	-	\$	862
ROW	\$	-	\$ 4,949	\$	1,895	\$	-	\$	6,844
CON	\$	-	\$ -	\$	-	\$	38,233	\$	38,233
TOTAL	\$	340	\$ 5,402	\$	2,023	\$	38,233	\$	45,998

Proposed Funding (in 000s)	ATP		CMAQ/ Earmark		Local		STIP		Total	
PA/ED	\$	50	\$	-	\$	9	\$	-	\$	59
PS&E	\$	290	\$	453	\$	119	\$	-	\$	862
ROW	\$	-	\$	4,949	\$	1,895	\$	4,156	\$	11,000
CON	\$	-	\$	-	\$	-	\$	38,233	\$	38,233
TOTAL	\$	340	\$	5,402	\$	2,023	\$	42,389	\$	50,154
CHANGE							\$	4,156	\$	4,156

ATP – Active Transportation Program
CMAQ – Congestion Mitigation and Air Quality Program

State Route 57 (SR-57) Truck Climbing Lane Phase II – Lambert Road to County Line

The SR-57 Truck Climbing Lane Phase II – Lambert Road to County Line Project will construct a truck climbing lane on the SR-57 from the Lambert Road undercrossing to just north of the Orange County/Los Angeles County Line. A climbing lane would improve truck traffic travel speeds and would increase the throughput of the northbound SR-57. The overall project length is approximately 2.5 miles. This project is identified as Project G in the Next 10 Delivery Plan. Staff are proposing \$5 million in STIP funds for the ROW phase to complement the previously approved \$24.5 million in STIP funds for the SR-57 Truck Climbing Lane Project. This is consistent with the CPP regarding the use of STIP funds because it is an M2 freeway project.

The existing and proposed funding plans are provided below:

Existing Funding (in 000s)	S	ГІР	Lo	ocal	To	otal
PA/ED	\$	6,500	\$	3,250	\$	9,750
PS&E	\$	18,000	\$	-	\$	18,000
TOTAL	\$	24,500	\$	3,250	\$	27,750

Proposed Funding (in 000s)	S	ГІР	L	ocal	To	otal
PA/ED	\$	6,500	\$	3,250	\$	9,750
PS&E	\$	18,000	\$	-	\$	18,000
ROW	\$	5,000	\$	-	\$	5,000
TOTAL	\$	29,500	\$	3,250	\$	32,750
CHANGE	\$	5,000			\$	5,000

Orange County Maintenance Facility (Phase 1) (CON)

The Orange County Maintenance Facility (OCMF) is part of the Metrolink Southern California Optimized Rail Expansion (SCORE) program, which is funded through the Transit and Intercity Rail Capital Program (TIRCP). The facility will be located on the 21.3-acre parcel owned by the Orange County Transportation Authority (OCTA), adjacent to Marine Way, and located along the Metrolink Orange Subdivision between mileposts 183.5 and 184 in the City of Irvine. The goal of the project is to provide for more efficient rail operations. The OCMF will provide space and equipment to inspect, clean, and maintain cars and locomotives consistent with federal mandates. Staff is not proposing any changes to the STIP funding amount but will delay the \$20 million in STIP funds for the construction phase from fiscal year (FY) 2027-28 to FY 2029-30 to align with an updated schedule. The project has an unfunded need, but OCTA will continue to seek funding to fully fund the project through construction. The project is consistent with the CPP, which allows STIP funds to be used for transit capital projects.

The existing and updated funding plans are provided below:

Existing Funding (in 000s)	TIRCP	SCORE	S	TIP	Т	otal
PA/ED	\$	4,829	\$	•	\$	4,829
PS&E	\$	6,401	\$	•	\$	6,401
CON	\$	60,000	\$	20,000	\$	80,000
TOTAL	\$	71,230	\$	20,000	\$	91,230

Updated Funding (in 000s)	TIRCP	/SCORE	S	TIP	_	inded eed	Т	otal
PA/ED	\$	4,829	\$	-	\$	-	\$	4,829
PS&E	\$	6,401	\$	-	\$	-	\$	6,401
CON	\$	60,000	\$	20,000	\$	150,000	\$	230,000
TOTAL	\$	71,230	\$	20,000	\$	150,000	\$	241,230
CHANGE					\$	150,000	\$	150,000

Planning, Programming, and Monitoring (PPM)

Orange County is impacted by severe congestion on many regional and interregional facilities. Examination of the problem and potential solutions are necessary for the future construction of improvements. STIP funds will be used to support studies that are directly used in the development of the Long-Range Transportation Plan and to develop project study reports, thus creating a shelf of projects for the future. Specific examples of studies that are supported using STIP PPM include the Transit Chokepoint Study, Freeway Bus Rapid Transit Concepts Study, Harbor Boulevard Transit Corridor Study, and Active

Transportation Support. The California Transportation Commission sets aside five percent of the STIP for regional agencies to carry out planning activities. Staff is requesting approval to submit for two additional years of STIP PPM funding totaling \$1.824 million. This will bring the five-year STIP PPM total to \$6.993 million.

Pacific Coast Highway (PCH) Coastal Rail Bridge (CON)

The PCH Coastal Rail Bridge Project will replace an existing 100-year-old rail bridge spanning PCH between the San Juan Capistrano and San Clemente rail stations. Contingent on design, the new structure will be a single-track steel through plate girder bridge with an 85-foot-long span, supported by cast-in-drilled-hole piles. This project involves demolishing the old bridge and constructing the new one, using advanced engineering techniques to minimize disruption. The new bridge will meet modern safety standards, including seismic resilience, and efforts will be made to reduce environmental impact and enhance the area's aesthetics. The project will keep the rail infrastructure in a state of good repair, allowing freight trains to increase speeds through the area, improve safety, and avoid rail line closures. Staff is seeking \$15 million in STIP funds for the construction phase. The project is consistent with the CPP, which allows STIP funds to be used for fixed-guideway transit capital projects.

Existing Funding (in 000s)	*5	STBG	*CI	MAQ	Lo	cal	7	otal
PA/ED	\$	748	\$	83	\$	108	\$	939
PS&E	\$	4,242	\$	471	\$	611	\$	5,324
TOTAL	\$	4,990	\$	554	\$	719	\$	6,263

Proposed Funding (in 000s)	*5	STBG	*CN	ЛAQ	Lo	ocal	;	STIP	_	funded Need	Total
PA/ED	\$	748	\$	83	\$	108	\$	-	\$	-	\$ 939
PS&E	\$	4,242	\$	471	\$	611	\$	-	\$	•	\$ 5,324
CON	\$	-	\$	-	\$	-	\$	15,000	\$	30,000	\$ 45,000
TOTAL	\$	4,990	\$	554	\$	719	\$	15,000	\$	30,000	\$ 51,263
CHANGE							\$	15,000	\$	30,000	\$ 45,000

^{*}Pending approval in the SCAG's FY27-FY28 STBG/CMAQ Call for Project

Interstate 5 (I-5) Improvement from County Line to Avenida Pico (ROW)

The I-5 Improvement from San Diego County Line to Avenida Pico project will improve person and vehicle throughput along I-5 between the San Diego County Line and the I-5/Avenida Pico interchange through the addition of high-occupancy vehicle (HOV) lanes in each direction. This project would extend the existing HOV lane project that was recently completed on I-5 between the San Juan Creek Bridge and Avenida Pico and effectively continue the HOV lane to the San Diego County Line. The project would also reestablish existing auxiliary lanes, widen existing undercrossings, and replace two existing overcrossings to accommodate the proposed HOV lanes. The overall project length is approximately 4.8 miles. Staff is seeking approval for \$13.611 million in STIP funds for the ROW phase. The project is consistent with the Capital Programming Policies (CPP) regarding the use of STIP funds for freeway projects.

Existing Funding (in 000s)	S	TBG	 ınded eed	Т	otal
PA/ED	\$	6,407	\$ -	\$	6,407
PS&E	*\$	40,000	\$ 6,086	\$	46,086
TOTAL	\$	46,407	\$ 6,086	\$	52,493

Proposed Funding (in 000s)	STBG		_	unded eed	S	STIP	Т	otal
PA/ED	\$	6,407	\$	-	\$	-	\$	6,407
PS&E	\$	40,000	\$	6,086	\$	-	\$	46,086
ROW	\$	-	\$	-	\$	13,611	\$	13,611
TOTAL	\$	46,407	\$	6,086	\$	13,611	\$	66,104
CHANGE		•			\$	13,611	\$	13,611

^{*}Pending approval in SCAG's FY27-FY28 STBG/CMAQ call for projects

OC Loop Segment B (Brea) (CON)

OC Loop Segment B (Brea) will extend the current Tracks at Brea off-street path, from the Brea Canyon Flood Channel (its existing western terminus) to Palm Street, along the Union Pacific Railroad Corridor. The project will close a 1.3-mile gap in the OC Loop with a Class I bicycle trail and pedestrian path within the City of Brea. This segment will provide a connection between the existing four-mile Class I Tracks at Brea trail to La Habra's Class I trail. Staff is proposing \$6.149 million in STIP funds for the CON phase. The project is consistent with the CPP regarding the use of STIP funds for complete streets.

Existing Funding (in 000s)	-	TP / te Park	Ea	rmarks	С	MAQ	City	-	Total
PA/ED	\$	-	\$		\$		\$	\$	-
PS&E	\$	225	\$		\$	237	\$ 88	\$	550
ROW	\$	1,787	\$	2,000	\$	3,592	\$ 869	\$	8,248
CON	\$	-	\$	-	\$	3,539	\$ 2,191	\$	5,730
TOTAL	\$	2,012	\$	2,000	\$	7,368	\$ 3,148	\$	14,528

Proposed Funding (in 000s)	ATP / te Park	Ea	rmarks	С	MAQ	City	5	STIP	Total
PA/ED	\$ -	\$	-	\$	-	\$	\$	-	\$
PS&E	\$ 225	\$	-	\$	237	\$ 88	\$	-	\$ 550
ROW	\$ 1,787	\$	2,000	\$	5,811	\$ 1,202	\$	-	\$ 10,800
CON	\$ -	\$	-	\$	1,320	\$ 1,858	\$	6,149	\$ 9,327
TOTAL	\$ 2,012	\$	2,000	\$	7,368	\$ 3,148	\$	6,149	\$ 20,677
CHANGE	·		·			·	\$	6,149	\$ 6,149

ATTACHMENT C

				D	R	AFT Fu	ndi	ing Pla	n f	or Prop	008	sed 202	6 5	STIP							
2026 STIP (In Thousands)	2	026-27	2	027-28	2	2028-29	2	:029-30	2	2030-31	T	otal STIP		STBG/ CMAQ	_ocal/ .gency	ederal armark	TIRCP/ SCORE	_	nfunded Need	P	Total hase(s) Cost
SR-74 Ortega Highway Gap Closure and Multimodal Improvements (CON) Augmented Projects	\$	24,600	\$	-	\$		\$		\$		\$	24,600	\$	30,000	\$ 1,000	\$ 2,500	\$ -	\$	-	\$	58,100
OC Loop - Segment A (La Habra) (ROW New) + (CON) SR-57 Truck Climbing Lane Phase II -	\$	4,156	\$	38,233	\$		\$		\$		\$	42,389	\$	1,949	\$ 1,895	\$ 3,000	\$ -	\$	-	\$	49,233
Lambert Road to County Line (PS&E)+(ROW New)	\$		\$	-	\$	18,000	\$	5,000	\$		\$	23,000	\$	_	\$ -	\$ _	\$ -	\$	-	\$	23,000
Orange County Maintenance Facility (Phase 1) (CON)	\$	-	\$	-	\$	-	\$	20,000	\$	-	\$	20,000	\$	-	\$ -	\$ -	\$ 60,000	\$	150,000	\$	230,000
Planning, Programming, and Monitoring Proposed New Projects	\$	1,030	\$	2,769	\$	1,370	\$	912	\$	912	\$	6,993	\$	-	\$ -	\$ -	\$	\$		\$	6,993
PCH Coastal Rail Bridge (CON)	\$	-	\$	-	\$	-	\$	-	\$	15,000	\$	15,000	\$	-	\$ -	\$ -	\$ -	\$	30,000	\$	45,000
I-5 Improvement from County Line to Avenida Pico (ROW)	\$		\$	-	\$	-	\$	13,611	\$		\$	13,611	\$		\$ -	\$ 	\$ -	\$	-	\$	13,611
OC Loop - Segment B (Brea) (CON)	\$		\$	-	\$		\$	6,149	\$		\$	6,149	\$	1,320	\$ 1,858	\$ -	\$	\$		\$	9,327
DRAFT 2026 STIP Subtotal	\$	29,786	\$	41,002	\$	19,370	\$	45,672	\$	15,912	\$	151,742	\$	33,269	\$ 4,753	\$ 5,500	\$ 60,000	\$	180,000	\$	435,264

Acronyms

CMAQ - Congestion Mitigation and Air Quality

CON - Construction I-5 - Interstate 5

PCH - Pacific Coast Highway

PS&E - Plans, Specifications, and Engineering

ROW - Right-of-Way

SCORE - Southern California Optimized Rail Expansion

SR-57 - State Route 57 SR-74 - State Route 74

STBG - Surface Transportation Block Grant Program

STIP - State Transportation Improvement Program TIRCP - Transit and Intercity Rail Capital Program



Pending Approval by OCTA Board of Directors - October 13, 2025

		Sta	te Highway	Project							
			Fed	deral Fun	ıds		State Fund	s		Local Fund	ls
Project Title	M Code	Total Funding	STBG/CMAQ	FTA	Other Fed.	STIP	SB1	Other State	M1	M2	Other Loca
I-5 widening, I-405 to Yale Avenue (Segment 1)	В	\$337,943	\$47,473		\$5,421	\$95,338	\$11,374			\$178,337	
I-5 widening, Yale Avenue to SR-55 (Segment 2)	В	\$261,164	\$32,527				\$9,780			\$218,857	
I-5 widening, Alicia Parkway to El Toro Road (Segment 3)	С	\$227,523	\$49,897		\$4,728		\$16,915			\$155,983	
I-5 widening, Oso Parkway to Alicia Parkway (Segment 2)	С	\$228,675	\$48,676		\$7,921					\$172,078	
I-5 widening, SR-73 to Oso Parkway (Segment 1)	С	\$248,198	\$28,167		\$6,433	\$73,735	\$18,242	\$29,832		\$91,789	
I-5, SR-73 to El Toro Road landscaping/replacement planting	С	\$12,335	\$790			\$6,000				\$5,545	
I-5/El Toro Interchange	D	\$9,713	\$9,213							\$500	
SR-55 (I-5 to SR-91)	F	\$202,135	\$7,865		\$2,641					\$191,629	
SR-55 widening between I-405 and I-5	F	\$505,720	\$160,500		\$42,375	\$80,000	\$140,000			\$82,845	
SR-57 Orangewood Avenue to Katella Avenue	G	\$120,921	\$11,500		\$3,240					\$106,181	
SR-57 truck climbing lane phase II: Lambert Road to LA County Line 1	G	\$32,750				\$29,500				\$3,250	
SR-91, Acacia Avenue to La Palma Avenue (Segment 3)	ı	\$222,404	\$1,770		\$3,000					\$30	\$217,604
SR-91, La Palma Avenue to SR-55 (Segment 2)	ı	\$380,681	\$3,460		\$4,000		\$6,641			\$40	\$366,540
SR-91, SR-55 to Lakeview Avenue (Segment 1)	ı	\$132,777	\$1,770		\$5,000		\$42,566			\$30	\$83,411
SR-91, SR-57 to SR-55 (Segment 1,2 and 3) Outreach	ı	\$2,000									\$2,000
SR-91, SR-241 to I-15	J	\$41,800									\$41,800
I-405 improvements, SR-73 to I-605	К	\$2,159,999	\$35,000		\$10,648			\$89,771		\$1,395,650	\$628,930
I-405 (I-5 to SR-55)	L	\$8,000	\$8,000								
I-605/ Katella Avenue interchange	М	\$53,014	\$17,800							\$35,214	
241/91 Express Lanes (HOT) connector		\$182,298	\$50								\$182,248
I-5 Improvement from County Line to Avenida Pico		\$21,339	\$6,978			\$13,611					\$750
I-5 widening, I-405 to Yale Avenue (Segment 1) Multi Asset Project		\$50,144			\$36,400			\$13,744			
I-5 widening, Yale Avenue to SR-55 (Segment 2) Multi Asset Project		\$27,861			\$27,861						
SR-74 - Gap closure for 0.9 mile and multimodal improvements 1		\$88,513	\$30,000		\$4,250	\$43,913				\$7,200	\$3,150
SR-74 widening, City/County line to Antonio Parkway		\$40,905	\$5,285			\$10,000					\$25,620
SR-91, Acacia Avenue to La Palma Avenue (Segment 3) Multi Asset Project		\$35,046			\$26,021			\$9,025			
SR-91, SR-55 to Lakeview Avenue (Segment 1) Multi Asset Project		\$7,968			\$7,968						
State Highway Project Totals		\$5,641,826	\$506,721		\$197,907	\$352,097	\$245,518	\$142,372		\$2,645,158	\$1,552,053

Federal Funding Total	\$704,628
State Funding Total	\$739,987
Local Funding Total	\$4,197,211
Total Funding (000's)	\$5,641,826

State Highway Project Completed											
			Federal Funds				State Fund	S	Local Funds		
Project Title	M Code	Total Funding	STBG/CMAQ	FTA	Other Fed.	STIP	SB1	Other State	M1	M2	Other Local



Pending Approval by OCTA Board of Directors - October 13, 2025

State Highway Project Completed											
			Federal Funds			State Funds				ls	
Project Title	M Code	Total Funding	STBG/CMAQ	FTA	Other Fed.	STIP	SB1	Other State	M1	M2	Other Local
l-5 from SR-55 to SR-57, add one HOV lane each direction	Α	\$41,500	\$36,191							\$5,309	
I-5 HOV lane each direction s/o PCH to San Juan Creek Road	С	\$74,300	\$11,326					\$20,789		\$42,185	
I-5 HOV lanes from s/o Avenida Vista Hermosa to s/o PCH	С	\$75,300	\$12,065			\$46,779				\$16,456	
I-5 HOV lanes: s/o Avenida Pico to s/o Avenida Vista Hermosa	С	\$83,500	\$26,867		\$1,600	\$43,735				\$11,298	
I-5/SR-74 interchange improvements	D	\$80,300				\$48,683		\$24,109	\$2,500		\$5,008
I-5/SR-74 interchange landscaping/replacement planting	D	\$1,440			\$752	\$688					
SR- 57 n/b widening, Katella Avenue to Lincoln Avenue - landscaping	G	\$2,172								\$2,172	
SR- 57 n/b widening, SR-91 to Yorba Linda Boulevard - landscaping	G	\$946								\$946	
SR-57 n/b widening, Katella Avenue to Lincoln Avenue	G	\$35,827						\$24,127		\$11,700	
SR-57 n/b widening, SR-91 to Yorba Linda Boulevard	G	\$51,354						\$39,475		\$11,879	
SR-57 n/b widening, Yorba Linda to Lambert Road	G	\$52,871						\$41,250		\$11,621	
SR-57 n/b widening, Yorba Linda to Lambert Road - landscaping	G	\$1,193								\$1,193	
SR-91 w/b connect existing aux lanes, I-5 to SR-57	Н	\$62,977						\$27,227		\$35,750	
SR-91 w/b connecting existing aux lanes, I-5 to SR-57 - landscaping	Н	\$2,290								\$2,290	
SR-91 w/b (SR-55 - Tustin interchange) improvements	I	\$43,753				\$15,753		\$14,000		\$14,000	
SR-91 e/b widening, SR-241 to SR-71	J	\$57,773			\$45,911					\$6,942	\$4,920
SR-91 w/b routes 91/55 - e/o Weir Canyon Road replacement planting	J	\$2,898				\$2,898					
SR-91 widening, SR-55 to Gypsum Canyon Road (Weir Canyon Road/SR-241)	J	\$76,993				\$22,250		\$54,045		\$698	
l-405 s/b aux lane - University Drive to Sand Canyon Avenue and Sand Canyon Avenue to SR-133 $$		\$2,328				\$2,328					
I-405/SR-22/I-605 HOV connector - landscaping		\$4,600	\$4,600								
HOV connectors from I-405 and I-605	M1	\$173,091	\$14,787					\$135,430	\$16,200		\$6,674
HOV connectors from SR-22 to I-405	M1	\$115,878	\$64,375		\$49,625				\$1,878		
State Highway Project Completed Totals		\$1,043,284	\$170,211		\$97,888	\$183,114		\$380,452	\$20,578	\$174,439	\$16,602

Federal Funding Total \$268,099
State Funding Total \$563,566
Local Funding Total \$211,619
Total Funding (000's) \$1,043,284



Pending Approval by OCTA Board of Directors - October 13, 2025

1. Approve the 2026 State Transportation Improvement Program submittal of eight projects for \$151.742 million, from fiscal year 2026-27 through fiscal year 2030-31.

Acronyms:

Aux - Auxilliary

Board - Board of Directors

CMAQ - Congestion Mitigation Air Quality Improvement

Program

E/B - Eastbound

E/O - East of

FTA - Federal Transit Administration

HOT - High-Occupancy Toll

HOV - High-Occupancy Vehicle

I-405 - Interstate 405

I-5 - Interstate 5

I-605 - Interstate 605

LA - Los Angeles

M Code - Project Codes in Measure M1 and M2

M1 - Measure M1

M2 - Measure M2

N/B - Northbound

OC - Orange County

OCTA - Orange County Transportation Authority

PCH - Pacific Coast Highway

S/B - Southbound

S/O - South of

SB 1 - SB 1 (Chapter 5, Statutes of 2017)

SR-133 - State Route 133

SR-22 - State Route 22

SR-241 - State Route 241

SR-55 - State Route 55

SR-57 - State Route 57

SR-71 - State Route 71

SR-73 - State Route 73

SR-74 - State Route 74

SR-91 - State Route 91

STBG - Surface Transportation Block Grant

STIP - State Transportation Improvement Program

W/B - Westbound



Pending Approval by OCTA Board of Directors - October 13, 2025

Local Road Project												
			Federal Funds			State Funds			Local Funds			
Project Title	M Code	Total Funding	STBG/CMAQ	FTA	Other Fed.	STIP	SB1	Other State	M1	M2	Other Local	
State-Local Partnership Program (SLPP) formula grant call	M1/Q	\$54,445						\$24,945	\$1,280	\$27,249	\$971	
M2 Project O Regional Capacity Program call	0	\$402,211						\$24,254		\$377,957		
SR-57 truck climbing lane phase I - Lambert Road interchange improvement	0	\$121,500			\$7,719	\$74,705				\$19,254	\$19,822	
M2 Project P Regional Signal Synchronization Program call	Р	\$158,828	\$1,774					\$11,762	\$4,546	\$140,746		
Regional Traffic Signal Synch (Edinger Ave, MacArthur Blvd/Talbert Ave, and Warner Ave)	Р	\$15,000					\$10,200			\$4,200	\$600	
M2 Project Q Fair Share Program (FY 2016-17 through FY 2021-22)	Q	\$361,621								\$361,621		
M2 Project X Environmental Clean Up	Х	\$64,449								\$64,449		
Active Transportation Program - regional call		\$82,704	\$6,359		\$62,653	\$92		\$107			\$13,493	
Bicycle Corridor Improvement Program (BCIP)		\$63,128	\$43,755								\$19,373	
Bristol Street widening		\$44,750									\$44,750	
Countywide Signal Synchronization Baseline		\$15,000	\$15,000									
First Street Multimodal Boulevard Design		\$4,300						\$4,300				
Local Agency led SCCP projects		\$3,357					\$3,357					
M1 Combined Transportation Funding Program (CTFP)		\$34,000							\$34,000			
McFadden Avenue Transit Signal Priority Pilot		\$3,690						\$3,690				
OC Connect Santa Ana - Garden Grove Rails to Trails		\$8,000			\$3,750	\$3,900		\$350				
OC Loop - Segment A 1		\$50,154	\$3,402		\$2,340	\$42,389					\$2,023	
OC Loop Segment B (Brea) ¹		\$20,677	\$7,368		\$4,012	\$6,149					\$3,148	
Orange County Complete Streets (Wave 3)		\$34,706	\$26,316								\$8,390	
Orange County Complete Streets (Wave 4)		\$5,229	\$4,687								\$542	
Orange County Complete Streets Program (Wave 1)		\$40,915	\$25,062								\$15,853	
Orange County Complete Streets Program (Wave 2)		\$40,072	\$33,421								\$6,651	
Pavement Management Relief Funding Program		\$9,469			\$3,811			\$5,658				
SCAG sustainability planning grants		\$720			\$671						\$49	
Traffic signal improvements		\$15,000				\$12,000					\$3,000	
Transportation enhancement activities		\$22,172			\$15,628						\$6,544	
Local Road Project Totals		\$1,676,097	\$167,144		\$100,584	\$139,235	\$13,557	\$75,066	\$39,826	\$995,476	\$145,209	
Federal Funding Total \$267,728												
State Funding Total \$227,858												
Local Funding Total \$1,180,511												
Total Funding (000's) \$1,676,097												

Local Road Project Completed											
			Federal Funds			:	State Fund	S		Local Fund	s
Project Title	M Code	Total Funding	STBG/CMAQ	FTA	Other Fed.	STIP	SB1	Other State	M1	M2	Other Local



Pending Approval by OCTA Board of Directors - October 13, 2025

		Local R	oad Project	t Complet	ed						
			Federal Funds			State Funds			ı	Local Fund	S
Project Title	M Code	Total Funding	STBG/CMAQ	FTA	Other Fed.	STIP	SB1	Other State	M1	M2	Other Local
Grand Avenue widening, 1st Street to 4th Street	0	\$12,537	\$6,708								\$5,829
Kraemer Boulevard grade separation	0	\$63,830	\$22,044					\$16,973		\$22,981	\$1,832
Lakeview Avenue grade separation	0	\$110,702	\$37,102		\$9,709			\$27,344		\$21,792	\$14,755
Orangethorpe Avenue grade separation	0	\$106,043	\$38,240		\$18,600			\$30,324		\$16,182	\$2,697
Placentia Avenue grade separation	0	\$64,539						\$33,386		\$27,453	\$3,700
Raymond Avenue grade separation	0	\$125,419						\$95,482		\$22,373	\$7,564
State College Boulevard grade separation	0	\$99,380	\$27,161		\$10,887			\$34,785		\$15,460	\$11,087
Tustin Avenue/Rose Drive grade separation	0	\$96,638	\$45,957					\$22,534		\$26,384	\$1,763
M2 Fair Share State - Local Partnership Grant Program	Q	\$7,032						\$3,516		\$3,516	
Antonio Parkway widening		\$32,553	\$15,499								\$17,054
ARRA transportation enhancements		\$6,833			\$4,049				\$500		\$2,284
Arterial Pavement Management Program		\$50,951	\$19,655		\$604						\$30,692
Atlanta Avenue widening		\$4,160	\$2,278								\$1,882
Firestone Boulevard widening at Artesia Boulevard		\$2,468	\$2,059								\$409
Local Agency American Reinvestment and Recovery Act of 2009 rehabiliation projects		\$32,369			\$32,369						
Del Obispo widening	M1	\$6,419	\$3,740								\$2,679
I-5 at La Paz interchange improvements	M1	\$8,942	\$2,800						\$1,792		\$4,350
Imperial Highway Smart Streets	M1	\$1,900						\$200	\$200		\$1,500
Traffic Light Synchronization Program (TLSP), countywide - Proposition 1B	M1	\$8,000						\$4,000	\$4,000		
Local Road Project Completed Totals		\$840,715	\$223,243		\$76,218			\$268,544	\$6,492	\$156,141	\$110,077

Federal Funding Total	\$299.4
Local Road Project Compi	eted rotals

State Funding Total	\$268,544
Local Funding Total	\$272,710
Total Funding (000's)	\$840,715



Pending Approval by OCTA Board of Directors - October 13, 2025

1. Approve the 2026 State Transportation Improvement Program submittal of eight projects for \$151.742 million, from fiscal year 2026-27 through fiscal year 2030-31.

