



AGENDA

Regional Planning and Highways Committee Meeting

Committee Members

Mark A. Murphy, Chairman
Barbara Delgleize, Vice Chair
Lisa A. Bartlett
Doug Chaffee
Patrick Harper
Gene Hernandez
Joe Muller
Vicente Sarmiento

Orange County Transportation Authority
Headquarters
Conference Room 07
550 South Main Street
Orange, California
Monday, June 7, 2021 at 10:30 a.m.

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, telephone (714) 560-5676, no less than two (2) business days prior to this meeting to enable OCTA to make reasonable arrangements to assure accessibility to this meeting.

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 Committee 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.

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.

Guidance for Public Access to the Board of Directors/Committee Meeting

On March 12, 2020 and March 18, 2020, Governor Gavin Newsom enacted Executive Orders N-25-20 and N-29-20 authorizing a local legislative body to hold public meetings via teleconferencing and make public meetings accessible telephonically or electronically to all members of the public to promote social distancing due to the state and local State of Emergency resulting from the threat of Novel Coronavirus (COVID-19).

In accordance with Executive Order N-29-20, and in order to ensure the safety of the OCTA Board of Directors (Board) and staff and for the purposes of limiting the risk of COVID-19, in-person public participation at public meetings of the OCTA will not be allowed during the time period covered by the above-referenced Executive Orders.

Instead, members of the public can listen to AUDIO live streaming of the Board and Committee meetings by clicking the below link:

<http://www.octa.net/About-OCTA/Who-We-Are/Board-of-Directors/Live-and-Archived-Audio/>



Guidance for Public Access to the Board of Directors/Committee Meeting (Continued)

Public comments may be submitted for the upcoming Board and Committee meetings by emailing them to ClerkOffice@octa.net.

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.

In order to ensure that staff has the ability to provide comments to the Board Members in a timely manner, please submit your public comments **90 minutes prior to the start time of the Board and Committee meeting date.**

Call to Order

Roll Call

Pledge of Allegiance

Director Harper

1. Public Comments

Special Calendar

There are no Special Calendar matters.

Consent Calendar (Items 2 through 8)

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

2. Approval of Minutes

Approval of the minutes of the Regional Planning and Highways Committee meeting of May 3, 2021.



3. Measure M2 Environmental Mitigation Program Update
Lesley Hill/Kia Mortazavi

Overview

Measure M2 includes a program to deliver comprehensive mitigation for specific environmental impacts of 13 freeway projects in exchange for streamlined project approvals from the state and federal Resource Agencies. The Environmental Mitigation Program has acquired conservation properties and provided funding for habitat restoration projects as part of the Natural Community Conservation Plan/Habitat Conservation Plan. A biannual status report of the Environmental Mitigation Program is presented.

Recommendation

Receive and file as an information item.

4. Consultant Selection for the Freeway Chokepoint Improvement Study
Stephanie Chhan/Kia Mortazavi

Overview

The Orange County Transportation Authority is retaining a consultant to conduct an 18-month study to identify freeway chokepoints remaining in Orange County after the implementation of the Measure M2 Freeway Program and to develop improvement strategies. Board of Directors' approval for the selection of a firm to perform the required work is requested.

Recommendations

- A. Approve the selection of Kittelson and Associates, Inc., as the firm to provide consulting services to conduct the Freeway Chokepoint Improvement Study.
- B. Authorize the Chief Executive Officer to negotiate and execute Agreement No. C-1-3346 between the Orange County Transportation Authority and Kittelson and Associates, Inc., in the amount of \$297,337, to provide consulting services to conduct the Freeway Chokepoint Improvement Study.



5. Comprehensive Transportation Funding Programs Semi-Annual Review - March 2021

Charvalen Alacar/Kia Mortazavi

Overview

The Orange County Transportation Authority recently completed the March 2021 semi-annual review of projects funded through the Comprehensive Transportation Funding Programs. This process reviews the status of Measure M2 grant-funded projects and provides an opportunity for local agencies to update project information and request project modifications. Recommended project adjustments and a proposed Comprehensive Transportation Funding Programs Guidelines exception are presented for review and approval.

Recommendations

- A. Approve requested adjustments to Comprehensive Transportation Funding Programs projects, Local Fair Share, and Senior Mobility Program funds.
- B. Due to the impacts of the coronavirus, approve an exception to the Comprehensive Transportation Funding Programs Guidelines for Environmental Cleanup Program Tier I projects in order for project award delays to be granted.

6. Measure M2 Eligibility Review Recommendations for Fiscal Year 2019-20 Expenditure Reports

Kelsey Imler/Kia Mortazavi

Overview

The Measure M2 Ordinance requires that all Orange County local jurisdictions annually satisfy eligibility requirements to receive Measure M2 net revenues. As part of this requirement, fiscal year 2019-20 expenditure reports and resolutions were submitted by the local jurisdictions. In April 2020, the Taxpayer Oversight Committee affirmed that all expenditure reports were received and reviewed consistent with Measure M2 requirements. Board of Directors' approval is requested to find all Orange County local jurisdictions eligible to continue receiving Measure M2 net revenues.

Recommendation

Approve all 35 Orange County local jurisdictions eligible to continue receiving Measure M2 net revenues.



7. Programming Recommendations for Coronavirus Response and Relief Supplemental Appropriations Act of 2021 and Mid-Cycle State Transportation Improvement Program

Ben Ku/Kia Mortazavi

Overview

The Coronavirus Response and Relief Supplemental Appropriations Act of 2021, signed into law on December 27, 2020, appropriated funding for transportation infrastructure and programs to mitigate revenue loss due to the coronavirus pandemic. Based on state guidelines, these funds will flow through the mid-cycle process for the State Transportation Improvement Program. Programming recommendations are presented for the Board of Directors' consideration and approval.