Acronyms:

ARRA - American Recovery and Reinvestment Act of 2009

Board - Board of Directors

Call - Call for Projects

CMAQ - Congestion Mitigation Air Quality Improvement

Program

FTA - Federal Transit Administration

FY - Fiscal Year

I-5 - Interstate 5

M Code - Project Codes in Measure M1 and M2

M1 - Measure M1

M2 - Measure M2

OCTA - Orange County Transportation Authority

SB 1 - SB 1 (Chapter 5, Statutes of 2017)

SCAG - Southern California Association of Governments

SCCP - Solutions for Congested Corridors Program

SHA - State Highway Account

SR-57 - State Route 57

STBG - Surface Transportation Block Grant

STIP - State Transportation Improvement Program



Total Funding (000's)

Capital Funding Program Report

Pending Approval by OCTA Board of Directors - October 13, 2025

\$2,015,405

			Rail Proje	ect							
			Fe	deral Fun	ds	9	State Fund	s		Local Fund	s
Project Title	M Code	Total Funding	STBG/CMAQ	FTA	Other Fed.	STIP	SB1	Other State	M1	M2	Other Loca
OC Streetcar (New Starts)	M1/S	\$649,000	\$130,132	\$171,961				\$175,427		\$171,480	
OC Streetcar (non-New Starts)	M1/S	\$16,702		\$342					\$6,904	\$9,313	\$143
OC Streetcar (operations and potential future capital needs)	M1/S	\$0	\$0								
Coastal Rail Infrastructure Resiliency Project Environmental Phase 2	R	\$10,220			\$8,176					\$2,044	
Coastal Rail Stabilization Priority Project	R	\$313,580			\$103,824		\$80,000	\$128,800		\$956	
Cyprus Shore Initial Track Stabilization Projects (MP 206.8)	R	\$8,000								\$7,000	\$1,000
Cyprus Shore Track Stabilization Projects (MP 206.8)	R	\$14,110	\$6,000		\$1,210	\$6,000		\$200		\$700	
Future VSS	R	\$217		\$174							\$43
Inland Slope Rehabilitation Phase II	R	\$8,170					\$2,400			\$5,770	
Irvine Station Improvement Project	R	\$6,330						\$6,330			
Metrolink new capital	R	\$21,977	\$2,121	\$19,856							
Metrolink Operating Subsidy - FY 2023-24 to FY 2027-28	R	\$271,246		\$71,212				\$135,745		\$64,289	
Metrolink rehabilitation/renovation - FY 2021-22 to FY 2025-26	R	\$209,117		\$209,117							
Metrolink station and track improvements, and rehabilitation	R	\$3,063		\$2,617							\$446
MP 204.2 Mariposa Point	R	\$9,200				\$9,200					
OC Maintenance Facility 1	R	\$91,230				\$20,000		\$71,230			
Placentia Commuter Rail Station	R	\$34,825	\$50			\$2,500		\$400		\$8,000	\$23,875
Rail track and structures	R	\$86,468						\$86,468			
San Clemente Track Protection (MP 204.6)	R	\$5,500				\$3,000	\$2,500				
San Juan Creek Bridge replacement	R	\$65,670	\$908	\$39,833	\$913		\$5,578	\$17,059		\$1,379	
SCRRA operating subsidy assistance	R	\$2,510								\$2,510	
OC Streetcar operations	S	\$164,971	\$18,050					\$74,659		\$40,506	\$31,756
Pacific Coast Highway Coastal Rail Bridge		\$21,263				\$15,000					\$6,263
Pedestrian Audible Warning System (PAWS)		\$2,036						\$1,818			\$218
Rail Project Totals		\$2,015,405	\$157,261	\$515,112	\$114,123	\$55,700	\$90,478	\$698,136	\$6,904	\$313,947	\$63,744
Federal Funding Total \$786,496 State Funding Total \$844,314 Local Funding Total \$384,595		JL									

Rail Project Completed											
	Federal Funds				State Funds			Local Funds			
Project Title	M Code	Total Funding	STBG/CMAQ	FTA	Other Fed.	STIP	SB1	Other State	M1	M2	Other Local
Fullerton Transportation Center parking expansion	M1/R	\$33,667				\$11,250		\$11,035	\$9,718		\$1,664
Laguna Niguel-Mission Viejo Station parking improvements and expansion (ADA ramps)	M1/R	\$5,581	\$3,204	\$732					\$1,645		
Metrolink Grade Crossing safety improvements (OCX)	M1/R	\$80,618						\$18,250	\$7,600	\$30,710	\$24,058



Pending Approval by OCTA Board of Directors - October 13, 2025

		Rail	Project Cor	mpleted							
			Fe	deral Fun	ds	9	State Fun	ds	L	ocal Fund	s
Project Title	M Code	Total Funding	STBG/CMAQ	FTA	Other Fed.	STIP	SB1	Other State	M1	M2	Other Local
Metrolink rolling stock	M1/R	\$158,009	\$42,230	\$35,390				\$36,300	\$44,089		
Metrolink service track expansion	M1/R	\$119,957						\$51,399	\$68,558		
Orange Transportation Center parking structure	M1/R	\$31,003	\$2,555	\$2,644		\$13,762			\$1,850	\$420	\$9,772
Sand Canyon Avenue grade separation	M1/R	\$62,050	\$10,536					\$28,192	\$3,116	\$5,352	\$14,854
M2 Project S Fixed-Guideway Anaheim Rapid connection	M1/S	\$9,924		\$1,516					\$6,000	\$1,286	\$1,122
Anaheim Regional Intermodal Transportation Center (ARTIC) construction	M1/T	\$184,164	\$33,250	\$37,253	\$3,501	\$29,219			\$43,900	\$35,291	\$1,750
Fullerton Transportation Station expansion planning, environmental PSR	M1/T	\$0	\$0						\$0		
Santa Ana grade separation planning and environmental PSR	M1/T	\$1,333	\$1,180						\$153		
Santa Ana Transportation Station planning and environmental PSR	M1/T	\$1,003	\$888						\$115		
17th Street grade separation environmental	R	\$2,476								\$2,476	
Anaheim Canyon Station	R	\$34,200	\$30,432							\$2,000	\$1,768
Control Point at 4th Street	R	\$2,985		\$2,985							
Control Point Stadium crossover	R	\$6,490		\$3,245				\$3,245			
Fullerton Transportation Center stair rehabilitation	R	\$1,065		\$1,030							\$35
Laguna Niguel to San Juan Capistrano passing siding	R	\$35,956	\$24,652	\$1,015		\$3,000		\$6,734			\$555
LOSSAN Corridor grade separations PSR in Anaheim, Orange, and Santa Ana	R	\$2,699								\$2,699	
Metrolink grade crossing safety improvements ROW	R	\$3,025								\$3,025	
North Beach crossings safety enhancements	R	\$348						\$166		\$182	
Positive Train Control (Metrolink)	R	\$39,916		\$4,492	\$1,234			\$34,190			
Rail Crossing signal lights and pedestrian gates	R	\$252						\$252			
Rail station platform safety improvements (Fullerton, Irvine, and Tustin)	R	\$553						\$553			
Safety repairs for San Clemente Pier Station	R	\$122						\$122			
San Clemente Beach Trail crossings safety enhancements	R	\$4,999						\$2,170		\$2,251	\$578
Slope and culvert improvements	R	\$300		\$300							
Slope stabilization Laguna Niguel-Lake Forest	R	\$5,168		\$4,834						\$334	
Tactile tile project	R	\$1,569		\$1,538						\$31	
Ticket vending machines	R	\$6,857									\$6,857
Transit Rail Security (monitors, fencing, video surveillance)	R	\$163						\$163			
VSS at commuter rail stations	R	\$4,409		\$3,594				\$56			\$759
Go Local	S	\$7,730							\$7,730		
M2 Project S Transit extensions to Metrolink (Rubber Tire)	S	\$733								\$733	
ARTIC environmental, ROW, program management support, site plan	M1	\$41,369							\$8,869		\$32,500
Fiber Optics installation (Metrolink)	M1	\$23,183		\$10,903				\$10,479	\$1,801		
Laguna Niguel-Mission Viejo Station parking expansion (south lot)	M1	\$4,135						\$695	\$3,440		
Tustin Rail Station parking expansion	M1	\$15,390				\$1,100		\$7,181	\$7,109		
Rail Project Completed Totals		\$933,401	\$148,927	\$111,471	\$4,735	\$58,331		\$211,182	\$215,693	\$86,790	\$96,272



Pending Approval by OCTA Board of Directors - October 13, 2025

Rail Project Completed													
					Fe	deral Fun	ds		State Fund	ls		Local Fund	ds
	Project Title	ı	M Code	Total Funding	STBG/CMAQ	FTA	Other Fed.	STIP	SB1	Other State	M1	M2	Other Local
Federal Funding Total	\$265,133												
State Funding Total	\$269,513												
Local Funding Total	\$398,755												
Total Funding (000's)	\$933,401												



Pending Approval by OCTA Board of Directors - October 13, 2025

1. Approve the 2026 State Transportation Improvement Program submittal of eight projects for \$151.742 million, from fiscal year 2026-27 through fiscal year 2030-31.

Acronyms:

ADA - Americans with Disabilities Act

Board - Board of Directors

CMAQ - Congestion Mitigation Air Quality Improvement

Program

FFY - Federal Fiscal Year

FTA - Federal Transit Administration

FY - Fiscal Year

LOSSAN - Los Angeles-San Diego-San Luis Obispo Rail

Corridor

M Code - Project Codes in Measure M1 and M2

M1 - Measure M1

M2 - Measure M2

MP - Mile Post

OC - Orange County

OCTA - Orange County Transportation Authority

OCX - Rail-Highway Grade Crossing/Safety Enhancement

Project

PSR - Project Study Report

ROW - Right-of-Way

SB 1 - SB 1 (Chapter 5, Statutes of 2017)

SCRRA - Southern California Regional Rail

Authority/Metrolink

STBG - Surface Transportation Block Grant

STIP - State Transportation Improvement Program

VSS - Video Surveillance System

2026 State Transportation Improvement Program Development Schedule

- October 6, 2025 Present to the Orange County Transportation Authority (OCTA) Regional Transportation Planning Committee the State Transportation Improvement Program (STIP)/Regional Transportation Improvement Program (RTIP).
- October 13, 2025 Present to the Orange County Transportation Authority (OCTA) Board of Directors the STIP/RTIP item for approval.
- October 15, 2025 The California Department of Transportation (Caltrans) submits the final draft Interregional Transportation Improvement Program (ITIP).
- October 30, 2025 California Transportation Commission (CTC) ITIP hearing North.
- November 7, 2025 CTC ITIP hearing South.
- By December 15, 2025 STIP/RTIP and Caltrans ITIP submittal due to CTC.
- January 28, 2026 CTC STIP hearing North.
- February 5, 2026 CTC STIP hearing South.
- February 27, 2026 CTC publishes staff recommendations.
- March 19-20, 2026 CTC adopts STIP.





October 13, 2025

To: Members of the Board of Directors

From: Andrea West, Clerk of the Board will Will

Subject: Contract Change Orders for Construction of the OC Streetcar

Project

Transit Committee Meeting of October 9, 2025

Present: Directors Jung, Amezcua, Klopfenstein, Leon, Janet Nguyen, and

Tam T. Nguyen

Absent: Director Sarmiento

Committee Vote

This item was passed by the Members present.

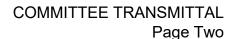
Director Janet Nguyen voted in opposition to this item.

Director Leon was not present to vote on this item.

Committee Recommendation(s)

A. Authorize the Chief Executive Officer to negotiate and execute Contract Change Order No. 89.2 to Agreement No. C-7-1904 with Walsh Construction Company II, LLC, in the amount of \$350,000, for maintenance and storage facility access control system installation support.

- B. Authorize the Chief Executive Officer to negotiate and execute Contract Change Order No. 248 to Agreement No. C-7-1904 with Walsh Construction Company II, LLC, in the amount of \$350,000, for maintenance and storage facility service and inspection pit safety enhancements.
- C. Authorize the Chief Executive Officer to negotiate and execute Contract Change Order No. 251.1 to Agreement No. C-7-1904 with Walsh Construction Company II, LLC, in the amount of \$1,100,000, for additional work to implement an accelerated schedule.





- D. Authorize the Chief Executive Officer to negotiate and execute Contract Change Order No. 252.1 to Agreement No. C-7-1904 with Walsh Construction Company II, LLC, in the amount of \$250,000, for public conveyance and safety enhancements.
- E. Authorize the Chief Executive Officer to negotiate and execute Contract Change Order No. 255.1 to Agreement No. C-7-1904 with Walsh Construction Company II, LLC, in the amount of \$350,000, for overhead contact system modifications.
- F. Authorize the Chief Executive Officer to negotiate and execute Contract Change Order No. 266.1 to Agreement No. C-7-1904 with Walsh Construction Company II, LLC, in the amount of \$250,000, for modifications to miscellaneous maintenance and storage facility systems.
- G. Authorize the Chief Executive Officer to negotiate and execute Contract Change Order No. 277 to Agreement No. C-7-1904 with Walsh Construction Company II, LLC, in the amount of \$425,000, for maintenance and storage facility mezzanine fall protection modifications.
- H. Authorize the Chief Executive Officer to negotiate and execute Contract Change Order No. 291.1 to Agreement No. C-7-1904 with Walsh Construction Company II, LLC, in the amount of \$160,000, for overhead contact system span wire to contact wire changes.
- I. Authorize the Chief Executive Officer to negotiate and execute Contract Change Order No. 301 to Agreement No. C-7-1904 with Walsh Construction Company II, LLC, in the amount of \$1,000,000, for train signal control modifications.



October 9, 2025

To: Transit Committee

From: Darrell E. Johnson, Chief Executive Officer

Subject: Contract Change Orders for Construction of the OC Streetcar

Project

Overview

On September 24, 2018, the Orange County Transportation Authority Board of Directors authorized Agreement No. C-7-1904 with Walsh Construction Company II, LLC, for construction of the OC Streetcar Project. Contract change orders are required for additional compensation for maintenance and storage facility access control system installation support, maintenance and storage facility service inspection pit safety enhancements, additional work to implement an accelerated schedule, public conveyance and safety enhancements, overhead contact system modifications, modifications to miscellaneous maintenance and storage facility systems, maintenance and storage facility mezzanine fall protection modifications, overhead contact system adjustments, and train signal control modifications.

Recommendations

- A. Authorize the Chief Executive Officer to negotiate and execute Contract Change Order No. 89.2 to Agreement No. C-7-1904 with Walsh Construction Company II, LLC, in the amount of \$350,000, for maintenance and storage facility access control system installation support.
- B. Authorize the Chief Executive Officer to negotiate and execute Contract Change Order No. 248 to Agreement No. C-7-1904 with Walsh Construction Company II, LLC, in the amount of \$350,000, for maintenance and storage facility service and inspection pit safety enhancements.
- C. Authorize the Chief Executive Officer to negotiate and execute Contract Change Order No. 251.1 to Agreement No. C-7-1904 with Walsh Construction Company II, LLC, in the amount of \$1,100,000, for additional work to implement an accelerated schedule.

- D. Authorize the Chief Executive Officer to negotiate and execute Contract Change Order No. 252.1 to Agreement No. C-7-1904 with Walsh Construction Company II, LLC, in the amount of \$250,000, for public conveyance and safety enhancements.
- E. Authorize the Chief Executive Officer to negotiate and execute Contract Change Order No. 255.1 to Agreement No. C-7-1904 with Walsh Construction Company II, LLC, in the amount of \$350,000, for overhead contact system modifications.
- F. Authorize the Chief Executive Officer to negotiate and execute Contract Change Order No. 266.1 to Agreement No. C-7-1904 with Walsh Construction Company II, LLC, in the amount of \$250,000, for modifications to miscellaneous maintenance and storage facility systems.
- G. Authorize the Chief Executive Officer to negotiate and execute Contract Change Order No. 277 to Agreement No. C-7-1904 with Walsh Construction Company II, LLC, in the amount of \$425,000, for maintenance and storage facility mezzanine fall protection modifications.
- H. Authorize the Chief Executive Officer to negotiate and execute Contract Change Order No. 291.1 to Agreement No. C-7-1904 with Walsh Construction Company II, LLC, in the amount of \$160,000, for overhead contact system span wire to contact wire changes.
- I. Authorize the Chief Executive Officer to negotiate and execute Contract Change Order No. 301 to Agreement No. C-7-1904 with Walsh Construction Company II, LLC, in the amount of \$1,000,000, for train signal control modifications.

Discussion

On September 24, 2018, the Orange County Transportation Authority (OCTA) Board of Directors (Board) awarded the contract to construct the OC Streetcar Project (Project) to Walsh Construction Company II, LLC (Walsh). The Notice to Proceed with construction was issued to Walsh on March 4, 2019. The construction of the Project is nearing 95 percent complete. The project alignment is referenced in Attachment A.

Staff is requesting Board authorization of the following contract change orders (CCO).

Maintenance and Storage Facility (MSF) Access Control System Support

Access cards and readers are required to enhance security at the MSF and adjacent areas. Initially, the contractor was to install wiring only, with OCTA procuring and installing the equipment. To ensure system connectivity, staff directed the contractor to procure and install the full access control system. In January 2022, the Board approved CCO No. 89, in the amount of \$2,200,000, to install the full access control system. In June 2024, the Board approved supplemental CCO No. 89.1, in the amount of \$750,000, for higher than assumed labor costs for the installation of the access control system. Due to the complexity of the system, the level of effort for programming, system integration, and commissioning were beyond the original estimate. CCO No. 89.2 is needed, in the amount of \$350,000, to cover additional labor to support the programming, integration, and commissioning of the access control system.

MSF Service and Inspection Pit Safety Enhancements

During construction, it was determined that modifications to the MSF service and inspection pit access points were needed to enhance worker safety. Enhancements include additional stair enclosures, gates, and guardrails at the work platforms, as well as relocation of existing gates and related items to accommodate these changes. These enhancements were not anticipated in the original design. CCO No. 248, in the amount of \$350,000, is needed to implement these safety enhancements at the MSF.

Additional Work to Implement Accelerated Schedule

In September 2024, the Board approved CCO No. 251 for partial settlement of the construction contractor's claims and to implement an accelerated schedule targeting opening of the streetcar service to the public in summer 2026. As part of CCO No. 251, up to \$4,000,000 was authorized for initial acceleration costs, including additional equipment, crews, resources, and overtime to advance critical work. The initial authorized costs are nearly expended and CCO No. 251.1, in the amount of \$1,100,000, is now needed for additional compensation similar to those already encountered to implement the accelerated schedule to allow streetcar service to open to the public as soon as possible.

Public Conveyance and Safety Enhancements

OCTA is coordinating completion of work with the City of Santa Ana (City) to inspect and transfer project improvements for City maintenance. Inspections of final work identified additional safety enhancements, such as streetlight

replacements and handrails and pavement markings that ensure conformance with the existing field conditions that were difficult to anticipate in the original scope of work. CCO No. 252, in the amount of \$150,000, was issued to cover initial costs and is now fully expended. As completion of work continues and final inspections are conducted, additional work is anticipated to conform with existing conditions for public safety. CCO No. 252.1, in the amount of \$250,000, is needed to fund the remaining work necessary for final project completion and turnover of improvements to the City.

Overhead Contact System (OCS) Modifications

Various OCS design modifications were required to address minimum clearance requirements discovered during installation. The modifications include changes to OCS wire supports, OCS wire adjustments, and rerouting of OCS wiring. CCO No. 255, in the amount of \$200,000, was issued to cover these modifications for Segment 1 and has now been fully expended. To complete anticipated OCS modifications in Segments 2 to 5, similar to those already encountered, CCO No. 255.1, in the amount of \$350,000, is required to reduce any impacts to the project schedule.

Modifications to Miscellaneous MSF Systems

As construction progresses towards final completion and occupancy of the MSF, miscellaneous modifications not anticipated in the original design to various mechanical, electrical, and plumbing systems are required. The modifications include changes to the fire alarm, gas service, compressor feed, and other various systems. CCO No. 266, in the amount of \$200,000, was issued to cover these modifications and has now been fully expended. CCO No. 266.1, in the amount of \$250,000, is required to compensate the contractor for modifications to miscellaneous MSF systems.

MSF Mezzanine Fall Protection Modifications

Modifications on the mezzanine level of the MSF are required to improve fall protection safety. The changes were not anticipated in the original design and include closing a gap between the mezzanine and the top of the train with metal plates. CCO No. 277, in the amount of \$425,000, is needed to improve fall protection safety on the MSF mezzanine.

OCS Span Wire to Contact Wire Changes

Modifications were required to the OCS system associated with span wire to contact wire adjustments and modifications at various locations to meet

minimum clearance requirements. CCO No. 291, in the amount of \$205,000, was issued to cover these modifications for Segment 1 and has now been fully expended. To complete the anticipated OCS modifications in Segments 2 to 5, similar to those already encountered, CCO No. 291.1, in the amount of \$160,000, is needed.

Train Signal Control Modifications

The train signal control system coordinates streetcar movements with City traffic signals to ensure safe operations. Modifications to the system's hardware and software are needed to ensure that it functions safely and properly. The modifications were not included in the original design. The hardware modifications include adjustments and additional detector loops and signal equipment at multiple locations throughout the Project. Software modifications include costs to install and configure the system. CCO No. 301 is required, in the amount of \$1,000,000, for train signal control modifications.

Procurement Approach

The initial procurement was handled in accordance with OCTA's Board-approved procedures for public works projects. These procedures, which conform to both federal and state requirements, require that contracts are awarded to the lowest responsive, responsible bidder after a sealed bidding process. On September 24, 2018, the Board authorized Agreement No. C-7-1904 with Walsh, in the amount of \$220,538,649, for construction of the Project.

Proposed CCO nos. 89.2, 248, 251.1, 252.1, 255.1, 266.1, 277, 291.1, and 301, in the amount of \$4,235,000, will increase the cumulative value of the contract to \$355,919,592, as shown in Attachment B. Board approval is required for CCO nos. 89.2, 248, 251.1, 252.1, 255.1, 266.1, 277, 291.1, and 301 pursuant to the State of California Public Contracting Code Section 20142. The CCOs will be issued with a reservation of rights to advance the Project, pending resolution of disputes between OCTA and Walsh. The statements in this report are made in the context of, and subject to, OCTA's reservation of rights.

Fiscal Impact

Funding for these changes was included in the revised OC Streetcar Federal Transit Administration Full Funding Grant Agreement approved by the Board on February 24, 2025, and is included in OCTA's Fiscal Year 2025-26 Budget, Capital Programs Division, account nos. 0051-TS010-9017-Z32 (CCO nos. 89.2, 248, 266.1, 277), 0051-TS010-9017-Z55 (CCO No. 251.1), 0051-TS010-9017-Z42 (CCO No. 252.1), 0051-TS010-9017-Z46

(CCO No. 252.1), 0051-TS010-9017-Z54 (CCO nos. 255.1, 291.1), and 0051-TS010-9017-Z51 (CCO No. 301), is funded with Federal Transit Administration Section 5309 New Starts grant funds and local Measure M2 funds. The cost of the work associated with the CCOs noted above will be funded by, and are included in, the project budget that was previously approved by the Board on February 24, 2025.

Summary

Staff recommends the Board authorize the Chief Executive Officer to negotiate and execute CCO No. 89.2, in the amount of \$350,000, for MSF access control system installation support; CCO No. 248, in the amount of \$350,000, for MSF service and inspection pit safety enhancements; CCO No. 251.1, in the amount of \$1,100,000, for additional work to implement an accelerated schedule; CCO No. 252.1, in the amount of \$250,000, for public conveyance and safety enhancements; CCO No. 255.1, in the amount of \$350,000, for OCS modifications; CCO No. 266.1, in the amount of \$250,000, for modifications to miscellaneous MSF systems; CCO No. 277, in the amount of \$425,000, for MSF mezzanine fall protection modifications; CCO No. 291.1, in the amount of \$160,000, for OCS span wire to contact wire changes; and CCO No. 301, in the amount of \$1,000,000, for train signal control modifications to Agreement No. C-7-1904 between OCTA and Walsh for the construction of the Project.

Attachments

A. Project Alignment

B. Walsh Construction Company II, LLC, Agreement No. C-7-1904, Contract Change Order (CCO) Log

Prepared by:

Jeff Mills, P.E.

Director, Capital Project Delivery

(714) 560-5925

Pia Veesapen

Director, Contracts Administration and

Materials Management

(714) 560-5619

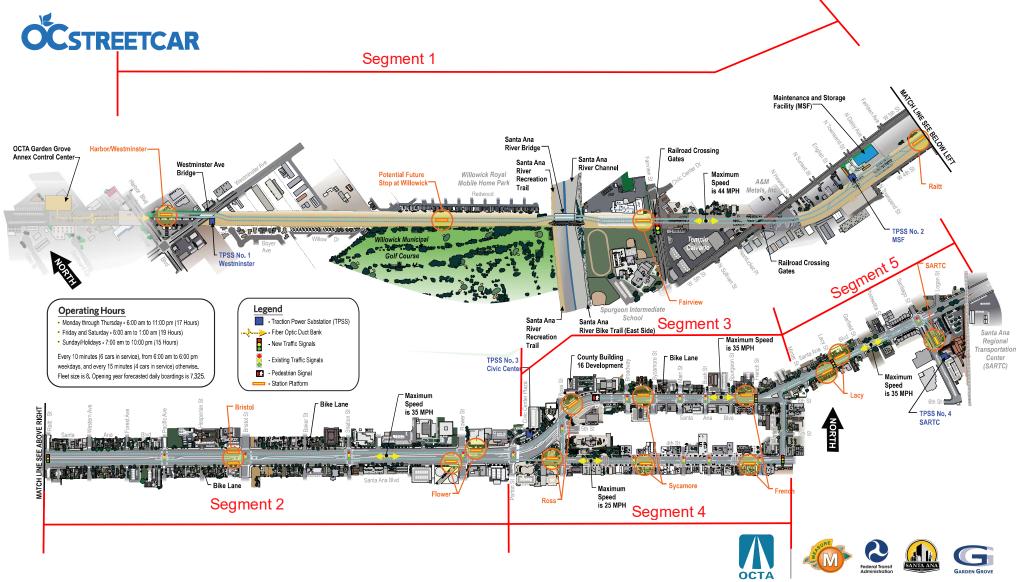
Approved by:

James G. Beil, P.E.

Executive Director, Capital Programs

(714) 560-5646

Project Alignment



Walsh Construction Company II, LLC Agreement No. C-7-1904 Contract Change Order (CCO) Log

CCO No.	Title	Status	Date	Cost
			Executed	
1	Maintenance and Storage Facility (MSF) Removals	Approved	6/20/2019	\$199,749.00
1.1	MSF Removals Additional Funding	Approved	6/25/2019	\$113,884.77
1.2	Time Impact Evaluation (TIE) 01 - Schedule Impacts Associated with Change	Approved	6/17/2020	\$0.00
1.3	Directive (CD)-001 and CD-003 Schedule Impacts Associated with TIE 01	Annroyed	10/17/2022	\$2,100,000.00
2	MSF Removal of Additional Hazardous Materials	Approved Approved	6/25/2019	\$2,100,000.00
2.1	MSF Removal of Additional Hazardous Materials Additional Funding	Approved	8/15/2019	\$160,000.00
3	Removal and Disposal of Contaminated Materials within the Orange County Transit	Approved	9/12/2019	\$1,600,000.00
	District (OCTD)-Owned Pacific Electric Right-of-Way (PEROW)	7.6610100	0,12,2010	\$1,000,000.00
3.1	Removal and Disposal of Contaminated Materials Additional Funding	Approved	2/25/2020	\$7,278,795.00
3.2	Removal and Disposal of Contaminated Materials Additional Funding	Approved	10/18/2021	\$1,100,000.00
3.3	Removal and Disposal of Contaminated Materials Additional Funding	Approved	4/18/2023	\$1,500,000.00
3.4	Removal and Disposal of Contaminated Materials Additional Funding	Approved	4/21/2025	\$657,000.00
4	Work Related to Existing Utility Conflicts	Approved	8/27/2019	\$200,000.00
4.1	Work Related to Existing Utility Conflicts Additional Funding	Approved	2/25/2020	\$833,300.00
4.2	Work Related to Existing Utility Conflicts Additional Funding Work Related to Existing Utility Conflicts Additional Funding	Approved Approved	6/9/2020 6/21/2021	\$2,426,000.00 \$2,000,000.00
4.4	Work Related to Existing Utility Conflicts Additional Funding Work Related to Existing Utility Conflicts Additional Funding	Approved	11/19/2021	\$3,500,000.00
4.4	Work Related to Existing Utility Conflicts Additional Funding Work Related to Existing Utility Conflicts Additional Funding	Approved	6/3/2025	\$250,000.00
5	Tree Trimming and Removal	Approved	6/9/2020	\$129,215.52
5.1	Tree Trimming and Removal Additional Funding	Approved	12/29/2023	\$300,000.00
7	Orange County Sanitation District Specifications Revisions	Approved	6/9/2020	\$82,445.00
8	Orange County Flood Control District Maintenance Path Profile Revisions	Approved	6/9/2020	\$6,055.00
9	MSF Vapor Barrier	Approved	12/22/2020	\$395,717.00
10	112 Tram Rail Ultrasonic Testing	Approved	6/10/2020	\$0.00
11	GPS Priority Control System	Approved	6/9/2020	\$40,120.00
12	Santa Ana River Bridge (SARB) Precast Girders	Approved	8/27/2020	\$88,877.00
13	Retaining Wall 544 Reinforcing Steel	Approved	9/3/2020	\$2,321.30
14	Retaining Wall 508	Approved	12/14/2020	\$125,341.00
15	Utility Relocations for Overhead Contact System (OCS) Pole Foundations and Traffic Signal Pole Foundations	Approved	6/17/2020	\$195,723.00
16	OCS and Traffic Signal Pole Foundations Hand Excavation and Survey	Approved	6/23/2020	\$198,808.00
16.1	OCS, Traffic Signal, and Streetlight Foundation Hand Excavation, Layout and Survey Additional Funding	Approved	6/26/2020	\$1,400,000.00
16.2	OCS, Traffic Signal, and Streetlight Foundation Hand Excavation, Layout and Survey Additional Funding	Approved	4/15/2021	\$1,400,000.00
16.3	OCS, Traffic Signal, and Streetlight Foundation Hand Excavation, Layout and Survey Additional Funding	Approved	5/1/2023	\$250,000.00
17	Westminster Bridge OCS Diaphragm	Approved	10/30/2020	\$1,682.00
18	Remove Buried Man-Made Objects	Approved	11/23/2020	\$300,000.00
18.1	Remove Buried Man-Made Objects Additional Funding	Approved	10/25/2021	\$300,000.00
18.2	Remove Buried Man-Made Objects Additional Funding	Approved	5/1/2023	\$600,000.00
19	Removal of Boulders	Approved	11/17/2020	\$160,000.00
20	Removal of Chain Link Fence	Approved	3/9/2021	\$7,316.90
21	Changes to Turnout Geometry	Approved	10/5/2020	\$0.00
22	Railroad Crossing Gate Bells SARB, OCS Pole, and OCS Down Guy Diaphragms	Approved Approved	10/5/2020	\$0.00
23	OCS Sectionalization – Siemens Portion	Approved Approved	1/19/2021 10/5/2020	\$7,419.00 \$158.941.01
24.1	OCS Sectionalization – Siemens Portion OCS Sectionalization Additional Funding	Approved	4/27/2021	\$158,941.01 \$722,253.92
26	Revisions to Station Color Schedule, Glass, and Pylon	Approved	4/19/2021	\$176,419.84
27	Street Lighting	Approved	11/19/2020	\$12,347.91
28	Schedule Impacts Associated with TIE 04 and 07	Approved	12/8/2020	\$0.00
28.1	Schedule Impacts Associated with TIE 07	Approved	10/17/2022	\$1,300,000.00
28.2	Schedule Impacts Associated with TIE 07	Approved	1/17/2024	\$0.00
28.3	Schedule Impacts Associated with TIE 07	Approved	6/4/2024	\$1,425,000.00
29	Revision to MSF, Traction Power Substation (TPSS), and OCS Siemens Portion	Approved	11/19/2020	\$34,216.80
29.1	Revision to MSF, TPSS, and OCS Siemens Portion	Approved	6/22/2023	\$175,730.75
30	SARB Pile, Westminster Bridge, and Demonstration Section Electrical Continuity Testing	Approved	2/1/2021	\$23,928.10
30.1	Electrical Continuity Testing Additional Funding	Approved	3/16/2021	\$320,164.40
31	MSF Building and Southern California Edison (SCE) Design Revisions	Approved	1/17/2022	\$207,367.00
32	Asbestos Survey	Approved	2/1/2021	\$25,000.00
34	OCS Spanwire Modifications	Approved	5/8/2024	\$10,901.00
35	No Sunshade for Variable Message Sign	Approved	12/22/2020	\$0.00
37	Station Platform Power	Approved	5/18/2021	\$58,414.15
38 39	Modify OCS Foundation Schedule	Approved	6/15/2021	\$32,733.04
39.1	OCS Revisions Based on Field Walks Additional Revisions to OCS Hardware	Approved	6/17/2021 6/26/2023	\$28,088.32 \$180,709.28
39.1	Additional Revisions to 003 nardware	Approved	0/20/2023	\$100,709.28

40. MSF Remote Yard Gates	CCO No.	Title	Status	Date	Cost
40	CCO NO.	Title	Status		Cost
MSF Remote Vard Gates	40	MCE Damata Vard Cataa	Ammunicad		£22 207 CC
41 Auxiliary Freeder Pullbox Sizes- Segment 3A Approved 11/23/2021 531,132 132,132 133,132					\$67,819.03
CDMP Pises	_				\$61,041.24
Cight Piles					\$35,138.00
44. Design of Temporary Traffic Signals Segment 2A - Stages 1 and 2					,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
44.1 Design of Temporary Traffic Signals and Victore Detections Approved 104/2022 \$997.22			• •		\$372,136.38
					\$41,967.00
Main					\$50,813.00
46 MSF Video Servers from Garden Grove Bus Annex to MSF Approved 19/13/2021 \$410 47 Anchaeological Security and Data Recovery at MSF Approved 19/2022 \$110,00 47.1 Archaeological Security and Data Recovery at MSF Additional Funding Approved 48/2022 \$11,773.8 48 Thickneed AC Pawement Approved 427/2021 \$11,713.8 48 Rickneed AC Pawement Approved 627/2021 \$11,713.8 50 MSF Stever and Yard Villity Conflicts Approved 627/2021 \$30,00 51 MSF Yeard Light Connection Details Approved 627/2021 \$30,00 52.1 Over Excavation of Unsuitable Solis Additional Funding Approved 627/2021 \$30,00 52.1 Over Excavation of Unsuitable Solis Additional Funding Approved 627/2021 \$30,00 52.1 Cover Excavation of Unsuitable Solis Additional Funding Approved 627/2021 \$30,00 52.1 Cartification Service Active Service					
47.1 Archaeological Security and Data Recovery at MSF Additional Funding Approved 1192022 \$110,00 48.1 Thicknend AC Pawment Approved 4272021 \$11,77,36 49.1 Retaining Wall 501 Encroachment Approved 46772021 \$1818,36 50.1 MSF Street and Vard Utility Conflicts Approved 5722021 \$1818,36 50.1 MSF Street and Vard Utility Conflicts Approved 5722021 \$1818,36 51.2 Over Exeavation of Unsuitable Solis Additional Funding Approved 66712021 \$290,50 52.1 Over Exeavation of Unsuitable Solis Additional Funding Approved 66712021 \$540,00 53.2 SARB Bridge Decking Approved 66712021 \$540,00 54.1 Revisions to the Traction and Power Substation Site Plan Approved 66712022 \$160,00 55.2 Dec Exeavation of Unsuitable Solis Additional Funding Approved 66712021 \$500,00 56.2 Exploratory Protholing Allowance Approved 66712021 \$500,00 56.2 Exploratory Protholing Allowance		·			\$40,267.30
48 Ritching Wall 501 Encroachment					\$110,000.00
Retaining Wall 501 Encroachment	47.1	Archaeological Security and Data Recovery at MSF Additional Funding	Approved	5/8/2023	\$98,000.00
50 MSF Street and Vard Utility Conflicts Approved 5752021 \$320,00 51 MSF Vard Light Connection Details Approved 62170221 \$395,50 52.1 Over Excavation of Unsuitable Soils Additional Funding Approved 62170221 \$300,50 53 SARB Bridge Decking Approved 6170222 \$300,00 54 Revisions to the Traction and Power Substation Site Plan Approved 6170222 \$300,00 55 Exploratory Potholing Allowance Approved 4582022 \$300,00 56.1 Exploratory Potholing Allowance Approved 4782022 \$300,00 56.2 Exploratory Potholing Allowance Approved 4782023 \$100,00 58.2 Vehicle Platform Tolerances Approved 1782021 \$8 59 Direct Fixation Fasteners Approved 5782021 \$8 60 Base Contract Utility Credits Approved 5782021 \$8 61 Lops Robication and Block Out Approved 5782021 \$8 61 Lops Robication	48	Thickened AC Pavement	Approved	4/27/2021	\$1,177,362.00
51		,			\$181,802.77
52. Over Excavation of Unsuitable Soils Approved 62/10/201 \$28,95.00 52. 1. Over Excavation of Unsuitable Soils Additional Funding Approved 62/10/201 \$38,00 53. SARB Bridge Decking Approved 61/17/201 \$30,00 54. Ravisions to the Traction and Power Substation Site Plan Approved 61/17/2021 \$30,00 55. By December 1. September 1. September 1. September 1. September 2. September		·			\$200,000.00
52.1 Over Excavation of Unsuitable Soils Additional Funding Approved 67170221 \$54,000 53 SARB Bridge Decking Approved 67170221 \$54,000 54 Revisions to the Traction and Power Substation Site Plan Approved 573,0222 \$52,000 55 Bild tem 24 - Earthwork Credit Approved 478,2022 \$120,000 56 Exploratory Potholing Allowance Approved 478,20221 \$1,00,00 56.1 Exploratory Potholing Allowance Approved 578,2023 \$500,00 58.2 Vehicle Platform Tolerances Approved 578,2023 \$500,00 59.2 Direct Fixation Fasteners Approved 677,2021 \$ 59.3 Direct Fixation Fasteners Approved 677,2021 \$3,00 60.3 Back Contract Utility Credits Approved 407,2021 \$30,00 61.1 Lop Relocation and Block Out Approved 407,2025 \$30,00 61.1 SCE Meter Switchagear Additional Funding Approved 478,2021 \$30,00 61.2		•			\$193,803.00
SARB Bridge Decking					
55					\$9,002.94
55 Bid Item 24 - Earthwork Credit Approved 51/2022 \$152022 \$152020 \$156 Exploratory Petholing Allowance Approved \$120000 \$56.1 Exploratory Petholing Allowance Approved \$150202 \$150000 \$56.2 Exploratory Petholing Allowance Approved \$150202 \$50000 \$56.2 Exploratory Petholing Allowance Approved \$150202 \$500000 \$500000 \$500000 \$500000 \$500000 \$500000		, , , , , , , , , , , , , , , , , , ,			\$1,200,000.00
56.1 Exploratory Potholing Allowance Approved 38/2021 \$1,100.00 56.2 Exploratory Potholing Allowance Approved 69/2023 \$580.00 58.9 Vehicle Platform Tolerances Approved 67/2021 \$ 59.0 Direct Fixation Fasteners Approved 67/2021 \$ 60.0 Base Contract Utility Credits Approved 67/2021 \$ 61.1 Train-to-Vayside Communications Approved 67/2022 \$38,00 61.1 Train-to-Wayside Communications Approved 67/2025 \$38,00 61.2 Backfill of OCS Foundations Approved 67/2025 \$233,83 62.2 Backfill of OCS Foundations Approved 67/80225 \$323,83 63.3 Graffill Removal Approved 67/80221 \$100.00 64.1 SCE Meter Switchgear Additional Funding Approved 19/18/2021 \$9.14 64.2 SCE Meter Switchgear Additional Funding Approved 5/18/2021 \$9.24 65.2 Additional Environmental Soil Investigation			• •		(\$659,666.73)
56.2 Exploratory Potholing Allowance Approved 13/20221 \$50.00 58 Vehicle Platform Tolerances Approved 12/20221 \$ 69 Direct Fixation Fasteners Approved 6/7/2021 \$ 60 Base Contract Utility Credits Approved 6/7/2021 \$ 61 Loop Relocation and Block Out Approved 16/22021 \$0.00 61.1 Train-to-Wayside Communications Loop Installation in Embedded Track Approved 6/3/2023 \$233,38. 62 Backflill or CoS Foundations Approved 11/3/20221 \$200,00 63 Graffittl Removal Approved 6/3/2025 \$100,00 64 SCE Meter Switchgear Engineering and Submittal Costs Approved 5/18/2021 \$17,61 64.1 SCE Meter Switchgear Additional Funding Approved 1/19/2022 \$369,87 65 Additional Environmental Soil Investigation on West Santa Ana Boulevard/Bristol Street Approved 5/18/2021 \$3,84 54 SCE Meter Switchgear Additional Funding Approved 5/12/2021 \$	56	Exploratory Potholing Allowance			\$200,000.00
Section Approved Approved Section Se		' ' '	• •		\$1,100,000.00
See Contract Utility Credits					\$500,000.00
69					\$0.00
61. Train-to-Wayside Communications Loop Installation in Embedded Track					\$0.00
61.1 Train-to-Wayside Communications Loop Installation in Embedded Track Approved 6/3/2025 \$233,88 62 Backfill of OCS Foundations Approved 11/8/2021 \$200,00 63 Graffill Removal Approved 5/18/2021 \$100,00 64 SCE Meter Switchgear Additional Funding Approved 16/18/2021 \$17,81 64.1 SCE Meter Switchgear Additional Funding Approved 1/17/2022 \$198,95 65 Additional Environmental Soil Investigation on West Santa Ana Boulevard/Bristol Street Approved 5/18/2021 \$9,89,57 66 Goldfrional Environmental Scill Investigation Approved 4/17/2022 \$869,57 67 City of Garden Grove Driveway Standard Update Approved 9/17/2021 \$208,00 68 Ross Intersaction Traffic Signal Conduit Installation Approved 4/12/2021 \$208,00 70 Tiraffic Signal Interconnect Approved 4/12/2022 \$208,00 71.1 Traffic Signal Interconnect Additional Funding Approved 3/12/2022 \$500,00 71.2 Traffic Signal Inte		•			\$80,000.00
622 Backfill of OCS Foundations		•			\$233,582.27
64.1 SCE Meter Switchgear Engineering and Submittal Costs	62				\$200,000.00
64.1 SCE Meter Switchgear Additional Funding	63	Graffiti Removal	Approved	5/18/2021	\$100,000.00
64.2 SCE Meter Switchgear Additional Funding			Approved		\$17,618.00
Additional Environmental Soil Investigation on West Santa Ana Boulevard/Bristol Street Approved Station Stop (Stage 1) Station Stop (Stage 1) Approved 9/1/2021 \$208,000 For City of Garden Grove Driveway Standard Update Approved Approved Approved 11/24/2021 \$20,800 For City of Garden Grove Driveway Standard Update Approved Approved Approved 6/7/2021 \$18,000 For City of Garden Grove Driveway Standard Update Approved Approved 6/7/2021 \$18,000 For City of Garden Grove Driveway Standard Update Approved Approved 6/7/2022 \$20,800 For City of Garden Grove Driveway Standard Update Approved Approved 6/7/2022 \$20,800 For City of Garden Grove Driveway Standard Update Approved Approved 4/1/2022 \$208,000 For City of Garden Grove Driveway Standard Update Approved Approved 5/31/2022 \$500,000 For City of Garden Grove Driveway Standard Update Approved 5/31/2022 \$500,000 For City of Garden Grove Driveway Standard Update Approved 5/31/2023 \$165,800 For City of Garden Grove Driveway Standard Update Approved 5/31/2023 \$165,800 For City of Garden Grove Driveway Standard Update Approved 5/31/2023 \$165,800 For City of Garden Grove Driveway Standard Update For City of Garden Grove Driveway Standard Up		Ţ Ţ			\$191,950.00
Station Stop (Stage 1)		· · · · · · · · · · · · · · · · · · ·	• • •		\$669,573.00
66 Ground Penetrating Radar Investigation Approved 9/1/2021 \$208,00 67 City of Garden Grove Driveway Standard Update Approved 1/12/2021 \$20,63 68 Ross Intersection Traffic Signal Conduit Installation Approved 6/7/2021 \$18,00 69 Optical Backbone Network System Redundancy Approved 4/12/2022 \$208,00 71.1 Traffic Signal Interconnect Additional Funding Approved 5/31/2022 \$500,00 71.2 Traffic Signal Interconnect Additional Funding Approved 3/4/2025 \$165,60 71.3 Traffic Signal Interconnect Ethernet Switches Approved 3/4/2025 \$165,60 71.3 Traffic Signal Interconnect Ethernet Switches Approved 4/4/2025 \$165,60 71.1 Traffic Signal Interconnect Ethernet Switches Approved 4/4/2022 \$500,00 71.2 Traffic Signal Interconnect Ethernet Switches Approved 4/4/2022 \$165,60 71.1 Traffic Signal Interconnect Ethernet Switches Approved 4/1/2022 \$171,12 71.2 Pavement Modifica	65		Approved	5/18/2021	\$9,840.60
67 City of Garden Grove Driveway Standard Update Approved 11/24/2021 \$20,63 68 Ross Intersection Traffic Signal Conduit Installation Approved 2/25/2022 \$20,63 69 Optical Backboon Network System Redundancy Approved 2/25/2022 \$520,58 71 Traffic Signal Interconnect Approved 4/12/2022 \$208,00 71.1 Traffic Signal Interconnect Additional Funding Approved 5/31/2022 \$500,00 71.2 Traffic Signal Interconnect Additional Funding Approved 3/4/2025 \$165,50 71.3 Traffic Signal Interconnect - Ethernet Switches Approved 6/16/2025 \$171,12 72 Cathodic Protection at MSF and Car Wash Approved 1/13/2022 \$40,00 77.1 Pavement Modifications Along Embedded Tracks and Grade Crossings Approved 5/3/2022 \$400,00 77.2 Pavement Modifications Along Embedded Tracks and Grade Crossings Approved 5/3/2022 \$400,00 77.3 Pavement Modifications and Restoration Along Embedded Tracks and Grade Crossings Approved 5/2/2022 \$400,00	66		Approved	9/1/2021	\$208,000.00
69 Optical Backbone Network System Redundancy Approved 2/25/2022 \$520,58 71 Traffic Signal Interconnect Approved 4/12/2022 \$208,00 71.1 Traffic Signal Interconnect Additional Funding Approved 3/4/2025 \$500,00 71.2 Traffic Signal Interconnect Additional Funding Approved 3/4/2025 \$165,80 71.3 Traffic Signal Interconnect - Ethernet Switches Approved 6/16/2025 \$171,12 72 Cathodic Protection at MSF and Car Wash Approved 1/13/0/2023 \$202,74 77 Pavement Modification at Street Intersections Approved 1/13/0/2021 \$208,00 77.1 Pavement Modifications Along Embedded Tracks and Grade Crossings Approved 5/3/2022 \$400,00 77.3 Pavement Modifications and Restoration Additional Funding Approved 6/7/2023 \$1,300,00 77.4 Pavement Modifications and Restoration Additional Funding Approved 6/2/2022 \$300,00 77.4 Pavement Modifications and Restoration Additional Funding Approved 6/2/2/202 \$300,00	67	City of Garden Grove Driveway Standard Update	Approved	11/24/2021	\$20,637.83
71 Traffic Signal Interconnect Approved 4/12/2022 \$208,000 71.1 Traffic Signal Interconnect Additional Funding Approved 5/31/2022 \$500,000 71.2 Traffic Signal Interconnect - Ethernet Switches Approved 6/16/2025 \$165,80 71.3 Traffic Signal Interconnect - Ethernet Switches Approved 6/16/2025 \$171,12 72 Cathodic Protection at MSF and Car Wash Approved 11/30/2023 \$298,74 77 Pavement Modification at Street Intersections Approved 5/3/2022 \$400,00 77.1 Pavement Modifications Along Embedded Tracks and Grade Crossings Approved 5/3/2022 \$400,00 77.2 Pavement Modifications Along Embedded Tracks and Grade Crossings Approved 6/7/2023 \$430,00 77.2 Pavement Modifications and Restoration Additional Funding Approved 6/7/2023 \$430,00 77.3 Pavement Modifications and Restoration Additional Funding Approved 5/28/2022 \$300,00 77.4 Pavement Modifications Scrow Documents Approved 5/28/2022 \$300,00		Ross Intersection Traffic Signal Conduit Installation	Approved		\$18,000.00
71.1 Traffic Signal Interconnect Additional Funding Approved 5/31/2022 \$500,00 71.2 Traffic Signal Interconnect Additional Funding Approved 3/4/2025 \$165,80 71.3 Traffic Signal Interconnect - Ethernet Switches Approved 6/16/2025 \$171,12 72 Cathodic Protection at MSF and Car Wash Approved 11/30/2023 \$292,74 77 Pavement Modification at Street Intersections Approved 5/3/2022 \$400,00 77.1 Pavement Modifications Along Embedded Tracks and Grade Crossings Approved 5/3/2022 \$400,00 77.2 Pavement Modifications Along Embedded Tracks and Grade Crossings Approved 5/3/2022 \$400,00 77.3 Pavement Modifications and Restoration Additional Funding Approved 6/7/2023 \$430,00 77.4 Pavement Modifications and Restoration Additional Funding Approved 6/7/2023 \$1,300,00 77.4 Pavement Modifications and Restoration Additional Funding Approved 6/7/2022 \$3,000,00 80 Contract Language Modifications Escrow Documents Approved Approved 6/2/2022 \$3,000,00 82.1 Third-Party		•			\$520,582.00
71.2 Traffic Signal Interconnect - Ethernet Switches Approved 3/4/2025 \$165,802 71.3 Traffic Signal Interconnect - Ethernet Switches Approved 6/16/2025 \$171,12 72 Cathodic Protection at MSF and Car Wash Approved 11/30/2023 \$292,74 77 Pavement Modification at Street Intersections Approved 12/28/2021 \$208,001 77.1 Pavement Modifications Along Embedded Tracks and Grade Crossings Approved 5/3/2022 \$400,001 77.2 Pavement Modifications Along Embedded Tracks and Grade Crossings Approved 6/7/2023 \$480,000 77.3 Pavement Modifications and Restoration Along Embedded Tracks and Grade Crossings Approved 6/7/2023 \$480,000 77.4 Pavement Modifications and Restoration Additional Funding Approved 6/7/2023 \$130,000 79 MSF Permit Drawings and Revisions Approved 6/2/2022 \$300,000 80 Contract Language Modifications Escrow Documents Approved 6/2/2022 \$300,000 81 Third-Party Utility Work - AT&T Approved 6/9/2022 \$100,000					\$208,000.00
71.3 Traffic Signal Interconnect - Ethernet Switches Approved 6/16/2025 \$171,12 72 Cathodic Protection at MSF and Car Wash Approved 11/30/2023 \$292,74 77 Pavement Modification at Street Intersections Approved 12/28/2021 \$208,00 77.1 Pavement Modifications Along Embedded Tracks and Grade Crossings Approved 5/3/2022 \$400,00 77.2 Pavement Modifications and Restoration Along Embedded Tracks and Grade Crossings Approved 9/22/2023 \$480,00 77.3 Pavement Modifications and Restoration Additional Funding Approved 6/7/2023 \$1,300,00 79 MSF Permit Drawings and Revisions Approved 6/24/2022 \$3,000,00 80 Contract Language Modifications Escrow Documents Approved 6/24/2022 \$3,000,00 81 Third-Party Utility Work - Southern California Gas: Expose Abandoned Gas Lines Approved 6/9/2022 \$100,00 82.1 Third-Party Utility Work - AT&T Approved 6/2/2022 \$100,00 83 Additional Storage of Four TPSS Units at Factory Approved 6/21/2022 <t< td=""><td></td><td>Ţ Ţ</td><td></td><td></td><td></td></t<>		Ţ Ţ			
72 Cathodic Protection at MSF and Car Wash Approved 11/30/2023 \$292,74 77 Pavement Modification at Street Intersections Approved 12/28/2021 \$208,00 77.1 Pavement Modifications Along Embedded Tracks and Grade Crossings Approved 5/3/2022 \$400,00 77.2 Pavement Modifications Along Embedded Tracks and Grade Crossings Approved 9/22/2023 \$480,000 77.3 Pavement Modifications and Restoration Along Embedded Tracks and Grade Crossings Approved 6/7/2023 \$1,300,000 77.4 Pavement Modifications and Restoration Additional Funding Approved 5/28/2025 \$350,000 79 MSF Permit Drawings and Revisions Approved 6/24/2022 \$3,000,000 80 Contract Language Modifications Escrow Documents Approved 4/12/2022 \$3,000,00 81 Third-Party Utility Work - Southern California Gas: Expose Abandoned Gas Lines Approved 6/9/2022 \$100,00 82.1 Third-Party Utility Work - AT&T Approved 6/21/2022 \$108,00 83.2 Additional Storage of Four TPSS Units at Factory Approved 6					
77 Pavement Modification at Street Intersections Approved 12/28/2021 \$208,00 77.1 Pavement Modifications Along Embedded Tracks and Grade Crossings Approved 5/3/2022 \$400,00 77.2 Pavement Modifications Along Embedded Tracks and Grade Crossings Approved 9/22/2023 \$480,000 77.3 Pavement Modifications and Restoration Along Embedded Tracks and Grade Crossings Approved 6/7/2023 \$1,300,000 77.4 Pavement Modifications and Restoration Additional Funding Approved 5/28/2025 \$350,000 79 MSF Permit Drawings and Revisions Approved 6/24/2022 \$3,000,000 80 Contract Language Modifications Escrow Documents Approved 4/12/2022 \$3,000,000 82.1 Third-Party Utility Work - Southern California Gas: Expose Abandoned Gas Lines Approved 6/9/2022 \$100,000 82.1 Third-Party Utility Work - AT&T Approved 6/21/2022 \$108,000 82.1 Third-Party Utility Work - AT&T Approved 6/21/2022 \$200,000 86.1 OCS Pole Grounding Conduit Routing at PEROW Approved 5/24/20					\$292,745.56
77.2Pavement Modifications Along Embedded Tracks and Grade CrossingsApproved9/22/2023\$480,0077.3Pavement Modifications and Restoration Along Embedded Tracks and Grade CrossingsApproved6/7/2023\$1,300,0077.4Pavement Modifications and Restoration Additional FundingApproved5/28/2025\$350,0079MSF Permit Drawings and RevisionsApproved6/24/2022\$3,000,00080Contract Language Modifications Escrow DocumentsApproved4/12/2022\$100,00082.1Third-Party Utility Work - Southern California Gas: Expose Abandoned Gas LinesApproved6/9/2022\$100,00082.1Third-Party Utility Work - AT&TApproved6/21/2022\$100,00083Additional Storage of Four TPSS Units at FactoryApproved6/21/2022\$208,00086.1OCS Pole Grounding Conduit Routing at PEROWApproved5/24/2022\$200,00086.1OCS and Platform Grounding Conduit Additional FundingApproved4/18/2023\$300,00088Traction Power Sub-Station Grounding RevisionsApproved6/6/2022\$2,200,00089.1Additional Security ModificationsApproved6/11/2025\$750,00089.2MSF Access Control SupplementalPending\$350,00090Contract Language Modifications - Electronic Compliance Auditing Tool Disadvantaged Business Enterprise ReportingApproved6/20/2022\$1,650,00091.1Additional Customer Information Center Enclosure and Component ModificationsApproved6/20/2022					\$208,000.00
77.3Pavement Modifications and Restoration Along Embedded Tracks and Grade CrossingsApproved6/7/2023\$1,300,00077.4Pavement Modifications and Restoration Additional FundingApproved5/28/2025\$350,00079MSF Permit Drawings and RevisionsApproved6/24/2022\$3,000,00080Contract Language Modifications Escrow DocumentsApproved4/12/2022\$3,000,00082Third-Party Utility Work - Southern California Gas: Expose Abandoned Gas LinesApproved6/9/2022\$100,00082.1Third-Party Utility Work - AT&TApproved6/21/2022\$108,00083Additional Storage of Four TPSS Units at FactoryApproved6/21/2022\$208,00086.1OCS Pole Grounding Conduit Routing at PEROWApproved5/24/2022\$200,00086.1OCS and Platform Grounding Conduit Additional FundingApproved4/18/2023\$300,00088Traction Power Sub-Station Grounding RevisionsApproved6/6/2022\$229,8389Equipment and Security UpgradesApproved6/22/2022\$2,200,00089.1Additional Security ModificationsApproved6/11/2025\$750,00089.2MSF Access Control SupplementalPending\$350,00090Contract Language Modifications - Electronic Compliance Auditing Tool Disadvantaged Business Enterprise ReportingApproved6/20/2022\$1,650,00091.1Additional Customer Information Center Enclosure and Component ModificationsApproved6/28/2023\$30,00,00092 <td>77.1</td> <td>Pavement Modifications Along Embedded Tracks and Grade Crossings</td> <td>Approved</td> <td>5/3/2022</td> <td>\$400,000.00</td>	77.1	Pavement Modifications Along Embedded Tracks and Grade Crossings	Approved	5/3/2022	\$400,000.00
77.4 Pavement Modifications and Restoration Additional Funding Approved Ap					\$480,000.00
79 MSF Permit Drawings and Revisions Approved 6/24/2022 \$3,000,000 80 Contract Language Modifications Escrow Documents Approved 4/12/2022 \$\$ 82 Third-Party Utility Work - Southern California Gas: Expose Abandoned Gas Lines Approved 6/9/2022 \$100,000 82.1 Third-Party Utility Work - AT&T Approved 6/21/2022 \$108,000 82.1 Third-Party Utility Work - AT&T Approved 6/21/2022 \$108,000 82.1 Third-Party Utility Work - AT&T Approved 6/21/2022 \$108,000 82.1 Third-Party Utility Work - AT&T Approved 6/21/2022 \$208,000 83.1 OCS Pole Grounding Conduit Routing at PEROW Approved 5/24/2022 \$200,000 86.1 OCS and Platform Grounding Conduit Additional Funding Approved 4/18/2023 \$300,000 83.1 Traction Power Sub-Station Grounding Revisions Approved 6/6/2022 \$2,200,000 89.1 Additional Security Upgrades Approved 6/22/2022 \$2,200,000 89.1 Additional Security Modifications Approved 6/11/2025 \$750,000 89.2 MSF Access Control Supplemental Pending Pending Pending Sissiness Enterprise Reporting Pending Sissiness Enterprise Reporting Pending Pending Sissiness Enterprise Reporting Pending Sissiness Enterprise Reporting Pending Sissiness Pending					\$1,300,000.00
80 Contract Language Modifications Escrow Documents 82 Third-Party Utility Work - Southern California Gas: Expose Abandoned Gas Lines 83 Additional Storage of Four TPSS Units at Factory 84 Approved 85 Approved 86 Approved 86 Approved 86 OCS Pole Grounding Conduit Routing at PEROW 86 OCS and Platform Grounding Conduit Additional Funding 87 Equipment and Security Upgrades 88 Equipment and Security Upgrades 89 Equipment and Security Upgrades 89 Approved 89 Approved 89 Approved 89 Approved 89 Approved 89 Contract Language Modifications - Electronic Compliance Auditing Tool Disadvantaged 89 Business Enterprise Reporting 90 Customer Information Center Enclosure and Component Modifications 91 Additional Customer Information Center Enclosure and Component Modifications 92 Changes to Platform SCE Meter Pedestals 93 Wheel Turing Pit Modifications Approved 87 Sp. 90 89 Sproved 8		Ţ .			\$350,000.00
S2 Third-Party Utility Work - Southern California Gas: Expose Abandoned Gas Lines Approved 6/9/2022 \$100,000					\$3,000,000.00
82.1 Third-Party Utility Work - AT&T 83 Additional Storage of Four TPSS Units at Factory 84 Approved 85 OCS Pole Grounding Conduit Routing at PEROW 85 OCS and Platform Grounding Conduit Additional Funding 86 Approved 87 Traction Power Sub-Station Grounding Revisions 88 Traction Power Sub-Station Grounding Revisions 89 Equipment and Security Upgrades 89 Approved 89.1 Additional Security Modifications 89.2 MSF Access Control Supplemental 90 Contract Language Modifications - Electronic Compliance Auditing Tool Disadvantaged Business Enterprise Reporting 91 Customer Information Center Enclosure and Component Modifications 92 Changes to Platform SCE Meter Pedestals 93 Wheel Turing Pit Modifications Approved 86 (22/2022 \$108,000 \$209,831 \$300,000 \$4,18/2023 \$209,831 \$209,831 \$4,800 \$4,18/2025 \$4,200,000 \$4,18/2022 \$1,650,000 \$4,18/2022 \$1,650,000 \$4,18/2023 \$1,650,000 \$4,18/2025 \$1,000,000 \$4,18/2025 \$1,000,000 \$4,18/2025 \$1,848 \$4,849 \$4,18/2025 \$4,940,000 \$4,18/2025 \$4,940,000 \$4,18/2025 \$4,000,000 \$4,000					\$100,000.00
Additional Storage of Four TPSS Units at Factory 86 OCS Pole Grounding Conduit Routing at PEROW 86.1 OCS and Platform Grounding Conduit Additional Funding 87 Traction Power Sub-Station Grounding Revisions 88 Equipment and Security Upgrades 89 Equipment and Security Upgrades 89.1 Additional Security Modifications 89.2 MSF Access Control Supplemental 90 Contract Language Modifications - Electronic Compliance Auditing Tool Disadvantaged Business Enterprise Reporting 91 Customer Information Center Enclosure and Component Modifications 92 Changes to Platform SCE Meter Pedestals 93.1 MSF Jib Cranes 94 Traffic Signal Pole Modifications Approved 6/21/2022 \$209,83 \$200,000 Approved 6/6/2022 \$2,200,000 Approved 6/6/2022 \$2,200,000 6/22/2022 \$2,200,000 Approved 6/21/2022 \$2,200,000 Approved 6/11/2025 \$750,000 Approved 11/17/2022 \$1,650,000 91.1 Additional Customer Information Center Enclosure and Component Modifications Approved 6/20/2022 \$1,650,000 \$1,000,000 \$20,000 Approved 6/28/2023 \$208,610 Approved 8/18/2025 \$96,930 93 Wheel Turing Pit Modifications Approved 8/18/2025 \$96,930 94 Traffic Signal Pole Modifications Approved 6/22/2022 \$800,000					\$108,000.00
86.1 OCS and Platform Grounding Conduit Additional Funding 88 Traction Power Sub-Station Grounding Revisions 89 Equipment and Security Upgrades 89.1 Additional Security Modifications 89.2 MSF Access Control Supplemental 90 Contract Language Modifications - Electronic Compliance Auditing Tool Disadvantaged Business Enterprise Reporting 91 Customer Information Center Enclosure and Component Modifications 92 Changes to Platform SCE Meter Pedestals 93.1 MSF Jib Cranes 94 Traffic Signal Pole Modifications Approved 4/18/2023 \$300,000 \$20,000 \$20,000 \$4,18/2022 \$1,650,000 \$4,18/2023 \$2,200,000 \$4,18/2025 \$2,200,000 \$4,18/2025 \$2,200,000 \$4,18/2025 \$3,000 \$4,18/2025 \$3,18,480 \$4,18/2025 \$3,000 \$4,18/2025 \$3,18,480 \$4,18/2025 \$3,18,480 \$4,18/2025 \$3,000 \$4,18/2025 \$3,18,480 \$4,18/2025 \$3,18,480 \$4,18/2025 \$3,000 \$4,18/2025 \$3,18,480 \$4,18/2025 \$3,18,480 \$4,18/2025 \$3,000 \$4,18/2025 \$3,18,48		• •			\$208,000.00
Traction Power Sub-Station Grounding Revisions 89 Equipment and Security Upgrades 89.1 Additional Security Modifications 89.2 MSF Access Control Supplemental 90 Contract Language Modifications - Electronic Compliance Auditing Tool Disadvantaged Business Enterprise Reporting 91 Customer Information Center Enclosure and Component Modifications 92 Changes to Platform SCE Meter Pedestals 93.1 Wheel Turing Pit Modifications Papproved	86		Approved	5/24/2022	\$200,000.00
89 Equipment and Security Upgrades Approved 6/22/2022 \$2,200,000 89.1 Additional Security Modifications Approved 6/11/2025 \$750,000 89.2 MSF Access Control Supplemental Pending \$350,000 90 Contract Language Modifications - Electronic Compliance Auditing Tool Disadvantaged Business Enterprise Reporting Approved 6/20/2022 \$1,650,000 91.1 Additional Customer Information Center Enclosure and Component Modifications Pending \$1,000,000 92 Changes to Platform SCE Meter Pedestals Approved 6/28/2023 \$208,613 93 Wheel Turing Pit Modifications Approved 8/18/2025 \$96,933 93.1 MSF Jib Cranes Approved 6/22/2022 \$800,000	86.1	OCS and Platform Grounding Conduit Additional Funding	Approved	4/18/2023	\$300,000.00
89.1 Additional Security Modifications 89.2 MSF Access Control Supplemental 90 Contract Language Modifications - Electronic Compliance Auditing Tool Disadvantaged Business Enterprise Reporting 91 Customer Information Center Enclosure and Component Modifications 91 Additional Customer Information Center Enclosure and Component Modifications 92 Changes to Platform SCE Meter Pedestals 93 Wheel Turing Pit Modifications Approved					\$209,839.49
89.2 MSF Access Control Supplemental Pending \$350,000 90 Contract Language Modifications - Electronic Compliance Auditing Tool Disadvantaged Business Enterprise Reporting 91 Customer Information Center Enclosure and Component Modifications Approved 6/20/2022 \$1,650,000 91.1 Additional Customer Information Center Enclosure and Component Modifications Pending \$1,000,000 92 Changes to Platform SCE Meter Pedestals Approved 6/28/2023 \$208,613 93 Wheel Turing Pit Modifications Approved 2/2/2024 \$318,480 93.1 MSF Jib Cranes Approved 8/18/2025 \$96,930 94 Traffic Signal Pole Modifications Approved 6/22/2022 \$800,000					\$2,200,000.00
90 Contract Language Modifications - Electronic Compliance Auditing Tool Disadvantaged Business Enterprise Reporting 91 Customer Information Center Enclosure and Component Modifications Approved 6/20/2022 \$1,650,000 91.1 Additional Customer Information Center Enclosure and Component Modifications Pending 92 Changes to Platform SCE Meter Pedestals Approved 93 Wheel Turing Pit Modifications Approved 93.1 MSF Jib Cranes Approved 8/18/2025 \$96,930 94 Traffic Signal Pole Modifications Approved Approved Approved 6/22/2022 \$800,000			• •	6/11/2025	\$750,000.00 \$350,000.00
Business Enterprise Reporting 91 Customer Information Center Enclosure and Component Modifications 91.1 Additional Customer Information Center Enclosure and Component Modifications 92 Changes to Platform SCE Meter Pedestals 93 Wheel Turing Pit Modifications 93.1 MSF Jib Cranes 94 Traffic Signal Pole Modifications 95 Approved 96/28/2023 97 Sp6,93		• • • • • • • • • • • • • • • • • • • •		11/17/2022	\$350,000.00
91 Customer Information Center Enclosure and Component Modifications Approved 6/20/2022 \$1,650,000 91.1 Additional Customer Information Center Enclosure and Component Modifications Pending \$1,000,000 92 Changes to Platform SCE Meter Pedestals Approved 6/28/2023 \$208,613 93 Wheel Turing Pit Modifications Approved 2/2/2024 \$318,480 93.1 MSF Jib Cranes Approved 8/18/2025 \$96,930 94 Traffic Signal Pole Modifications Approved 6/22/2022 \$800,000	55		Aprioreu	17172022	Ψ0.00
92 Changes to Platform SCE Meter Pedestals Approved 6/28/2023 \$208,61 93 Wheel Turing Pit Modifications Approved 2/2/2024 \$318,48 93.1 MSF Jib Cranes Approved 8/18/2025 \$96,93 94 Traffic Signal Pole Modifications Approved 6/22/2022 \$800,000	91		Approved	6/20/2022	\$1,650,000.00
93 Wheel Turing Pit Modifications Approved 2/2/2024 \$318,48 93.1 MSF Jib Cranes Approved 8/18/2025 \$96,93 94 Traffic Signal Pole Modifications Approved 6/22/2022 \$800,000		•			\$1,000,000.00
93.1 MSF Jib Cranes Approved 8/18/2025 \$96,930 94 Traffic Signal Pole Modifications Approved 6/22/2022 \$800,000					\$208,613.05
94 Traffic Signal Pole Modifications Approved 6/22/2022 \$800,000		-			\$318,486.42
					\$96,938.87
96 Relocate Bumping Posts and Train Signal Cabinet at Harbor Station Approved 6/22/2022 \$400,000					\$400,000.00

CCO No.	Title	Status	Date	Cost
o o o	10	Giaido	Executed	3001
104	MSF Ductwork and Louvers Revised Plans	Approved	8/1/2025	\$48,934.50
105	Modifications to the Track Slab Detail to Clear Utility Conflicts	Approved	5/18/2023	\$3,500,000.00
108	Traffic Signal and Pedestrian Crossing Equipment Modifications	Approved	9/17/2024	\$253,851.23
108.1	Traffic Signal and Pedestrian Crossing Modifications	Pending		\$21,946.41
110	Malcom and Spectrum Utility Concurrent Impacts (Claim 09) Manual Train Control Override	Approved	12/30/2021	\$123,714.20
117 117.1	Manual Train Control Override Manual Train Control Override Additional Funding	Approved Approved	4/29/2022 6/9/2022	\$208,000.00 \$700,000.00
118	Added Pedestrian Crossing and Updated City Standard Signage	Approved	6/6/2024	\$64,411.79
130	Drainage and Traction Power Underground Conflicts	Approved	10/11/2023	\$138,724.00
133	MSF Western Concrete Masonry Unit Wall Modifications	Approved	1/27/2023	\$208,000.00
139	Soundwall #2 CIDH Foundation Adjustments	Approved	7/24/2023	\$29,570.95
140	TPSS Additional Rear Doors	Approved	9/28/2023	\$64,275.10
145	Structural Steel Quality Control Inspection and Testing	Approved	5/31/2022	\$350,000.00
146 148	Train Signal Modifications Emergency Communication Devices	Approved Approved	6/14/2022 2/17/2023	\$850,000.00 \$195,000.00
150	Fourth Street Extended Work Hours and Public Safety	Approved	9/28/2022	\$500,000.00
150.1	Fourth Street Extended Work Hours and Public Safety Additional Funding	Approved	12/15/2022	\$800,000.00
150.2	Fourth Street Extended Work Hours Additional Funding	Approved	6/18/2024	\$250,000.00
157	Traffic Control Allowance Extension (Bid Item 33)	Approved	2/6/2023	\$208,000.00
157.1	Traffic Control Allowance Extension (Bid Item 33)	Approved	9/21/2023	\$300,000.00
158	Station Canopy Glass Price Escalation	Approved	10/17/2022	\$72,607.09
161 164	Contract Language Modification - Article 9 - Notices Station Platform, Parking Lot, and Sasscer Park Lights	Approved Approved	11/17/2022 5/18/2023	\$0.00 \$300,000.00
169	Traffic Signal Systems Spare Equipment for City of Santa Ana	Approved	3/28/2025	\$56,626.20
170	Station Spare Parts	Approved	1/2/2025	\$518,592.05
173	Buried OCS Pole Grounding	Approved	8/22/2024	\$209,500.00
173.1	Buried OCS Pole Grounding	Approved	8/27/2024	\$123,643.00
175 175.1	Additional Fence and Gates to Minimize Trespassing in PE ROW Additional Fence and Gates to Minimize Trespassing in PE ROW	Approved Pending	5/6/2025	\$198,210.15 \$200,000.00
177	Traffic Signal Plan Revisions: Utilizing Different Anchor Bolt Patterns	Approved	1/27/2023	\$208,000.00
177.1	Traffic Signal Pole Revisions Additional Funding	Approved	5/5/2025	\$100,000.00
178	Station Standby Lighting	Approved	12/16/2024	\$127,795.00
180	Miscellaneous Minor Changes at MSF	Approved	8/29/2025	\$51,406.77
182 183	Homeless Security and Cleanup Track Switch Indication Lights	Approved Approved	2/16/2023 2/28/2023	\$208,000.00 \$480,000.00
184	Santa Ana Boulevard Extended Hours	Approved	12/14/2022	\$208,000.00
185	Additional Builder Risk Insurance	Approved	2/8/2023	\$550,000.00
186	MSF Catenary Interlock System	Approved	2/17/2023	\$208,000.00
186.1	MSF Interlock System Additional Funding	Approved	12/27/2024	\$781,619.17
187 187.1	Schedule Impacts Associated with TIE 08 Schedule Impacts Associated with TIE 08	Approved Approved	10/24/2022 6/22/2023	\$0.00 \$2,847,000.00
188	Relocation of the Traction Power Track Connection Boxes in Segment 4	Approved	5/23/2024	(\$102,757.22)
189	MSF Grounding Additions	Approved	3/28/2025	\$178,283.21
190	Track Bumping Post Modifications	Approved	6/13/2024	\$206,920.32
191	Four-Fold and Coiling Doors at the MSF	Approved	6/20/2023	\$300,902.44
193 194	Embedded Track Transition to Paved Ballasted Track Malcom's Differing Site Condition Impacts for CIDH Pile Installation (Claim 10)	Approved Approved	2/20/2024 3/16/2023	\$182,498.67 \$209,999.00
195	Schedule Impacts Associated with TIE 12	Approved	3/27/2023	\$0.00
195.1	Schedule Impacts Associated with TIE 12	Approved	6/20/2023	\$1,249,403.38
195.2	Schedule Impacts Associated with TIE 12	Approved	5/3/2024	\$245,501.00
195.3	Schedule Impacts Associated with TIE 12	Approved	5/6/2024	\$940,580.78
196 197	Shore Power at the MSF OCS Pole and Foundation Revisions	Approved Approved	8/13/2024 6/19/2023	\$363,651.56 \$128,706.34
197	Fourth Street Planter Lighting, Irrigation Wiring, and Power Modifications	Approved	9/16/2024	\$85,247.00
199	Improvements at Civic Center Plaza	Approved	3/16/2023	\$208,000.00
200	Infrastructure for Electric Vehicle Charger at Santa Ana Regional Transportation Center	Approved	8/21/2023	\$25,000.00
201	Intumescent Fireproof Coating on Structural Steel at the MSF	Approved	12/29/2023	\$450,000.00
201.1	Intumescent Fireproof Coating on Structural Steel at the MSF Sidewalk Paver Material and Labor Escalation	Approved Approved	5/29/2024 6/19/2023	\$123,039.00 \$209,730.72
203	MSF Pedestal Track Spacing M1-M2	Approved	12/28/2023	\$209,730.72
206	Track Isolation at end of Embedded Track	Approved	6/6/2024	\$119,790.41
207	Sewer Ejector Changes at MSF	Approved	2/1/2024	\$208,221.98
208	Ultrasonic Cleaner Model Changes	Approved	6/7/2024	\$44,401.70
209 210	Harbor OCS Modifications MSF Extended Work Hours	Approved Approved	2/4/2025 1/3/2024	\$205,657.98 \$209,500.00
210	OCS Pole Re-Raking and Adjustment	Approved	6/4/2024	\$208,000.00
212	Restraining Rail Conflicts at M1, M2, M3 and Y1 Tracks	Approved	5/8/2024	\$35,426.59
213	Various Sidewalk and Brick Restoration Work	Approved	8/12/2024	\$209,500.00
214	SCE Switchgear Breaker Setting and Commissioning	Approved	4/30/2024	\$143,986.69
215 217	Emergency Walkway Track Crossing at Raitt Street and Fairview Street Platform Improvements at Sasscer Park	Approved Approved	12/28/2023	\$113,812.10 \$209.298.00
217	Ross Street Intersection Modifications	Approved Approved	5/8/2024 8/30/2024	\$209,298.00 \$140,421.07
221	Electrical Modifications at Sasscer Park	Approved	8/30/2024	\$128,045.06
222	SCE Electrical and Service Connections at Various Intersections	Approved	12/27/2024	\$368,980.95

Train Control Battery Backup	000 N	T***	01-1	D-1-	0 1
Train Control Battery Backup 2526 Train Control Battery Backup 2526 Train Cispinal Pole and Mask Arm Adjustments at Santiago Street, Shelton Street, and Approved 9767024 532,702.0	CCO No.	Title	Status	Date	Cost
Traffic Signal Pole and Mast Arm Adjustments at Santiago Street, and Briston Street, and Briston Street and Briston Street and Briston Modifications Due to the City of Santa Ana Bikk Lane Project Approved				Executed	
Bristol Street Approved 8/30/2024 345,886.0	225		Approved	9/17/2024	\$349,848.89
227 Traffic Signal and Striping Modifications Dus to the Oity of Santa Ana Bilke Lane Project Approved 611/2024 243, 894.88.89 228 OSF Aceder Cable Therif Protection Approved 1916/2024 243, 894.88 239 Traffic Signal Cabinet Relocation Sycamore Street and Santa Ana Boulevard Approved 671/2024 318, 500.00 232 Platform Modifications Approved Approved 771/2025 318, 377.88 233 MSF information Technology Room and Data Port and Communication Device Changes Approved 771/2025 317.287 233 MSF information Technology Room and Data Port and Communication Device Changes Approved 771/2025 317.287 233 MSF information Technology Room and Data Port and Communication Device Changes Approved 781/2025 347,757.00 3234 Schedule Impacts Associated with Title 18 Approved Approved 781/2025 347,757.00 347,	226	Traffic Signal Pole and Mast Arm Adjustments at Santiago Street, Shelton Street, and	Approved	9/26/2024	\$52,702.00
228 CSF Feeder Cable Theft Protection Approved Approved 918202 230 Traffic Signal Cabiner Relocation Systems and Santa Ana Boulevard Approved 918202 938,378,38 231 Bid Item 61 (Utility Service Fee) Extension Approved 1187,2024 376,463,3 2321. Platform Modifications Approved 1182024 378,663,3 2321. Platform Modifications Approved 1182024 378,663,0 232,873,3 2331. MSF IT Upgrades Supplemental Approved 1182024 378,785,0 232,873,2 232					
231 Bit Iden ## (Utility Swrice Fee) Extension	227	Traffic Signal and Striping Modifications Due to the City of Santa Ana Bike Lane Project	Approved	8/30/2024	\$45,088.00
	228			10/14/2024	\$243,904.68
223.1 Platform Modifications Approved 71/13/2026 \$12,628.57. 233.1 MSF Information Technology Room and Data Port and Communication Device Changes Approved 11/18/2026 \$1,519,573.02. 233.1 MSF Information Technology Room and Data Port and Communication Device Changes Approved 41/18/2024 \$1,519,573.02. 234 Schedule Impacts Associated with TiE 18 Approved 40/11/2024 \$7,050.03. 235 Diesel Particulate Filter 47,050.03.03.03.03.03.03.03.03.03.03.03.03.03	230	Traffic Signal Cabinet Relocation Sycamore Street and Santa Ana Boulevard		9/16/2024	\$93,878.89
232.1 Platform Modifications Approved 17/21/2025 \$152,857.97				6/7/2024	\$185,000.00
233.1 MSF Information Technology Room and Data Port and Communication Device Changes Approved 11/18/2024 \$1,519,575.02 234.1 Schedule Impacts Associated with TIE 18 Approved 58/2024 \$3,00 235.2 Disea Particulate Filter Approved 58/2024 \$3,00 237.2 Garfield Street and Sycamore Street SCE Services Pedestals and Foundation Changes Approved 9/30/2024 \$5,00 237.2 Service Filter Approved 9/30/2024 \$5,00 \$6,00 241.1 Modifications to the East and West Cates at MSF Approved 6/9/2025 \$36,80 \$4,00 242.2 CCS Pote Ground Repair in PE ROW Approved 6/9/2025 \$33,68 \$13.4 243.2 Overhead Utility Conflicts at Mortimer Street and Santa Ana Boulevard - Traffic Signal Approved 19/12/2024 \$33,498.3 244.5 Surp Pump Removal from Elevator Approved 19/12/2024 \$33,498.3 \$34,98.2 245.6 Modifications to Signage, Push Buttons, and Signal Heads Approved 19/14/2024 \$22,769.2 249.1 Lay Platform Landscape, Changes Approved 57/12/2025 \$352,000.00 250.1 Modify Pumps in the Wheel Truing and Service and inspection Pit <td></td> <td></td> <td></td> <td></td> <td>\$70,648.35</td>					\$70,648.35
2331 MSF IT Upgrades Supplemental Pending \$417,576.0 \$0.00					\$122,857.93
Schedule Impacts Associated with TIE 18				11/18/2024	\$1,519,579.00
237					\$417,576.00
237 TSS 9th Alternative Installation Method	234		Approved	5/8/2024	\$0.00
TPSS #01 Alternative Installation Method					\$77,050.69
241 Modifications to the East and West Gates at MSF					
242 OCS Pole Ground Repair in PE ROW					\$40,000.00
243 Overhead Utility Conflicts at Mortimer Street and Santa Ana Boulevard - Traffic Signal Approved 1/21/22024 \$38,498.2 244 Sump Pump Remord from Elevator Approved 1/31/22025 \$45,897.2 245 Parton Street and Santa Ana Boulevard Sidewalk Restoration Approved 1/14/2024 \$76,618.3 246 Modifications to Signage, Push Buttons, and Signal Heads Approved 1/14/2024 \$76,618.3 249 Laxy Platform Landscape Changes Approved 7/71/2025 \$350,000.0 250.1 Modify Pumps in the Wheel Truing and Service and Inspection Pit Approved 5/71/2025 \$39,005.0 250.1 Accelerated Schedule Agreement Approved 4/71/2025 \$30,000.0 251.1 Accelerated Schedule Agreement Pending \$90/20224 \$40,338,054.0 252.2 Public Conveyance and Safety Enhancements Approved 2/12/2025 \$150,000.0 252.1 Pacilic Conveyance and Safety Enhancements Approved 2/4/2025 \$150,000.0 252.2 Public Conveyance and Safety Enhancements Approved 2/4/2025 \$100,000.0					\$366,813.41
Sump Pump Removal from Elevator		,	Approved	2/4/2025	\$148,044.06
245 Parton Street and Santa Ana Boulevard Sidewalk Restoration Approved 1/11/2024 322,753.2 248 MSF Service and Inspection PIt Access Controlled Gate Revisions Pending 3530,000.0 5350,000.0 3530,000.0 3590,000.0					\$38,498.93
248 MS Fervice and Inspection Pit Access Controlled Gate Revisions					\$45,697.23
MSF Service and Inspection Pit Access Controlled Gate Revisions					\$22,763.02
249 Lacy Platform Landscape Changes	246			11/13/2024	\$76,618.35
250	248		Pending		\$350,000.00
251	249				\$49,908.54
251 Accelerated Schedule Agreement Approved 9/30/2024 \$40,338,084.00 251.1 Accelerated Schedule Agreement Pendling \$1,100,000.00 252.2 Public Conveyance and Safety Enhancements Approved 2/12/2025 \$150,000.00 252.1 Public Conveyance and Safety Enhancements Pending \$250,000.00 \$250,000.00 253 SC Invoices for Relocations due to General Order 95 Conflicts Approved 2/4/2025 \$150,000.00 254 Fairview Street Crossing Traffic Signal Poles Conflict with Overhead SCE Lines Approved 2/4/2025 \$21,225.3 255 OCS Modifications Pending \$350,000.00 \$350,000.00 255.1 OCS Modifications Approved 4/11/2025 \$200,000.00 258 Harbor Boulevard Station Adjustments Approved 4/11/2025 \$200,000.00 259 CS Modifications Approved 4/11/2025 \$200,000.00 260 MSF Finishes Approved 3/12/2025 \$200,000.00 261 Auxilliary Contact Wire at Eastbound Track 5 Approved 3/12/2025 </td <td>250</td> <td></td> <td></td> <td>5/7/2025</td> <td>\$325,000.00</td>	250			5/7/2025	\$325,000.00
251.1 Accelerated Schedule Agreement Pending \$1,100,000.0 252 Public Conveyance and Safety Enhancements Approved 2/12/2025 \$150,000.0 253 SCE Invoices for Relocations due to General Order 95 Conflicts Approved 2/4/2025 \$150,000.0 254 Fairwiew Street Crossing Traffic Signal Poles Conflict with Overhead SCE Lines Approved 2/4/2025 \$210,225.3 255 OCS Modifications Pending \$350,000.0 255.1 OCS Modifications Pending \$350,000.0 256 Harbor Boulevard Station Adjustments Approved 4/11/2025 \$200,000.0 250 MSF Finishes Approved 3/47/2025 \$200,000.0 261 OCS Cross Contact Assemblies on Hand Approved 3/47/2025 \$200,000.0 262 Auxiliary Contact Wire at Eastbound Track 5 Approved 8/29/2025 \$76,182.2 263 Communication Interface Cabinet Battery Replacement Approved 7/31/2025 \$203,000.0 264 MSF Room 124 Added Fan Coil Units Approved 7/21/2025 \$203,325.2	250.1				\$50,000.00
252	251	Accelerated Schedule Agreement	Approved	9/30/2024	\$40,338,054.00
252.1 Public Conveyance and Safety Enhancements Pending \$250,000.00 253 SCE Invoices for Relocations due to General Order 95 Conflicts Approved 2/4/2025 \$150,000.00 254 Fairview Street Crossing Traffic Signal Poles Conflict with Overhead SCE Lines Approved 1/21/2025 \$200,000.00 255.1 OCS Modifications Approved 1/21/2025 \$200,000.00 258.1 OCS CS Modifications Approved 4/11/2025 \$200,000.00 258.1 OCS CS Modifications Approved 4/11/2025 \$200,000.00 260 MSF Finishes Approved 3/13/2025 \$200,000.00 261 OCS Cross Contact Assemblies on Hand Approved 3/4/2025 \$200,000.00 262 Auxiliary Contact Wire at Eastbound Track 5 Approved 8/29/2025 \$76,182.21 263 Communication Interface Cabinet Battery Replacement Approved 5/8/2025 \$202,329.56 264 MSF Rodon Interface Cabinet Battery Replacement Approved 5/8/2025 \$202,329.56 265 MSF Bridge Crane Conflicts with Mechanical, Electrical, and			Pending		\$1,100,000.00
253 SCE Invoices for Relocations due to General Order 95 Conflicts Approved 2/4/2025 \$15,000.00 254 Fairview Street Crossing Traffic Signal Poles Conflict with Overhead SCE Lines Approved 2/4/2025 \$21,225.31 255. OCS Modifications Pending \$350,000.00 258 Harbor Boulevard Station Adjustments Approved 4/11/2025 \$200,000.00 260 MSF Finishes Approved 3/13/2025 \$200,000.00 261 OCS Cross Contact Assemblies on Hand Approved 3/4/2025 \$200,000.00 262 Auxiliary Contact Wire at Eastbound Track 5 Approved 8/29/2025 \$76,182.21 263 Communication Interface Cabinet Battery Replacement Approved 3/1/2025 \$200,000.00 264 MSF Room 124 Added Fan Coll Units Approved 7/3/1/2025 \$202,329.56 265 MSF Bridge Crane Conflicts with Mechanical, Electrical, and Plumbing (MEP) Approved 3/14/2025 \$200,000.00 266.1 MSF Systems Approved 3/12/2025 \$200,000.00 3/14/2025 \$200,000.00 267.7		Public Conveyance and Safety Enhancements	Approved	2/12/2025	\$150,000.00
254 Fairview Street Crossing Traffic Signal Poles Conflict with Overhead SCE Lines Approved 2/4/2025 \$21,225.3* 255 OCS Modifications Approved 1/21/2025 \$200,000.00 258.1 OCS Modifications Pending \$350,000.00 258.1 Harbor Boulevard Station Adjustments Approved 4/11/2025 \$200,000.00 260 MSF Finishes Approved 3/4/2025 \$200,000.00 261 OCS Cross Contact Assemblies on Hand Approved 3/4/2025 \$200,000.00 262 Auxiliary Contact Wire at Eastbound Track 5 Approved 8/29/2025 \$76,182.21 263 Communication Interface Cabinet Battery Replacement Approved 5/6/2025 \$202,329.55 264 MSF Room 124 Added Fan Coil Units Approved 7/31/2025 \$169,335.00 265 MSF Bridge Crane Conflicts with Mechanical, Electrical, and Plumbing (MEP) Approved 7/21/2025 \$202,329.50 266 MSF Systems Approved 3/28/2025 \$250,000.00 265.1 MSF Systems Approved 3/28/2025	252.1		Pending		\$250,000.00
255 OCS Modifications			Approved	2/4/2025	\$150,000.00
255.1 OCS Modifications Pending \$350,000.0 258 Harbor Boulevard Station Adjustments Approved 4/11/2025 \$200,000.0 260 MSF Finishes Approved 3/13/2025 \$200,000.0 261 OCS Cross Contact Assemblies on Hand Approved 3/4/2025 \$200,000.0 262 Auxiliary Contact Wire at Eastbound Track 5 Approved 8/29/2025 \$76,182.2 263 Communication Interface Cabinet Battery Replacement Approved 7/6/2025 \$202,329.5 264 MSF Rom 124 Added Fan Coil Units Approved 7/21/2025 \$169,835.0 265 MSF Bridge Crane Conflicts with Mechanical, Electrical, and Plumbing (MEP) Approved 7/21/2025 \$200,000.0 266. MSF Systems Approved 3/14/2025 \$200,000.0 267. Wheel Truing Machine Testing Approved 3/28/2025 \$92,397.0 268. MSF Additional Roof and Deck MEP Angle Supports Approved 5/8/2025 \$92,397.0 268. MSF Additional Roof and Deck MEP Angle Supports Approved 5/8/2025 <	254	Fairview Street Crossing Traffic Signal Poles Conflict with Overhead SCE Lines		2/4/2025	\$21,225.37
258 Harbor Boulevard Station Adjustments Approved 4/11/2025 \$200,000.00 260 MSF Finishes Approved 3/13/2025 \$200,000.00 261 OCS Cross Contact Assemblies on Hand Approved 3/4/2025 \$200,000.00 262 Auxiliary Contact Wire at Eastbound Track 5 Approved 8/29/2025 \$76,182.21 263 Communication Interface Cabine Battery Replacement Approved 5/6/2025 \$202,329.51 264 MSF Room 124 Added Fan Coil Units Approved 7/31/2025 \$169,835.0 265 MSF Bridge Crane Conflicts with Mechanical, Electrical, and Plumbing (MEP) Approved 7/21/2025 \$200,000.0 266.1 MSF Systems Pending \$250,000.0 \$200,000.0 266.1 MSF Systems Pending \$250,000.0 \$200,000.0 267 Wheel Truing Machine Testing Approved 3/28/2025 \$92,397.0 268.1 MSF Additional Roof and Deck MEP Angle Supports Pending \$59,202.5 268.1 MSF IR Room Power Distribution Unit Update Approved 7/21/2025 <td< td=""><td></td><td></td><td></td><td>1/21/2025</td><td>\$200,000.00</td></td<>				1/21/2025	\$200,000.00
260 MSF Finishes	255.1	OCS Modifications	Pending		\$350,000.00
261 OCS Cross Contact Assemblies on Hand Approved 3/4/2025 \$200,000.00 262 Auxillary Contact Wire at Eastbound Track 5 Approved 5/6/2025 \$76,182.21 263 Communication Interface Cabinet Battery Replacement Approved 5/6/2025 \$202,329.51 264 MSF Room 124 Added Fan Coil Units Approved 7/31/2025 \$169,835.00 265 MSF Bridge Crane Conflicts with Mechanical, Electrical, and Plumbing (MEP) Approved 3/14/2025 \$200,000.00 266.1 MSF Systems Approved 3/14/2025 \$200,000.00 266.1 MSF Systems Pending \$250,000.00 267 Wheel Truing Machine Testing Approved 3/28/2025 \$92,397.00 268 MSF Additional Roof and Deck MEP Angle Supports Approved 5/8/2025 \$99,232.81 268.1 MSF IT Room Power Distribution Unit Update Approved 7/21/2025 \$34,920.11 270 MSF IT Room Power Distribution Unit Update Approved 7/21/2025 \$34,920.11 271 MSF Lactation Room 109 and Breakroom Room 110 Revisions Ap	258	•		4/11/2025	\$200,000.00
262 Auxiliary Contact Wire at Eastbound Track 5 Approved 8/29/2025 \$76,182.21 263 Communication Interface Cabinet Battery Replacement Approved 5/6/2025 \$202,329.51 264 MSF Romot 124 Added Fan Coil Units Approved 7/31/2025 \$202,329.51 265 MSF Bridge Crane Conflicts with Mechanical, Electrical, and Plumbing (MEP) Approved 7/21/2025 \$200,000.00 266 MSF Systems Approved 3/14/2025 \$200,000.00 266.1 MSF Systems Pending \$250,000.00 267 Wheel Truing Machine Testing Approved 3/28/2025 \$92,397.00 268 MSF Additional Roof and Deck MEP Angle Supports Approved 5/8/2025 \$199,232.81 268.1 MSF Additional Roof and Deck MEP Angle Supports Pending \$58,867.90 270 MSF IIT Room Power Distribution Unit Update Approved 7/21/2025 \$34,920.11 271 MSF Lactation Room 109 and Breakroom Room 110 Revisions Approved 7/21/2025 \$42,795.90 275 Overhead Contact System Pole Twist and Arm Capacity Approved	260		Approved	3/13/2025	\$200,000.00
263 Communication Interface Cabinet Battery Replacement Approved 5/6/2025 \$202,329.56 264 MSF Room 124 Added Fan Coil Units Approved 7/31/2025 \$169,835.00 265 MSF Bridge Crane Conflicts with Mechanical, Electrical, and Plumbing (MEP) Approved 3/14/2025 \$200,000.00 266 MSF Systems Approved 3/14/2025 \$200,000.00 266.1 MSF Systems Pending \$250,000.00 267 Wheel Truing Machine Testing Approved 3/28/2025 \$92,397.00 268 MSF Additional Roof and Deck MEP Angle Supports Approved 5/8/2025 \$199,232.81 268.1 MSF Additional Roof and Deck MEP Angle Supports Pending \$59,867.91 270 MSF IT Room Power Distribution Unit Update Approved 7/21/2025 \$34,920.11 271 MSF SE Lactation Room 109 and Breakroom Room 110 Revisions Approved 7/21/2025 \$42,920.11 275 Overhead Contact System Pole Twist and Arm Capacity Approved 5/25/2025 \$400,000.0 281 MSF Fall Protection Modifications Pending			Approved		\$200,000.00
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 Subtotal Executed CCOs
 \$128,496,552.82

 Subtotal Pending CCOs
 \$6,884,390.31

 TOTAL CCOs
 \$135,380,943.13

 ORIGINAL VALUE
 \$220,538,649.00

 PROPOSED REVISED VALUE
 \$355,919,592.13





October 13, 2025

To: Members of the Board of Directors

Andrea West, Clerk of the Board From:

Subject: Cooperative Agreement with the California Department of

Transportation for the State Route 55 Improvement Project Between

Interstate 5 and State Route 91

Regional Transportation Planning Committee Meeting of October 6, 2025

Present: Directors Foley, Go, Harper, Klopfenstein, Stephens, and

Tavoularis

Director Federico Absent:

Committee Vote

This item was passed by the Members present.

Committee Recommendation(s)

Authorize the Chief Executive Officer to negotiate and execute Cooperative Agreement No. C-5-4264 between the Orange County Transportation Authority and the California Department of Transportation, in the amount of \$139,597,000, for construction capital and construction management support services for the State Route 55 Improvement Project between Interstate 5 and State Route 91.



October 6, 2025

To: Regional Transportation Planning Committee

From: Darrell E. Johnson, Chief Executive Officer

Subject: Cooperative Agreement with the California Department of

Transportation for the State Route 55 Improvement Project

Between Interstate 5 and State Route 91

Overview

The Orange County Transportation Authority proposes to enter into a cooperative agreement with the California Department of Transportation for construction capital and construction management support services for the State Route 55 Improvement Project between Interstate 5 and State Route 91.

Recommendation

Authorize the Chief Executive Officer to negotiate and execute Cooperative Agreement No. C-5-4264 between the Orange County Transportation Authority and the California Department of Transportation, in the amount of \$139,597,000, for construction capital and construction management support services for the State Route 55 Improvement Project between Interstate 5 and State Route 91.

Discussion

The Orange County Transportation Authority (OCTA), in partnership with the California Department of Transportation (Caltrans), is implementing the State Route 55 (SR-55) Improvement Project between Interstate 5 and State Route 91 (Project). The Project is Project F in the Measure M2 (M2) freeway program and is being advanced through the updated Next 10 Delivery Plan adopted by the OCTA Board of Directors (Board) in November 2024.

The Project will add a general purpose lane in each direction between Interstate 5 and State Route 22 and provide operational improvements on the southbound (SB) ramps at Katella Avenue and Lincoln Avenue. An additional lane will be added to the SB SR-55 Katella Avenue off- and on-ramps and the existing SB SR-55 Lincoln Avenue off-ramp will be relocated 1,300 feet to the south, next to the existing SB SR-55 Lincoln Avenue hook on-ramp.

Additionally, the Project provides standard curb ramps and sidewalks within the project improvement areas that improve active transportation options and provide continuity for pedestrians.

On September 9, 2021, the Board authorized Cooperative Agreement No. C-1-3642 with Caltrans to provide oversight of the plans, specifications, and estimates, and to advertise and award the construction contract for the Project.

On July 10, 2023, the Board authorized Cooperative Agreement No. C-3-2465 with Caltrans to implement right-of-way (ROW) activities, which include property appraisals and acquisitions, if necessary, and coordination of utility relocations needed for ROW certification for the Project. In addition, on April 14, 2025, the Board approved Amendment No. 1 to Cooperative Agreement No. C-3-2465 for additional ROW support services. ROW acquisitions are required due to additional ROW needs identified to construct the Project.

A cooperative agreement for the construction phase is required to define the specific roles and funding responsibilities for each agency to provide the construction capital and construction management support services for the Project.

As the implementing agency for construction of the Project, Caltrans will be responsible for the advertisement, award, approval, and administration of the construction contract. Construction bid documents for the Project are currently being prepared for advertisement of the construction contract in fall 2026. The total construction capital funding required for the Project is \$118,828,000 and is funded with M2 funds.

Caltrans and OCTA will share in the construction management support services for the Project. Caltrans will provide the resident engineer, structures representative, and other field personnel, along with construction administrative support and environmental monitoring for the Project, which is estimated to be \$9,207,000 funded with M2 funds. OCTA will retain a consultant firm to augment Caltrans' field staff with roadway inspection, office engineering, materials testing, and claims support services. OCTA's consultant firm will also provide a field office to house construction staff for the Project. The total estimated cost of OCTA's construction support is \$11,562,000 funded with M2 funds. The construction capital and construction support provided by both Caltrans and OCTA yields a total project cost of \$139,597,000.

Additionally, through separate contracts, OCTA will serve as lead agency on the public outreach and freeway service patrol efforts.

Fiscal Impact

The Project will be proposed in OCTA's Fiscal Year (FY) 2026-27 Budget and subsequent FY budgets, Capital Programs Division, account nos. 0017-9084-FF102-0X0 and 0017-9085-FF102-0X0 and will be funded with M2 funds.

Summary

Staff requests Board of Directors' approval for the Chief Executive Officer to negotiate and execute Cooperative Agreement No. C-5-4264 with the California Department of Transportation, in the amount of \$139,597,000, for the State Route 55 Improvement Project between Interstate 5 and State Route 91.

Attachment

None.

Prepared by:

Jeannie Lee, P.E. Senior Project Manager (714) 560-5735 Approved by:

James G. Beil, P.E. Executive Director, Capital Programs (714) 560-5646





October 13, 2025

To: Members of the Board of Directors

From: Andrea West, Clerk of the Board will Will

Subject: Agreement for the Construction of the Inland Slope Rehabilitation

Phase II Project

Transit Committee Meeting of October 9, 2025

Present: Directors Jung, Amezcua, Klopfenstein, Leon, Janet Nguyen, and

Tam T. Nguyen

Absent: Director Sarmiento

Committee Vote

This item was passed by the Members present.

Director Leon was not present to vote on this item.

Committee Recommendation(s)

Authorize the Chief Executive Officer to negotiate and execute Agreement No. C-4-2666 between the Orange County Transportation Authority and Bosco Constructors, Inc., the lowest responsive, responsible bidder, in the amount of \$4,450,000, for construction of the Inland Slope Rehabilitation Phase II Project.



October 9, 2025

To: Transit Committee

From: Darrell E. Johnson, Chief Executive Officer

Subject: Agreement for the Construction of the Inland Slope Rehabilitation

Phase II Project

Overview

The Orange County Transportation Authority's Board of Directors approved the construction of the Inland Slope Rehabilitation Phase II Project as part of the Orange County Transportation Authority's Fiscal Year 2025-26 Budget. Bids were received in accordance with the Orange County Transportation Authority's procurement policies and procedures for public works projects. Board of Directors' approval is requested to execute the construction agreement.

Recommendation

Authorize the Chief Executive Officer to negotiate and execute Agreement No. C-4-2666 between the Orange County Transportation Authority and Bosco Constructors, Inc., the lowest responsive, responsible bidder, in the amount of \$4,450,000, for construction of the Inland Slope Rehabilitation Phase II Project.

Discussion

The Orange County Transportation Authority, (OCTA) has secured state SB 1 (Chapter 5, Statutes of 2017) – Local Partnership Program Formula (SB 1 LPP) funds, matched with local Measure M2 (M2) funds to repair erosion and perform preventative maintenance to avoid slope failures on the railroad right-of-way. Field investigations conducted jointly with the Southern California Regional Rail Authority (SCRRA) identified six sites in the cities of Laguna Niguel, Lake Forest, and Mission Viejo requiring stabilization. These locations consist of steep embankments, ranging from 200 to 700 linear feet in length, that if left unaddressed could undermine the track bed and/or deposit debris onto the tracks, potentially disrupting rail operations.

A geotechnical evaluation was completed in July 2022 with site-specific mitigation recommendations, including grading, shotcrete lining, and open channel culverts. Final design plans and specifications for the Inland Slope Rehabilitation Phase II Project (Project) were completed in April 2025 and are now ready to be implemented. OCTA will lead the construction for all six site locations. Construction is anticipated to begin in January 2026 and be completed within six months. Work will be coordinated closely with SCRRA to minimize rail service impacts, especially during the rainy season when slope stability risks increase.

Procurement Approach

This procurement was handled in accordance with OCTA's Board of Directors-approved procedures for public works projects. These procedures, which conform to state requirements, require contracts to be awarded to the lowest responsive, responsible bidder after a sealed bidding process.

Invitation for Bids (IFB) 4-2666 was released on July 14, 2025, through OCTA's CAMM NET system. The bid was advertised on July 14 and July 21, 2025, in a newspaper of general circulation. A pre-bid conference was held on July 31, 2025, and was attended by five firms. Two addenda were issued to provide the pre-bid conference registration sheets and handle administrative issues related to the IFB. On August 18, 2025, two bids were received and publicly opened.

All bids were reviewed by staff from the Contracts Administration and Materials Management and Rail Programs departments to ensure compliance with the contract terms and conditions and technical specifications. The two bidders and bid amounts is presented below:

Firm and Location	Bid Amount
Bosco Constructors, Inc. Chatsworth, California	\$4,450,000
Legion Contractors, Inc.	\$5,836,000

The OCTA engineer's estimate for this Project was \$5,048,104. The recommended firm's bid is 11.85 percent below the engineer's estimate and is considered by staff to be fair and reasonable.

Agreement for the Construction of the Inland Slope *Page 3* Rehabilitation Phase II Project

State law requires award to the lowest responsive, responsible bidder. As such, state law recommends award to Bosco Constructors, Inc., the lowest responsive, responsible bidder, in the amount of \$4,450,000, for construction of the Project.

Fiscal Impact

The Project is included in OCTA's Fiscal Year 2025-26 Budget, Capital Programs Division, Account No. 0018-9084-C5054-TYR, and is funded by state grant SB 1 LPP and local M2 funds.

Summary

Staff recommends the Board of Directors authorize the Chief Executive Officer to negotiate and execute Agreement No. C-4-2666 between the Orange County Transportation Authority and Bosco Constructors, Inc., the lowest responsive, responsible bidder, in the amount of \$4,450,000, for construction of the Inland Slope Rehabilitation Phase II Project.

Attachment

None.

Prepared by:

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Pia Veesapen Director, Contracts Administration and Materials Management (714) 560-5619 Approved by:

James G. Beil, P.E. Executive Director, Capital Programs

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October 13, 2025

Members of the Board of Directors To:

Andrea West, Clerk of the Board From:

Comprehensive Transportation Funding Programs - Project X Tier 1 Subject:

2025 Call for Projects Programming Recommendations

Regional Transportation Planning Committee Meeting of October 6, 2025

Present: Directors Foley, Go, Harper, Klopfenstein, Stephens, and

Tavoularis

Director Federico Absent:

Committee Vote

This item was passed by the Members present.

Committee Recommendation(s)

Approve the award of \$3,088,766 in Tier 1 Environmental Cleanup Program funding for eight projects.



October 6, 2025

To: Regional Transportation Planning Committee

From: Darrell E. Johnson, Chief Executive Officer

Subject: Comprehensive Transportation Funding Programs – Project X

Tier 1 2025 Call for Projects Programming Recommendations

Overview

The Orange County Transportation Authority's Environmental Cleanup Program provides Measure M2 funding for water quality improvement projects to address transportation-generated pollution. The 2025 Tier 1 Grant Program call for projects was issued on March 10, 2025. Evaluations of the grant applications are now complete, and a list of projects is presented for Board of Directors' review and approval.

Recommendation

Approve the award of \$3,088,766 in Tier 1 Environmental Cleanup Program funding for eight projects.

Background

In May 2010, the Orange County Transportation Authority (OCTA) Board of Directors (Board) approved a two-tiered approach to fund the Measure M2 (M2) Project X Environmental Cleanup Program (ECP). The Tier 1 grant program is designed to mitigate the more visible forms of pollutants, such as litter and debris, which collect on roadways and in catch basins prior to being deposited in waterways and the ocean. The Tier 2 grant program provides funding for larger, multi-jurisdictional, capital-intensive structural treatment best management practice (BMP) types of projects.

Tier 1 funding, which is the focus of the most recent call for projects (call), is available for Orange County local jurisdictions to purchase and install equipment and other related BMPs that supplement, not supplant, current water quality programs. Examples include screens, filters, and inserts for catch basins, as well as other devices designed to remove the above-mentioned pollutants. Proposed projects must demonstrate a direct nexus to the reduction of

transportation-related pollution, as developed and defined by OCTA's Environmental Cleanup Allocation Committee (ECAC).

To date, the Board has approved funding for 233 Tier 1 projects, totaling over \$40 million. It is estimated that over 80 million gallons of trash have been captured since inception of the ECP in 2011. On March 10, 2025, the Board approved issuance of the current 2025 ECP Tier 1 call, making available approximately \$3.5 million to support a 15th call for the Tier 1 program.

Discussion

The ECP Tier 1 call application deadline was May 8, 2025. As of that date, nine applications were submitted from nine local jurisdictions. However, one application was withdrawn during the evaluation process due to the applicant's financial constraints. The remaining eight applications were reviewed and evaluated by an application review committee consisting of OCTA staff and two ECAC members. Project applications were evaluated based on Board-approved selection criteria, which included the following:

- Effectiveness at removing trash and debris;
- Cost/benefit analyses;
- Pollution-reducing benefits;
- Project readiness;
- Adequacy of proposed operations and maintenance plans; and
- Submission of clear and detailed work plans with specific implementation timing documented.

On August 14, 2025, the ECAC was provided with the application review committee's conclusions and staff's recommendation that eight projects totaling \$3,088,766 be considered by the Board for funding (Attachment A). The members of the ECAC, which lacked a quorum to formally recommend approval to the Board, did not raise any concerns regarding the recommendations. At the discretion of the Chair of the ECAC, this item is being advanced to the Board for approval.

The Tier 1 projects being recommended for funding primarily consist of various catch basin debris screen devices including 904 connector pipe screens (CPS), 381 automatic retractable screens (ARS), 30 full trash capture (FTC) units, four grated inlet trash screens (GITS), 54 brush inlet screens (BIS), as well as one trash rover and two hydrodynamic separators (HDS).

More detailed project descriptions and visual samples are provided in Attachments B and C, respectively. A brief overview of these project types is also provided below.

- Catch basin debris screen devices: These devices prevent debris from entering the storm drain system through catch basins and primarily consist of CPS, ARS, FTC, GITS, and BIS type devices.
- A trash rover is a mechanical device that can be deployed in larger enclosed bodies of water, such as bays and harbors, and is designed to collect floating waste autonomously and/or manually via remote control.
- An HDS utilizes a combination of swirl concentration and indirect screening to separate and capture trash and debris. The filtered water then passes into the separation area where suspended solids can settle, and runoff passes through. Trash and debris are captured and contained within the screen enclosure and vacuumed during maintenance.

As part of the Tier 1 program, local jurisdictions agree to contribute a minimum cash match of 20 percent of total project costs. All recommended projects meet or exceed this requirement.

Next Steps

Upon Board approval, each funded jurisdiction will be required to execute a letter amendment (to their existing M2 Master Funding Agreement with OCTA). Unless pre-award authority is requested, an executed letter amendment must be in place prior to project implementation. Once this process is complete, OCTA will initiate project monitoring and Board reporting through the Comprehensive Transportation Funding Programs semi-annual review and M2 quarterly reporting processes.

Summary

The OCTA ECP provides grant funding to local jurisdictions for projects that support water quality improvements related to transportation infrastructure. The 2025 Tier 1 call has concluded, and staff is recommending Board approval to program \$3,088,766 in ECP funds to eight local jurisdiction projects.

Attachments

- A. 2025 Project X Tier 1 Call for Projects Programming Recommendations
- B. 2025 Project X Tier 1 Call for Projects Project Summaries
- C. Visual Samples of Recommended Best Management Practice, Tier 1
 Project Types

Prepared by:

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Approved by:

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2025 Project X Tier 1 Call for Projects – Programming Recommendations

Proj	Projects Recommended for Funding					
No	Agency	Project Title	Project Description	Local Match	M2 Grant	Cumulative
1	Anaheim	Stormwater Catch Basin Screen Installation Project - Phase VI [†]	Install 18 CPS, 30 FTC, and 54 BIS units	20%	\$ 250,907	\$ 250,907
2	Irvine	Catch Basin Connector Pipe Screen Installation Project - Phase 5	Install 600 CPS units	33%	\$ 600,000	\$ 850,907
3	Mission Viejo	Trash and Runoff Abatement Project: Citywide 2025	Install 32 CPS and 116 ARS units	20%	\$ 200,000	\$ 1,050,907
4	Newport Beach	Newport Harbor Trash Rover 2.0	Deploy one trash rover	20%	\$ 54,400	\$ 1,105,307
5	Orange	White Oak Ridge & Palmyra Avenue Water Quality Storm Drain Improvement Project	Install one HDS and five CPS units	23%	\$ 600,000	\$ 1,705,307
6	San Clemente	Inland Residential and Rancho San Clemente Industrial Runoff Treatment Project	Install 119 CPS, four GITS, and 264 ARS units	20%	\$ 564,000	\$ 2,269,307
7	San Juan Capistrano	San Juan Capistrano High Priority CPS Screen Installation - 2025	Install 130 CPS units	20%	\$ 219,459	\$ 2,488,766
8	Seal Beach	5th Street at Electric Avenue Stormwater Treatment Project	Install one HDS and one ARS unit	30%	\$ 600,000	\$ 3,088,766

[†]Pre-award authority requested

F	Project withdrawn by applicant						
	No	Agency	Project Title	Project Description	Local Match	M2 Funding Request	Cumulative
	9	Laguna Hills	Clarington Park Biofiltration Project	Install two biofiltration basins and five trash screens	25%	\$ 600,000	\$ 3,688,766

Acronyms

ARS - Automatic Retractable Screen

BIS - Brush Inlet Screen

CPS - Connector Pipe Screen

FTC - Full Trash Capture Unit

GITS - Grated Inlet Trash Screen

HDS - Hydrodynamic Separator

M2 - Measure M2

N/A - Not Applicable

2025 Project X Tier 1 Call for Projects – Project Summaries

No	Agency	Project Title	Project Highlights
1	Anaheim	Stormwater Catch Basin Screen Installation Project - Phase VI	The City of Anaheim proposes to retrofit 100 existing storm drain catch basins at high-traffic, priority sites throughout the City of Anaheim watershed and storm drain system with 18 CPS, 30 FTC, and 54 BIS units. The improvements target broken or frequently overwhelmed ARS and will protect the Carbon Creek, City of Westminster, and Santa Ana River watersheds.
2	Irvine	Catch Basin Connector Pipe Screen Installation Project - Phase 5	The City of Irvine proposes to install 600 CPS in catch basins at various locations in Planning Areas 5 (Northwood Point), six (Portola Springs), nine (Woodbury), and 51 (Great Park). The proposed CPS locations were selected considering several factors such as development areas, increased vehicle/pedestrian traffic, the absence of stormwater treatment by a natural treatment system, drainage from PLU areas, and drainage to downstream receiving waters listed in the Clean Water Act.
3	Mission Viejo	Trash and Runoff Abatement Project: Citywide 2025	The City of Mission Viejo proposes to install 32 CPS and 116 ARS in catch basins located citywide. This project targets PLU areas and will reduce stormwater pollution that drain to either Aliso Creek or San Juan Creek watersheds by capturing trash and pollutants on arterial roadways.
4	Newport Beach	Newport Harbor Trash Rover 2.0	The City of Newport Beach proposes to deploy a second trash rover as an expansion of the existing Newport Harbor Trash Rover Project, continuing efforts to improve water quality and reduce trash and debris in Newport Harbor. The first rover was launched in February 2025, and the addition of a second unit will increase the coverage area for collecting floating debris. In conjunction with previously installed catch basin screens, continuous deflection separators, marina trash skimmers, and debris booms, the trash rover will be deployed in Newport Harbor and capture floating trash and debris entering from storm drain systems and creeks.
5	Orange	White Oak Ridge & Palmyra Avenue Water Quality Storm Drain Improvement Project	The City of Orange proposes to install one HDS and five CPS. The HDS would be located in the existing storm drain system that ultimately discharges into Handy Creek, collecting runoff from Watershed 19 as described in the City of Orange Master Plan of Drainage. The CPS would be installed within Watershed 17 on Palmyra Avenue and Main Street.
6	San Clemente	Inland Residential and Rancho San Clemente Industrial Runoff Treatment Project	The City of San Clemente proposes to install 119 CPS-Mod systems, four GITS, and 264 ARS-CL Curb Screens in catch basins located on 284 acres of PLU, including retail areas, medium- and high-density residential neighborhoods, and portions of the Rancho San Clemente Industrial Park. These areas also drain to sensitive downstream resources such as the Poche/Prima Deshecha Watershed, coastal canyons, and the largely undeveloped San Mateo Creek Watershed.
7	San Juan Capistrano	San Juan Capistrano High Priority CPS Screen Installation - 2025	The City of San Juan Capistrano proposes to install 130 CPS units in catch basins located in high-density residential, commercial, and transit-heavy areas that contribute to transportation-related pollutants impacting the San Juan Creek Watershed. The selected locations coincide with PLU zones and major roadways, including 12 bus stops, and are designed to prevent trash and debris 5mm or larger from entering the MS4 system, helping the City of San Juan Capistrano meet Clean Water Act standards and improve downstream water quality.
8	Seal Beach	5th Street at Electric Avenue Stormwater Treatment Project	The City of Seal Beach proposes to install one HDS and one ARS to efficiently redirect flow into the HDS with a bypass extension reconnecting to the Electric Avenue drainage system. Designed to improve stormwater quality, the project will enhance drainage capacity across a 37.3-acre tributary area contributing to the West End Pump Station in a low-lying coastal neighborhood.

ARS - Automatic Retractable Screen

BIS - Brush Inlet Screen

CPS - Connector Pipe Screen

FTC - Full Trash Capture Unit

GITS - Grated Inlet Trash Screen

HDS - Hydrodynamic Separator

Mod - Modular

MS4 - Municipal Separate Storm Sewer System

PLU - Priority Land Use

Visual Samples of Recommended Best Management Practice, Tier 1 Project Types

Automatic Retractable Screen (ARS)



Brush Inlet Screen (BIS)



Connector Pipe Screen (CPS)



Full Trash Capture Unit (FTC)



Grated Inlet Trash Screen (GITS)



Hydrodynamic Separator (HDS)



Trash Rover



Note: Photographs are for visualization purposes. Actual devices installed may be different depending on final procurement, site characteristics, final specifications, etc.





October 13, 2025

To: Members of the Board of Directors

From: Andrea West, Clerk of the Board Mills With

Subject: Measure M2 Next 10 Delivery Plan: Market Conditions Key

Indicators Analysis and Forecast

Executive Committee Meeting of October 6, 2025

Present: Chair Chaffee, Directors Hennessey, Jung, Klopfenstein, and

Tam Nguyen

Absent: Vice Chair Federico and Director Wagner

Committee Vote

This item was passed by the Members present.

Committee Recommendation(s)

Direct staff to continue to monitor market conditions key indicators and provide updates to the Board of Directors as appropriate.



October 6, 2025

To: Executive Committee

From: Darrell E. Johnson, Chief Executive Officer

Subject: Measure M2 Next 10 Delivery Plan: Market Conditions Key

Indicators Analysis and Forecast

Overview

At the direction of the Board of Directors, the Orange County Transportation Authority monitors construction market conditions. Annually, a report on Market Conditions Key Indicators Analysis and Forecast is presented to the Board of Directors to provide insight into potential project delivery cost drivers that could affect the Measure M2 Next 10 Delivery Plan. The last effort was presented to the Board of Directors on October 28, 2024. An updated forecast has been prepared and a presentation on the results of this effort is provided.

Recommendation

Direct staff to continue to monitor market conditions key indicators and provide updates to the Board of Directors as appropriate.

Background

On November 7, 2006, Orange County voters approved the Renewed Measure M (M2) Transportation Investment Plan (Plan) for a one-half-cent sales tax for transportation improvements for a period of 30 years through 2041. The Orange County Transportation Authority (OCTA) Board of Directors (Board) continues to advance the implementation of M2 commitments through the adoption of delivery plans. The delivery plans are designed to validate OCTA's ability to deliver the M2 Plan consistent with commitments to voters, outline a near-term work plan to promote effectiveness and efficiency, establish a common understanding among M2 stakeholders, set a baseline upon which future changes are measured, and provide the basis for the preparation of OCTA's annual budgets for capital projects.

In 2016, the Board directed staff to acquire better insight into the construction market outlook. The intent was to provide an analysis of trends for near-term construction market conditions in tandem with the annual sales tax revenue update to assist with prudent project delivery decisions.

OCTA retained the Orange County Business Council (OCBC), led by Dr. Wallace Walrod, Chief Economic Advisor to OCBC, and Dr. Marlon Boarnet, Professor and Director of the METRANS Transportation Consortium at the University of Southern California, to provide this analysis.

The results of the initial analysis were presented to the Board in September 2017. The report identified several near-term cost indicators that could impact the construction market and, by extension, M2 project delivery. These included the pace of transportation construction programs in the neighboring counties (resulting in the strained supply of materials and construction labor), construction wage pressures, sustained low statewide unemployment, and residential construction demand. Overall, OCBC's analysis identified a strong potential that OCTA could experience an increasing cost environment in the near term.

Following this presentation, the Board directed staff to continue to work with OCBC to monitor and track the indicators and provide the Board with updates to cost risk factors for project delivery. In response, OCBC spent early 2018 analyzing trends and creating an Infrastructure Construction Cost Pressure Index (ICCPI) model. On September 10, 2018, OCBC presented the ICCPI model, and forecasts for 2018, 2019, and 2020 cost fluctuation ranges to the Board.

Discussion

OCBC continues to monitor trends in material costs, labor costs, and general economic conditions through a contract with OCTA. Relevant data for each model component is analyzed to determine a range of potential cost impacts to update the forecast biannually. The fall 2025 update provides a three-year forecast through 2028. Attachment A summarizes the fall 2025 forecast and includes prior forecasts for reference. The full report on the ICCPI model update is included in Attachment B.

The ICCPI model is a forecasting tool, with scores indicating a forecast of fluctuations in public construction costs expressed in ranges. Index scores of two and three indicate somewhat low to normal inflationary environments in the range of one to six percent. Conversely, a score of four is a high inflation environment in the range of six to 11 percent. Extreme index values of zero and five correspond to the unusual conditions observed in Orange County immediately before and during the Great Recession and the high-cost inflation environment that occurred in the building boom years of the early 2000s and most recently in 2021 and 2022.

Using the ICCPI model, OCBC forecasts a score of three in 2026, 2027, and 2028, which represents a potential cost fluctuation range of two to six percent.

OCBC Orange County Transportation ICCPI Score, 2026-2028					
Year	Index Score	Range of Cost Fluctuation			
2026	3	2% - 6%			
2027	3	2% - 6%			
2028	3	2% - 6%			

The fall update anticipates an uptick in inflationary pressures following the moderation forecasted in spring 2025. The recent pattern for three key components of the construction cost pressure reflect a rise in building permits, California unemployment rates, and construction wages. Additionally, all infrastructure material costs saw increases. Increases in material costs and labor wages combined with rising statewide unemployment and growth in building permits indicate that the macroeconomy is under strain even as construction costs continue to rise.

As in prior forecasts, OCBC indicates that OCTA will also need to be aware and ready to respond to cost pressures that cannot be modeled. Examples of such risks include:

- Impacts from tariffs may shift Federal Reserve policy decisions,
- Domestic instability due to shifting political, social, and economic policies, including disruption from artificial intelligence adoption to the overall job market, and
- International instability resulting from ongoing global conflicts and new trade policies.

Overall, OCBC's analysis identifies an increase of inflationary pressures from 2026 through 2028. OCTA's Project Controls department monitors and adjusts project cost escalation assumptions according to market trends. Project Controls' cost estimating process uses historical information, as well as current trends in the market, and follows a consistent and defined process. Looking back at the last 20 years, OCTA's cost estimates have included a three percent escalation, which, on average during this timeframe, provided the appropriate escalation to deliver projects successfully. Currently, using 3.5 to five percent for construction escalation, as well as incorporating contingency based on the project phase and complexity, is staff's preferred approach to cost estimating. Given the continued market fluctuations in recent years, staff recommends continuing this effort to monitor key indicators to inform OCTA's delivery plans.

Summary

OCBC has prepared an update on construction market conditions to help OCTA with M2 project delivery planning. The update considers fluctuations in material costs, labor costs, and general economic conditions and trends. The Market Conditions Key Indicators Analysis and Forecast conclude that OCTA may experience rising inflationary pressures from 2026 through 2028.

Attachments

- A. Orange County Business Council, Orange County Transportation ICCPI Score, Fall 2018 through Fall 2025 Forecasts
- B. Orange County Business Council, Orange County Transportation Infrastructure Construction Cost Pressure Index, Fall 2025, Prepared for the Orange County Transportation Authority

Prepared by:

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Lose Carry

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Orange County Business Council Orange County Transportation ICCPI Score Fall 2018 through Fall 2025 Forecasts

	Orange County Business Council Orange County Transportation ICCPI Score														
Year	Fall	Spring	Fall	Spring	Fall	Spring	Fall	Spring	Fall	Spring	Fall	Spring	Fall	Spring	Fall
	2018	2019	2019	2020	2020	2021	2021	2022	2022	2023	2023	2024	2024	2025	2025
2018	4														
2019	3	4													
2020	3	3	3	3	0										
2021		3	3	2	1	1	5								
2022			3	2	1	2	4	5	5						
2023					3	4	4	4	4	4	3				
2024							4	4	4	4	3	2	2		
2025									2	3	2	3	3	2	3
2026											2	2	2	2	3
2027											·		2	2	3
2028															3

Range of Cost Fluctuations by Index Score					
Index Score	Low	Midpoint	High		
0	-17%	-9.5%	-2%		
1	-2%	-0.5%	1%		
2	1%	1.5%	2%		
3	2%	4%	6%		
4	6%	8.5%	11%		
5	11%	25.5%	40%		

Orange County Business Council Orange County Transportation Infrastructure Construction Cost Pressure Index Fall 2025 Prepared for the Orange County Transportation Authority

Orange County Business Council (OCBC) Research Team

Dr. Wallace Walrod - Chief Economic Advisor, OCBC

Dr. Marlon Boarnet – Professor and Director of the METRANS Transportation Consortium, University of Southern California

Background and Purpose

As a supplementary examination to the Next 10 Delivery Plan: Market Conditions Forecast and Risk Analysis study delivered by OCBC in September 2017, the Orange County Transportation Authority (OCTA) Board of Directors (Board) requested further study and exploration of potential cost fluctuations beyond existing cost analysis from the California Department of Transportation's (Caltrans) Construction Cost Index and internal OCTA analysis. The Board requested an ongoing analysis of construction cost factors, with periodic updates. In response, the OCBC team developed the Orange County Transportation Infrastructure Construction Cost Pressure Index (ICCPI), which is updated every six months.

To develop the cost pressure index, the OCBC team analyzed annual trends in material costs, labor costs, and general economic conditions to determine a range of potential cost increases with a time horizon that is typically three years into the future. The index updates begin by collecting relevant market data and indicators and then performing data analytics to assess current cost pressure and forecast future cost pressure. In doing so, and providing these findings to the Board, more accurate budgets can be determined by reducing the potential risk of cost pressure and project delivery slowdowns due to financial constraints. This September 2025 memo updates the March 2025 forecast of the Orange County Transportation ICCPI and provides annual cost pressure index forecasts for the remainder of 2025 and for 2026, 2027, and 2028.

Findings and Discussion

The most recent available input data were gathered to update the index. That includes second quarter 2025 data for the following index components: California's unemployment rate, California building permits, Caltrans index data on infrastructure construction materials costs as well as fourth quarter 2024 data on Orange County and Southern California construction industry wages. 2025 values for building permits and unemployment rates were estimated from changes from the second quarter of 2024 to the second quarter of 2025 and construction wages for 2024 from the fourth quarter of 2023 to the fourth quarter of 2024.

As of July 2025, the national inflation rate measured 2.7 percent, yet recent increases in the Producer Price Index indicate inflationary pressures may be returning. With recent remarks from the Federal Reserve, the probability for a September rate cut stands at 91.2 percent according to the Chicago Mercantile Exchange Group. At the same time, employment growth in both May and June 2025 was revised lower by a combined 258,000 jobs while the nation only added 73,000 jobs in July 2025, well below expectations. In California, the Employment Development Department reported the state's non-seasonally adjusted unemployment rate reached 6.1 percent in July 2025, 0.3 percentage points higher than its 5.8 percent reading in June 2025, higher than its July 2024 reading of 5.9 percent, and well-above the national July 2025 rate of 4.6 percent. As of the second quarter 2025, household debt continues to increase, reaching \$18.39 trillion, with mortgage balances growing by \$131 billion to \$12.94 trillion, while auto loans rose by \$13 billion to \$1.66 trillion. At the same time, credit card debt grew by \$27 billion to now total \$1.21 trillion, an increase of 5.9 percent compared to a year ago.² In the face of rising debts and increasing costs, growth in consumer spending saw a sharp decline beginning in 2025, largely due to uncertain trade policies and market volatility resulting in waning consumer confidence and sentiment. Consumer spending growth fell to 0.5 percent in the first guarter of 2025 and 1.4 percent in the second guarter of 2025, compared to growth of 3.7 percent in the third quarter of 2024 and 4.0 percent in the fourth quarter 2024.3 As consumer costs may further increase due to new tariff policies and inflationary pressures, spending is likely to remain under pressure as consumer are increasingly squeezed.

In the March 2025 update, the OCTA ICCPI reported a value of 2—indicating annualized cost changes between 1 and 2 percent—for the years 2025, 2026, and 2027. Six months earlier, in the September 2024 update, the ICCPI had forecasted a cost change index of 2 for 2024, followed by an increase to a level 3 (2 to 6 percent annualized increase) in 2025, and then a decrease back to level 2 for both 2026 and 2027.

The new estimate for September 2025 sees the index for 2025 increasing to a value of 3 for the remainder of the year and remaining steady at an index of 3 for 2026, 2027, and 2028. While the Federal Reserve has made dramatic strides in getting inflation under control, tariffs have begun to have a measurable impact on short-term costs and continued uncertainty surrounding the impacts of economic, trade, and immigration policies have resulted in slowed hiring trends as businesses struggle to forecast future needs. Adding to shifting government policies, the accelerating adoption of artificial intelligence technologies has also started to potentially slow overall job growth.

Comparisons of the five most recent Orange County Transportation ICCPI estimates are reflected in Table 1. The index values correspond to ranges of forecast annual infrastructure construction cost increases, as shown in Table 2.

¹ https://labormarketinfo.edd.ca.gov/file/lfmonth/oran\$pds.pdf

² https://www.newyorkfed.org/microeconomics/hhdc

³ https://www.fitchratings.com/research/corporate-finance/fitch-ratings-us-consumer-spending-slows-sharply-as-labor-market-weakens-tariffs-raise-inflation-21-08-2025

Table 1: September 2025 Update to Three-Year Orange County Transportation ICCPI, with comparison to March 2025, September 2024, March 2024, and September 2023 Index Estimates

Year	Index (September 2025) with Annual Cost Increase Range	Index (March 2025) with Annual Cost Increase Range	Index (September 2024) with Annual Cost Increase Range	Index (March 2024) with Annual Cost Increase Range	Index (September 2023) with Annual Cost Increase Range
2023	Not Estimated	Not Estimated	Not Estimated	Not Estimated	3 (2% to 6%)
2024	Not Estimated	Not Estimated	2 (1% to 2%)	2 (1% to 2%)	3 (2% to 6%)
2025	3 (2% to 6%)	2 (1% to 2%)	3 (2% to 6%)	3 (2% to 6%)	2 (1% to 2%)
2026	3 (2% to 6%)	2 (1% to 2%)	2 (1% to 2%)	2 (1% to 2%)	2 (1% to 2%)
2027	3 (2% to 6%)	2 (1% to 2%)	2 (1% to 2%)	Not Estimated	Not Estimated
2028	3 (2% to 6%)	Not Estimated	Not Estimated	Not Estimated	Not Estimated

Forecasting Method

OCBC used a series of regression analyses and forward-looking projections to create the ICCPI. The ICCPI provides a ranking from 0 to 5, with each rank corresponding to a range of percentage changes in overall construction costs. These ranges are built to be forecasting tools, with scores indicating public construction forecast cost increase. Values of 2 and 3 indicate somewhat normal inflationary environments. A value of 4 is a high inflation environment. A value of 1 is a low inflation/deflationary environment. Values of 0 and 5 correspond to the most extreme conditions observed in Orange County over the past three decades, and hence the ranges for those values are wide due to the unusual nature of the highly deflationary environment that occurred immediately prior to and during the Great Recession and the high-cost inflation environment that occurred in the building boom years of the early 2000s and most recently in 2021 and 2022.

Table 2 highlights each ICCPI ranking and the proposed range of cost fluctuations which have been provided on a low, midpoint, and high scale.

Table 2: OCBC Orange County ICCPI Index Values and Corresponding Forecast Annual Cost Increase Range

Index Value	Projected Annual Cost Increase, Low	Projected Annual Cost Increase, Midpoint	Projected Annual Cost Increase, High
0	-17%	-9.5%	-2%
1	-2%	-0.5%	1%
2	1%	1.5%	2%
3	2%	4%	6%
4	6%	8.5%	11%
5	11%	25.5%	40%

Methodology

To determine the Transportation ICCPI, the OCBC team started by aggregating several datasets, measures, and indicators on an annual basis as far back as 1972.

The index was built with the following key data inputs:

- California's unemployment rate
- Building permits in California
- Selected construction materials costs for California, from Caltrans
- Orange County Construction Labor Costs

The OCBC team examined how the various measures and indicators of construction costs varied with changes and recent past trends in construction inflation. Using statistical analyses, the research team has built a forecasting model that projects forward cost increases and predicted cost increases are grouped into the categorical ranges shown in Table 2.

Recent Data Trends

Table 3 shows the recent pattern for three key components of the construction cost pressure index. While building permits in California declined from 2018 to 2020, they jumped by 12.6 percent in 2021, by 0.2 percent in 2022 before falling 7.1 percent to 111,221 in 2023, and further by 10.1 percent in 2024 to 99,959. Using estimates based on the change in permits from the second quarter of 2024 to the second quarter of 2025, building permits are expected to increase by 2.5 percent to 102,478 in 2025. Despite high home prices and interest rates keeping housing demand low across the nation, this forecasted increase in building permits may help highlight recent statewide efforts to reinforce housing supply. Yet, home prices, especially for new construction, are likely to be exacerbated due to tariffs impacting the cost of building materials. Based on the change in average unemployment rates from the second quarter of 2024 to the second quarter of 2025, California's unemployment rate is expected to total 5.8 percent in 2025, 0.4 percentage points higher than in 2024. Construction salaries in Orange County, estimated from the fourth quarter of 2023 to the fourth quarter of 2024, are expected to register a 3.4 percent increase, totaling \$94,397 in 2024.

Table 3: Infrastructure Cost Correlates, Annual Percentage Changes, 2016-2025

					OC	
	California	% Change	California	% Change	Construction	% Change
Year	Building	Year-on-	Unemployment	Year-on-	Labor Costs	Year-on-
	Permits	Year	Rate	Year	(Average	Year
					Annual Wage)	
2016	102,350	4.2%	5.5%	-11.6%	\$67,179	3.8%
2017	114,780	12.1%	4.8%	-12.9%	\$71,474	6.4%
2018	113,502	-1.1%	4.2%	-12.0%	\$74,669	4.5%
2019	110,197	-2.9%	4.1%	-3.4%	\$77,288	3.5%
2020	106,075	-3.7%	10.3%	153%	\$81,460	5.4%
2021	119,436	12.6%	7.3%	-28.9%	\$84,170	3.3%
2022	119,667	0.2%	4.2%	-42.4%	\$88,265	4.9%
2023	111,221	-7.1%	4.8%	13.4%	\$94,003**	6.5%
2024	99,959	-10.1%	5.4%	12.4%	\$94,397**	3.4%
2025*	102,478	2.5%	5.8%	7.4%		

^{*}Estimated from second quarter change, 2024 to 2025, converted to annualized estimate **Estimated from fourth quarter change, 2023 to 2024, converted to annualized estimate

The appendix shows annual changes in materials costs in recent years. The 2025 values are estimated using the percent change from second quarter 2024 to second quarter 2025 and hence represent an estimate that will be revised in the next six-month update, when later data for 2025 becomes available. In 2025, costs of Portland Cement Concrete (PCC) Structure are expected to see the largest increase, growing by 112.7 percent followed by Structural Steel by 50.1 percent and Aggregate at 49.5 percent, Steel Bar at 5.3 percent, and PCC Pavement at 2.4 percent. Alongside a weakening labor market and declining consumer confidence and sentiment, building costs are likely to continue to increase due to new tariff policies. As more potential headwinds stack up against the national economy, continued close monitoring of tariff policies and their potential impact on costs will be crucial.

Appendix: Changes in Infrastructure Materials Costs 2016-2025 (all values are percentage year-on-year changes, 2025 values forecast from second quarter changes, 2024 to 2025)

Year	Aggregate	PCC Pavement	PCC Structure	Steel Structure	Steel Bar
2016	9.4%	8.6%	7.7%	26.3%	35.0%
2017	24.2%	106.8%	26.8%	-50.1%	-20.1%
2018	18.9%	25.9%	17.2%	-58.8%	9.4%
2019	4.6%	-11.1%	-4.2%	0.8%	53.4%
2020	14.9%	-20.5%	10.0%	-9.3%	-36.2%
2021	-27.5%	-19.8%	23.5%	5.0%	6.6%
2022	47.6%	60.5%	-3.1%	37.9%	28.8%
2023	8.4%	7.4%	52.3%	22.9%	-5.9%
2024	51.5%	43.2%	-0.01%	11.0%	4.0%
2025*	49.5%	2.4%	112.7%	50.1%	5.3%

^{*}The annual 2025 change in value represents the change between the second quarter of 2024 and the second quarter of 2025.

Orange County Transportation Infrastructure Construction Cost Pressure Index, Fall 2025

Orange County Business Council

September 2025

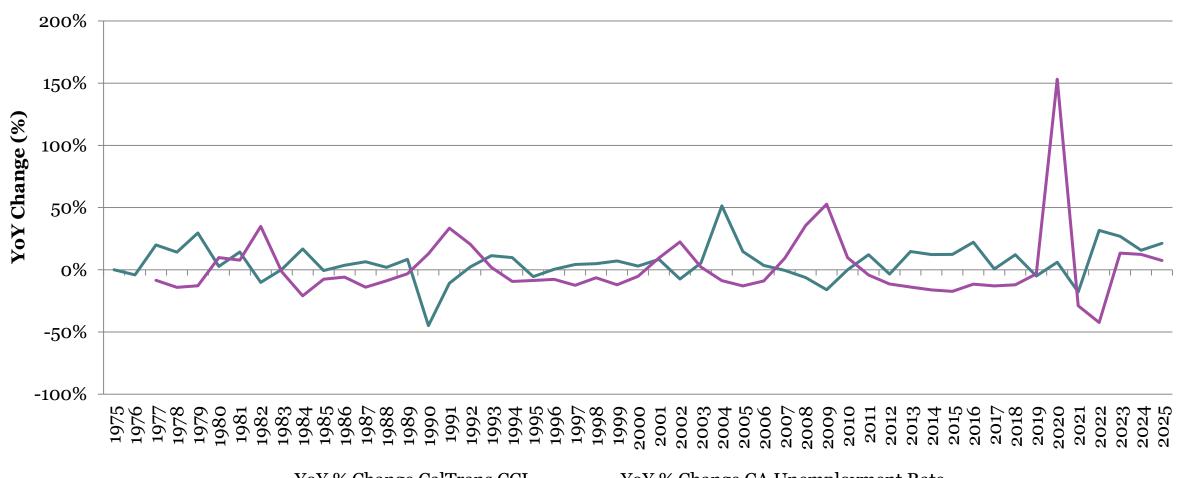
Orange County Transportation Infrastructure Construction Cost Pressure Index Model Components

- <u>Economic Trends</u> State-level building permits and unemployment rate (Census and California Employment Development Department (EDD)).
- <u>Material Costs</u> Construction Aggregate, PCC Pavement, PCC Structural Concrete, Structural Steel and Bar Steel (Caltrans).
- <u>Labor Costs</u> Localized construction wages of NAICS defined sectors provided by Bureau of Labor Statistics (BLS).
- <u>Economic Conditions</u> Periods of tight and slack economies affecting cost pressures.

3-Year Moving Average of Year-Over-Year Percent Change in Caltrans CCI and Building Permits



Year-Over-Year Percent Change in Caltrans CCI and CA Unemployment Rates



Forecast and Range of Orange County Transportation Infrastructure Cost Increases by Index Value

- 2025 Forecasted Index Value: 3
- 2026 Forecasted Index Value: 3
- 2027 Forecasted Index Value: 3
- 2028 Forecasted Index Value: 3

Range of Cost Fluctuations by Index Score					
Index	Low	Medium	High		
0	-17%	-9.5%	-2%		
1	-2%	-0.5%	1%		
2	1%	1.5%	2%		
3	2%	4%	6 %		
4	6%	8.5%	11%		
5	11%	25.5%	40%		

Inflation and Interest Rates Concerns Remain

- Inflationary impacts from new tariff trade policies start to impact businesses and consumers;
- Following large revisions to employment data, hiring has slowed in 2025 while layoffs are accelerating;
- Rising uncertainty surrounding interest rate cuts, yet probability of a September rate cut remains high;
- CCI declines 3.1% from Q1 2025 to Q2 2025; yet increases 2.8% over the past 12 months;
- CCI indicates that 4 material inputs increased in Q2 2025, 3 inputs decreased;
- For full-year 2025, our model projects all core material inputs to experience cost increases.

Year-over-Year Changes in California Building Permits, California Unemployment Rate and Orange County Construction Labor Costs, 2018-2025

Year	California Building Permits	% change year- on-year	California Unemployment Rate	% change year- on-year	OC Construction Labor Costs (avg. annual wage)	% change year- on-year
2018	113,502	-1.1%	4.2%	-12.0%	\$74,669	4.5%
2019	110,197	-2.9%	4.1%	-3.4%	\$77,289	3.5%
2020	106,075	-3.7%	10.3%	153%	\$81,460	5.4%
2021	119,436	12.6%	7.3%	-28.9%	\$84,170	3.3%
2022	119,667	0.2%	4.2%	-42.4%	\$88,265	4.9%
2023	111,221	-7.1%	4.8%	13.3%	\$91,280	3.4%
2024	99,959	-10.1%	5.4%	12.4%	\$94,397**	3.4%
2025*	102,478	2.5%	5.8%	7.4%		

^{*2025} values projected from year-on-year changes in quarterly data, 2nd quarter 2024 to 2nd quarter 2025.

^{** 2024} values projected form year-on-year changes in quarterly data, 4th quarter 2023 to 4th quarter 2024.

OCBC Infrastructure Construction Cost Forecast

- Systematic Risks Russia-Ukraine War, Israel-Gaza Conflict, Inflation, Interest Rates
 - Russia-Ukraine and Israel-Gaza conflicts continue to contribute to regional and global instability.
 - Inflation begins to creep up again as tariffs bite; Al adoption adds to labor market concerns.

OCBC OC Transportation Infrastructure Construction Cost Index Score, 2025-2028

Year	Index Score	Range of Cost Fluctuation
2025	3	2% to 6%
2026	3	2% to 6%
2027	3	2% to 6%
2028	3	2% to 6%

- Idiosyncratic Risks not predictable and therefore not in model
 - Inflationary/recessionary impacts from tariffs may shift Federal Reserve rate decisions.
 - Domestic instability due to shifting political, social, and economic policies; disruption from Al.
 - International instability due to new trade policies and reduced U.S.-related financial support.

Questions





October 13, 2025

Members of the Board of Directors To:

Andrea West, Clerk of the Board From:

Subject: Update on the Interstate 5/El Toro Road Interchange Improvement

> Project and Direction to Complete the Environmental

Documentation

Regional Transportation Planning Committee Meeting of October 6, 2025

Present: Directors Foley, Go, Harper, Klopfenstein, Stephens, and

Tavoularis

Director Federico Absent:

Committee Vote

This item was passed by the Members present.

Committee Recommendation(s)

Direct staff to advance project development and the selection of the project preferred alternative, and to complete the environmental phase in late 2026.



October 6, 2025

To: Regional Transportation Planning Committee

From: Darrell E. Johnson, Chief Executive Officer

Subject: Update on the Interstate 5/El Toro Road Interchange Improvement

Project and Direction to Complete the Environmental

Documentation

Overview

The Orange County Transportation Authority, in partnership with the California Department of Transportation, is underway with project development for the Interstate 5/El Toro Road Interchange Improvement Project. Staff is providing an update on the project development effort and is seeking Board of Directors' direction to advance project development, finalize selection of the project preferred alternative, and complete the environmental approval phase.

Recommendation

Direct staff to advance project development and the selection of the project preferred alternative, and to complete the environmental phase in late 2026.

Discussion

The Interstate 5 (I-5)/EI Toro Road Interchange Project (Project) is part of Project D in the Measure M2 (M2) freeway program. During development of M2, this Project was a top priority for the cities of Laguna Hills, Laguna Woods, and Lake Forest (Cities). In the Next 10 Delivery Plan, adopted by the Orange County Transportation Authority (OCTA) Board of Directors (Board) in November 2024, the Project is listed as one of the M2 freeway projects to be environmentally cleared by 2026 and shelf ready for future funding and advancement.

The existing I-5/El Toro Road interchange currently experiences congestion during the morning and afternoon peak periods, resulting in operational challenges. The Project will to improve traffic flows and ease congestion within the interchange, accommodate an expected increase in regional traffic, and improve access to and from the I-5 freeway. Proposed improvements at the I-5/El Toro Road interchange include improving El Toro Road and other local

roads, modifying on- and off-ramps, and modifying, replacing, or building new bridge structures.

Through Cooperative Agreement No. C-6-1262, approved by the Board on November 22, 2016, the California Department of Transportation (Caltrans) is approval/environmental document leading project phase. Proiect environmental phase work began in May 2017 with the draft environmental document (ED) circulated for public review and comments in spring 2019. At that time there was no consensus amongst the Cities on a preferred alternative following public review of the two build alternatives presented in the draft ED. The M2 ordinance requires that specific improvements at this interchange be developed in cooperation with local jurisdictions and affected communities. Due to the lack of consensus amongst the Cities on a preferred alternative, the Caltrans environmental phase work was paused. OCTA initiated discussions between late 2019 and early 2020 with the Cities and Caltrans to address the lack of consensus and to discuss proposed alternatives and next steps. Between late 2020 and early 2022, OCTA completed an alternatives assessment study to look at potential additional alternatives. In March 2022, OCTA, Caltrans, and the Cities agreed on two new alternatives to move forward to the environmental phase. The environmental phase was restarted in January 2023 to specifically study these two alternatives.

Next Steps

Preliminary engineering and cost estimates are scheduled to be finalized in late 2025. The environmental technical studies are scheduled to be completed in spring 2026 and a draft ED will be circulated for public review and a public hearing conducted in summer 2026. This would lead to the selection of a preferred alternative in fall 2026 with a goal to finalize the environmental document by the end of 2026. These milestones will be reflected accordingly in the Capital Action Plan and the CEO Action Plan for 2026.

OCTA staff is actively engaged with Caltrans and the Cities to keep the Project moving forward in the environmental phase, and OCTA remains committed to achieving consensus on a preferred alternative and delivering needed improvements on the I-5/EI Toro Road interchange.

Update on the Interstate 5/El Toro Road Interchange *Page 3* Improvement Project and Direction to Complete the Environmental Documentation

Summary

Staff seeks to reaffirm Board of Directors' approval to advance project development and the selection of the project preferred alternative, and complete the environmental phase in late 2026.

Attachment

None.

Prepared by:

Niall Barrett, P.E. Program Manager (714) 560-5879 Approved by:

James G. Beil, P.E.

Executive Director, Capital Programs

(714) 560-5646

Update on the Interstate 5/El Toro Road Interchange Improvement Project and Direction to Complete the Environmental Documentation



Project Location











Measure M2 (M2) Freeway Program Context

- During development of M2, the Interstate 5 (I-5)/EI Toro Road interchange was a top priority for the cities of Laguna Hills, Laguna Woods, and Lake Forest (Cities)
- M2 Ordinance (approved by voters on November 7, 2006)
 - Project D I-5 local interchange upgrades:
 - Oupdate and improve key I-5 interchanges, such as Avenida Pico, Avery Parkway, El Toro Road, La Paz Road, Ortega Highway, and others to relieve street congestion around older interchanges and on ramps. Specific improvements will be subject to approved plans developed in cooperation with local jurisdictions and affected communities
- Next 10 Delivery Plan (2024 Update)
 - I-5/El Toro Road Interchange Project to be environmentally cleared by 2026 and shelf-ready for future advancement

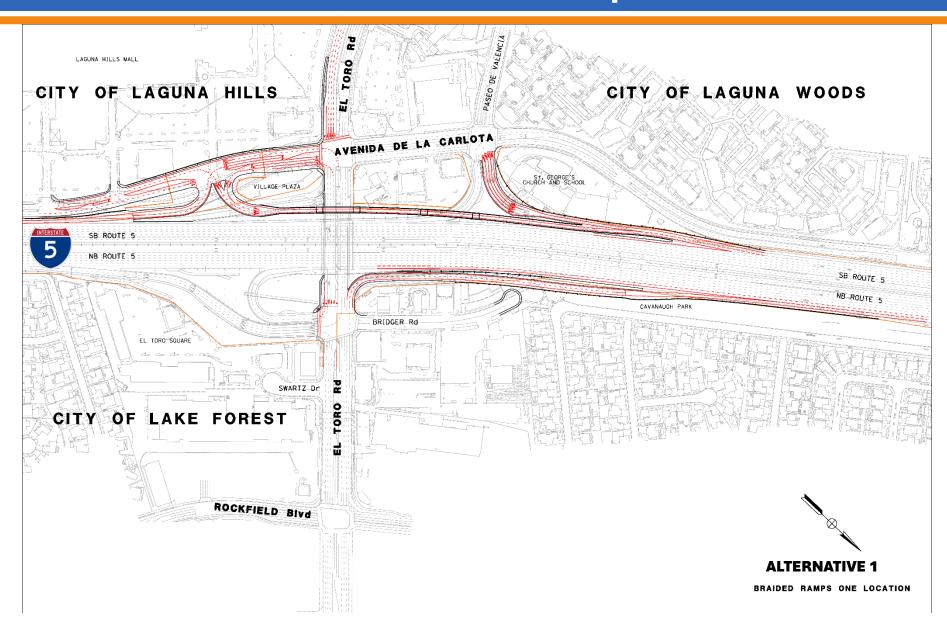
Project Background and Timeline

- February 2015 Project study report considered 15 alternatives, and four build alternatives were recommended for further study
- May 2017 California Department of Transportation (Caltrans) began Project Approval/Environmental Document (PA/ED) phase
- August 2018 to February 2019 Design and right-of-way (ROW) impact workshops held between Orange County Transportation Authority (OCTA), Caltrans, and the Cities. Two of four build alternatives were removed from further study
- April to May 2019 Public circulation and review of draft environmental document with two build alternatives; no consensus reached on preferred alternative

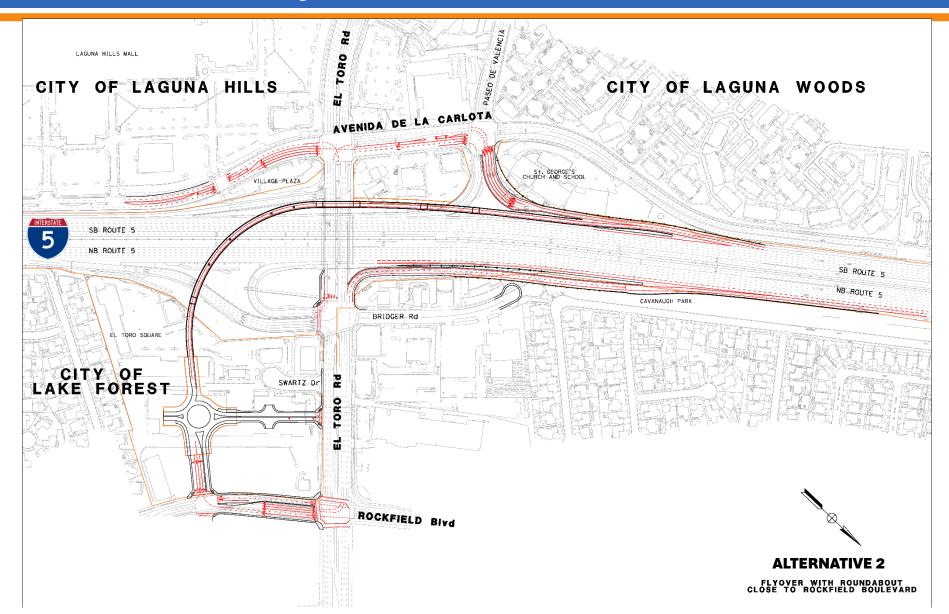
Project Background and Timeline (cont.)

- October 2021 OCTA completed an alternatives assessment study coordinated with the Cities and Caltrans that studied seven alternatives
- March 2022 OCTA, Cities, and Caltrans reach consensus on two alternatives to move forward with the PA/ED phase
- January 2023 Caltrans and OCTA restart PA/ED phase
- Project update to OCTA Board of Directors in June 2023 Project update to the city councils of Laguna Hills, Laguna Woods, and Lake Forest in June/July 2023
- Public scoping meeting in person: July 2023; virtual: August 2023
- August 2023 to March 2024 Public comment period and public summary report completed

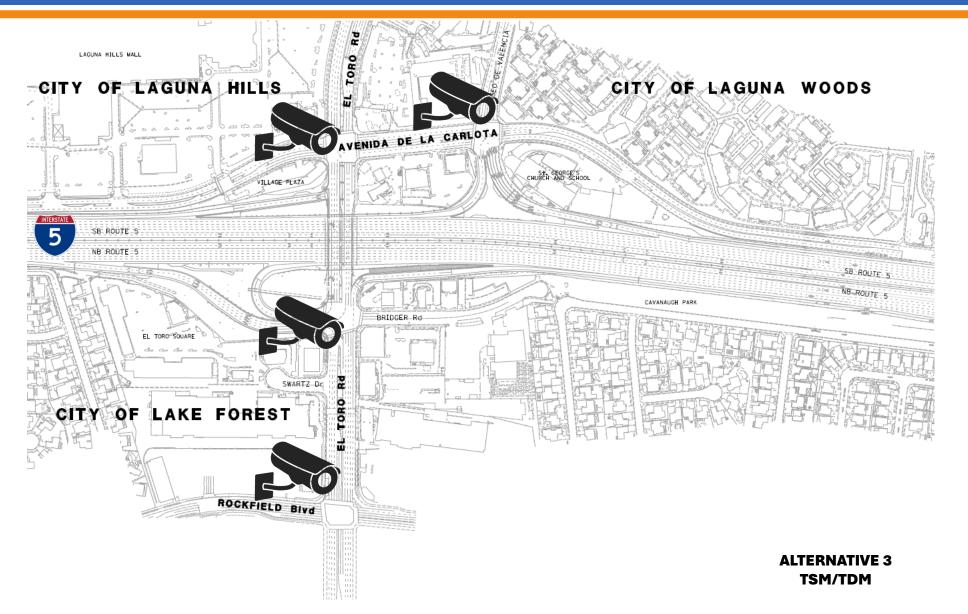
Alternative 1: Braided Ramps



Alternative 2: Flyover with Roundabout



Alternative 3: Transportation System Management and Transportation Demand Management (TSM/TDM)



Public Outreach

- Scoping Meetings
 - Held in July and August 2023
 - Online and print newspaper ads
 - Direct mail postcards
 - Local access television
- Presentations
 - City Council updates
 - Stakeholder briefings
- Collateral
 - Project webpage, email alerts, social media, flyers



Next Steps

- With OCTA Board of Directors' direction, staff will proceed to:
 - Complete preliminary engineering and construction cost estimates –
 December 2025
 - Complete ROW estimates and environmental technical studies Spring 2026
 - Approval of draft PA/ED Spring 2026
 - Public hearing Summer 2026
 - Select preferred alternative Fall 2026
 - Approval of final PA/ED December 2026





October 13, 2025

To: Members of the Board of Directors

From: Andrea West, Clerk of the Board Andrea West,

Subject: Fédération Internationale de Football Association World Cup

2026 and Los Angeles 2028 Olympic and Paralympic Games

Transit Planning Update

Executive Committee Meeting of October 6, 2025

Present: Chair Chaffee, Directors Hennessey, Jung, Klopfenstein, and

Tam Nguyen

Absent: Vice Chair Federico and Director Wagner

Committee Vote

This item was passed by the Members present.

Committee Recommendation(s)

A. Direct staff to work with the Los Angeles County Metropolitan Transportation Authority to continue to plan and implement World Cup 2026 transit service.

- B. Authorize the Chief Executive Officer to negotiate and execute a funding agreement between the Orange County Transportation Authority and the Los Angeles County Metropolitan Transportation Authority to obtain reimbursement from the Los Angeles County Metropolitan Transportation Authority for World Cup 2026 transit service expenses.
- C. Direct staff to seek state and federal funding opportunities for Los Angeles 2028 Olympic and Paralympic Games transit service.



October 6, 2025

To: Executive Committee

From: Darrell E. Johnson, Chief Executive Officer

Subject: Fédération Internationale de Football Association World Cup 2026

and Los Angeles 2028 Olympic and Paralympic Games Transit

Planning Update

Overview

The Orange County Transportation Authority, in collaboration with the Los Angeles County Metropolitan Transportation Authority, is advancing planning efforts for the Fédération Internationale de Football Association World Cup 2026 and the Los Angeles 2028 Olympic and Paralympic Games. These world-wide events represent significant regional mobility challenges and opportunities. The planning focus is to deliver safe, seamless, high-quality transit service for spectators and workforce while minimizing impacts to existing Orange County Transportation Authority riders. This report provides an update on ongoing efforts, outlines estimated funding needs, and presents recommendations for future actions.

Recommendations

- A. Direct staff to work with the Los Angeles County Metropolitan Transportation Authority to continue to plan and implement World Cup 2026 transit service.
- B. Authorize the Chief Executive Officer to negotiate and execute a funding agreement between the Orange County Transportation Authority and the Los Angeles County Metropolitan Transportation Authority to obtain reimbursement from the Los Angeles County Metropolitan Transportation Authority for World Cup 2026 transit service expenses.
- C. Direct staff to seek state and federal funding opportunities for Los Angeles 2028 Olympic and Paralympic Games transit service.

Background

The Fédération Internationale de Football Association (FIFA) World Cup 2026 (WC26) will include eight matches at SoFi Stadium (Stadium) between June 12 and July 10, 2026. A transit-first approach is planned, with Los Angeles County Metropolitan Transportation Authority (LA Metro) estimating that over 80 percent of spectators and workforce will use transit. More than 300 buses are expected to be required to operate bus service between parking facilities, mobility hubs, and Union Station. Orange County Transportation Authority (OCTA) and LA Metro staff are in discussions on potential support options, including bus service from the Anaheim Regional Transportation Intermodal Center (ARTIC) to the Stadium.

The Los Angeles 2028 (LA28) Olympic and Paralympic Games (Games) will include more than 800 events at over 80 venues across the region over a six-week period, with an anticipated 12 to 15 million ticketed spectators. Two confirmed venues in or adjacent to Orange County are the Honda Center (volleyball) and Trestles Beach (surfing). OCTA is expected to play a key role in connecting spectators via OC Bus, Southern California Regional Rail Authority (Metrolink), and Amtrak to these venues. LA Metro has estimated a need for an additional 2,700 buses to provide LA28 Games-related services, with Orange County serving as both a venue and a hospitality hub. Currently, LA Metro has secured approximately 900 buses from various transit operators throughout the nation, including - approximately five buses from OCTA.

Discussion

OCTA and LA Metro have coordinated planning over the past 18 months to prepare for WC26 and LA28. This includes exploring Games Enhanced Transit Service (GETS), Mobility Hubs, Games Route Network, First/Last Mile, Transportation Demand Management, and Park-and-Ride as options to complete the Games transportation component. OCTA staff attended the September 4, 2025, LA28 Games Summit hosted by LA Metro which highlighted how WC26 will serve as a beta test for the LA28 transit-first strategy.

World Cup 2026

LA Metro officials confirmed that spectator and workforce parking at the Stadium will be highly limited, and nearly all spectator and workforce transportation demand must be met by additional public transportation services. LA Metro anticipates carrying roughly 30,000 people by public transportation to and from the Stadium for each match, roughly six times the magnitude of a regular national

football league game. For WC26, this includes bus service to the Stadium from remote park-and-ride locations and mobility hubs, with advanced reservations, QR code ticketing, and no on-site cash handling. These sites will be located across Los Angeles and Orange counties, providing direct transportation options to the Stadium from across the region. Sites include college campuses (under-utilized during the summer months), major bus and rail transfer centers such as the new Los Angeles International Airport/Metro Transit Center and Downtown Union Station, and nearby LA Metro rail stations. These systems will also be used for LA28, demonstrating the role of WC26 acting as a test case for the LA28 Games.

The match times and information about which teams will be playing in the initial matches will not be known until December 2025. Event start times could range from 12:00 PM to 10:00 PM.

LA Metro has been working with regional transit operators to ascertain vehicle and operator availability for supporting the park-and-ride operations. Given the high concentration of hotels in the Anaheim Resort area, accessibility to Metrolink and Amtrak trains at ARTIC, and ample parking spaces available at the Honda Center/OC Vibe, OCTA and LA Metro agree there is likely a need for a bus service between ARTIC and the Stadium during WC26 matches.

High-level cost estimates have been developed for OCTA to operate bus service between ARTIC and the Stadium with the following key assumptions:

- 18 vehicles
- 900 daily passengers (50 passengers per vehicle)
- Eight matches over eight days of operations
- Eight hours of service per match day (includes three hours prior to match start, two hours for gameplay, and three hours for return operations)
- Cost per hour of operation: \$225.67

Based on these assumptions, the total cost estimate (including contingency) is approximately \$300,000 for the WC26 bus service from ARTIC. OCTA and LA Metro have engaged in discussions regarding reimbursement by LA Metro for OCTA providing transportation for WC26 matches.

LA28 Games

OCTA staff has continued to advance venue-specific planning for the LA28 Games. This includes participation in an LA28 Event Operational Planning

session for the Honda Center and a site visit to Trestles Beach during the Surfers Pro tournament. Discussions have ensued amongst OCTA and other regional stakeholders regarding the possibility of a temporary rail station platform to support events at Trestles Beach. These engagements have helped refine operational assumptions and identify key planning challenges. Key challenges remain for planning and cost estimation efforts, especially for the GETS, security perimeters, and clarification of roles and responsibilities. Engagement with LA28 (the organizing committee) has been initiated to address these challenges, though feedback has been limited to date. The response from LA28 regarding OCTA membership in the Games Mobility Executive (GME) Group is pending. Participation in this group is expected to significantly enhance coordination and planning efforts.

The competition schedule, released in July 2025, confirms up to four volleyball sessions per day at the Honda Center, with peak days accommodating approximately 72,000 attendees (18,000 per session). The Honda Center is active for all 16 days of the LA28 Games. At Trestles Beach, there will be one surfing session per day over four days, with contingency days as needed.

In late June, staff attended the LA28 Event Operational Planning meeting related to the Honda Center. Below is a synopsis of this meeting.

- Organizers anticipate significant transportation impacts and are promoting transit use, along with remote work policies, to ease system pressures.
- Key planning factors remain unresolved, including the definition of the security perimeter in coordination with the United States Secret Service, parking, access arrangements at Angel Stadium of Anaheim, and the potential impact of major league baseball scheduling.
- Athlete housing is tentatively planned at the University of California, Irvine, with LA28 managing athlete transportation between venues.
- Planning is advancing under the GME through approximately 13 specialized subcommittees, though coordination remains a concern. Major operational milestones include 60 percent completion by the end of 2025, 80 percent by 2026, 90 percent by 2027, and full readiness by mid-2028, with operational testing anticipated prior to live events.

In September, staff attended the LA Metro LA28 Summit, which convened a broad stakeholder group to discuss current planning assumptions. Topics included accessibility and equity, dedicated transit lanes and traffic management, expanded bus fleet and services, active transportation solutions,

fan zones and open streets, security and law enforcement coordination, and infrastructure requirements.

In October, OCTA will convene two meetings with local agency/partners to address transportation planning needs and explore opportunities for regional support related to the use of the Honda Center and Trestles Beach as LA28 Games event venues. In addition, LA28 has scheduled a Trestles Security and Transportation Working Group - Event Operational Planning meeting to discuss the specific venue logistics for this location in early October. Future activities will focus on advancing discussions on roles and responsibilities with partner agencies and identifying the funding needs for games-related services.

Summary

OCTA's continued collaboration with LA Metro, LA28, and other key stakeholders is critical to ensure successful planning and delivery of transit services for WC26 and LA28 Games. The proposed actions will position OCTA to secure reimbursement, identify funding, and minimize impacts to current riders while supporting two of the largest sporting events in United States history.

Attachment

None.

Prepared by:

Dan Phu

Director, Transportation Planning and

Analysis

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Approved by:

Rose Carry

Rose Casey

Executive Director, Planning

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Fédération Internationale de Football Association World Cup 2026 and Los Angeles 2028 Olympic and Paralympic Games Transit Planning Update



Background

- Initial planning efforts presented to OCTA Board on June 9, 2025
- OCTA and LA Metro have had regular meetings to advance planning efforts for both events
- The planning focus is to deliver safe, seamless, high-quality transit service for spectators and workforce while minimizing impacts to existing riders
- The FIFA World Cup will include eight matches at SoFi between June 12 and July 10, 2026
- The LA28 Olympic and Paralympic Games will include more than 800 events at over 80 venues across the region over a six-week period. Two venues have been confirmed in or adjacent to Orange County (Honda Center and Trestles Beach)

Board – Board of Directors
FIFA - Fédération Internationale de Football Association
Games - Olympic and Paralympic Games
LA28 - Los Angeles 2028
LA Metro - Los Angeles County Metropolitan Transportation Authority
OCTA - Orange County Transportation Authority
SoFi – SoFi Stadium

FIFA – Transportation Requirements

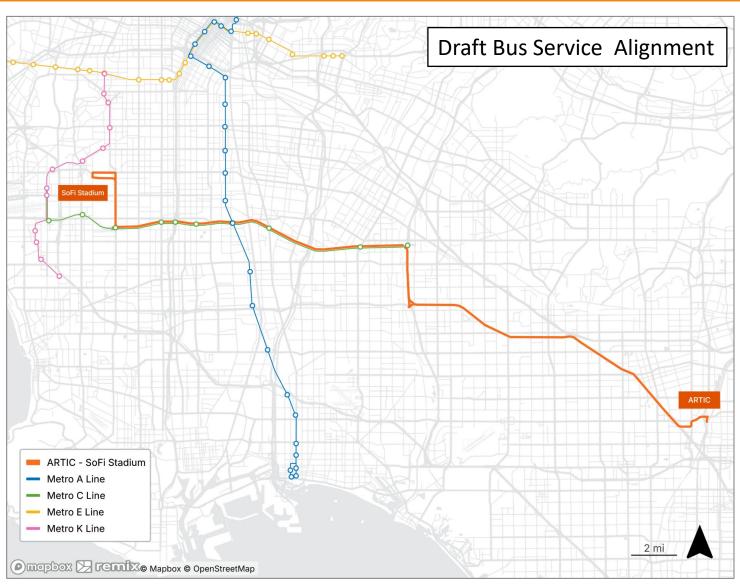
- All Los Angeles World Cup matches will be held at SoFi
- Eight matches, which include two matches featuring Team USA
- No public spectator parking available on-site, assuming over 80 percent of spectators and workforce will use public transit
- LA Metro is creating a park-and-ride and direct bus service expected to carry over 30,000 people to and from each match, requiring over 300 buses
 - Order of magnitude is five to six times ridership for a typical National Football League game
 - Over one dozen routes connecting with off-site parking lots and rail stations



USA - United States of America

FIFA – Dedicated Bus Service

- OCTA and LA Metro are coordinating on a possible bus service from ARTIC to SoFi
- Benefits of ARTIC connection
 - Access to hotels in the Anaheim Resort area
 - Direct connection to Amtrak and Metrolink
 - Abundant parking at OC Vibe



FIFA – Anticipated Costs

- Anticipated costs for OCTA to operate a FIFA World Cup 2026 bus service from ARTIC to SoFi Stadium are based on the following assumptions:
 - o 18 vehicles
 - o 900 daily passengers
 - Eight hours of service per vehicle per day over eight days
- Total estimated cost (including contingency) is approximately \$300,000
- OCTA seeking reimbursement from LA Metro for the bus service

LA28 – Updated Competition Schedule

Honda Center:

- Confirmed up to four volleyball sessions per day
- Venue active for 16 days
- Peak days will attract 72,000 people (18,000 per session)

Trestles Beach:

- Confirmed one surfing session per day
- Venue active for the first four days with contingency days as needed

Number of sessions per venue per day

	Day 1	Day 2	Day 3	Day 4	Day 5	Day 6	Day 7	Day 8	Day 9	Day 10	Day 11	Day 12	Day 13	Day 14	Day 15	Day 16
	Sat, Jul 15	Sun, Jul 16	Mon, Jul 17	Tue, Jul 18	Wed, Jul 19	Thu, Jul 20	Fri, Jul 21	Sat, Jul 22	Sun, Jul 23	Mon, Jul 24	Tue, Jul 25	Wed, Jul 26	Thu, Jul 27	Fri, Jul 28	Sat, Jul 29	Sun, Jul 30
Honda Center	4	4	4	4	4	4	4	4	4	4	4	2	2	1	2	1
Trestles Beach	1	1	1	1	Contingency	Contingency	Contingency	Contingency	Contingency							

LA28 – Key Updates

- Venue-specific planning has continued with stakeholders:
 - The first Event Operations Plan (EOP) session for the Honda Center took place in June 2025 with OCTA staff participating
 - EOP session for Trestles Beach scheduled on October 3, 2025
- Staff attended the LA Metro LA28 Games Summit, which convened a broad stakeholder group to discuss current planning efforts
- The Games Mobility Executive (GME) has established 13 specialized committees and OCTA membership on the GME is pending

LA28 – Challenges and Next Steps

- Key challenges remain for planning and cost estimation efforts, particularly due to:
 - Definition of the security perimeters at the venues
 - Clarity over roles and responsibilities
 - Uncertainty regarding parking availability and access arrangements
 - Scheduling of other events such as Major League Baseball games
- Future activities will focus on advancing discussions on roles and responsibilities and identifying funding needs for Games-related services
- Identification of funding sources to accommodate transit services

Recommendations

- Direct staff to work with LA Metro to continue to plan and implement WC26 transit service
- Authorize CEO to negotiate and execute a funding agreement between OCTA and LA Metro to obtain reimbursement from LA Metro on WC26 transit service expenses
- Direct staff to seek state and federal funding opportunities for LA28 transit service

CEO - Chief Executive Officer