Recommendations

- A. Approve the 2021 mid-cycle State Transportation Improvement Program submittal to program Coronavirus Response and Relief Supplemental Appropriations Act of 2021 for the following:
 - \$800,000 for the State Route 74 Ortega Highway Improvement Project, and
 - \$588,506 for planning, programming, and monitoring.
- B. Authorize staff to make all necessary amendments to the State Transportation Improvement Program and the Federal Transportation Improvement Program, as well as execute any necessary agreements to facilitate the recommendations above.

8. Regional Traffic Signal Synchronization Program Update

Alicia Yang/Kia Mortazavi

Overview

The Orange County Transportation Authority has been working with local cities, the County of Orange, and the California Department of Transportation to fund and implement key regional traffic signal synchronization projects. This report provides an update on the Measure M2 Regional Traffic Signal Synchronization Program, including results from recently completed projects.

Recommendation

Receive and file as an information item.



Regular Calendar

9. Draft 2021 State Route 91 Implementation Plan

Alison Army/Kia Mortazavi

Overview

The Orange County Transportation Authority and the Riverside County Transportation Commission annually prepare a plan for potential improvements along the State Route 91 corridor between State Route 57 in Orange County and Interstate 15 in Riverside County. The plan includes a listing of proposed improvements, preliminary cost estimates, and potential implementation timeframes. These improvements are sponsored by various agencies, such as the Orange County Transportation Authority, the Riverside County Transportation Commission, the Transportation Corridor Agencies, the California Department of Transportation, and cities along the corridor. The Draft 2021 State Route 91 Implementation Plan is provided for information purposes.

Recommendation

Receive and file as an information item.

10. Active Transportation Program Biannual Update

Peter Sotherland/Kia Mortazavi

Overview

The Orange County Transportation Authority coordinates regional active transportation efforts in Orange County. An update on recent and upcoming activities is provided for review.

Recommendation

Receive and file as an information item.



11. Transportation Control Measures - Substitute Program of Projects
Anup Kulkarni/Kia Mortazavi

Overview

The Orange County Transportation Authority, the Transportation Corridor Agencies, and the County of Orange have made project delivery commitments to specific projects that fulfill short-term air quality conformity requirements. Based on air quality regulations, these previously planned projects, known as transportation control measures, must be implemented by December 2022 and December 2023. If not, substitute projects with an equivalent air quality benefit must be delivered in a similar timeframe. Due to project delays, a substitute program of projects is recommended to move forward for implementation. Recommendations are presented to initiate the substitution process with the Southern California Association of Governments, and authorization to negotiate and execute a cooperative agreement with the Transportation Corridor Agencies for toll road improvements within the existing toll facility rights-of-way.

Recommendations

- A. Direct staff to work with the Southern California Association of Governments to replace the previously planned projects in the Federal Transportation Improvement Program with the substitute program of projects included in this report.
- B. Authorize the Chief Executive Officer, or his designee, to negotiate and execute a cooperative agreement with the Transportation Corridor Agencies for improvements on existing toll facilities.

Discussion Items

12. Update on Interstate 5 Improvement Project from San Diego County Line to Avenida Pico
Josue Vaglienty/James G. Beil

Staff will provide a project update.

13. Fiscal Year 2021-22 Budget Workshop Follow-up
Victor Velasquez/Andrew Oftelie

Budget staff is available for follow-up questions, issues, or concerns that may have arisen at and/or since the budget workshop conducted with the Board of Directors on May 10, 2021.



AGENDA

Regional Planning and Highways Committee Meeting

14. Chief Executive Officer's Report

15. Committee Members' Reports

16. Closed Session

There are no Closed Session items scheduled.

17. Adjournment

The next regularly scheduled meeting of this Committee will be held at **10:30 a.m. on Thursday, July 1, 2021**, at the Orange County Transportation Authority Headquarters, Conference Room 07, 550 South Main Street, Orange, California.



MINUTES

Regional Planning and Highways Committee Meeting

Committee Members Present via Teleconference

Mark A. Murphy, Chairman
Barbara Delgleize, Vice Chair
Lisa A. Bartlett
Doug Chaffee
Patrick Harper
Gene Hernandez
Joe Muller
Vicente Sarmiento

Staff Present

Jennifer L. Bergener, Deputy Chief Executive Officer
Allison Cheshire, Interim Deputy Clerk of the Board
Gina Ramirez, Deputy Clerk of the Board

Via Teleconference:

Darrel E. Johnson, Chief Executive Officer
Cassie Trapesonian, Assistant General Counsel

Committee Members Absent

None

Call to Order

The May 3, 2021 regular meeting of the Regional Planning and Highways Committee was called to order by Committee Chairman Murphy at 10:31 a.m.

Roll Call

The Deputy Clerk of the Board conducted an attendance Roll Call and announced a quorum of the Regional Planning and Highways Committee.

Pledge of Allegiance

Director Chaffee led the Pledge of Allegiance.

1. Public Comments

There were no Public Comments.

Special Calendar

There were no Special Calendar matters.

Consent Calendar (Items 2 through 4)

A motion was made by Director Bartlett, seconded by Director Sarmiento, and following a roll call vote, declared passed 7-0, to approve the minutes of the Regional Planning and Highways Committee meeting of April 5, 2021.

Director Hernandez was not present to vote on this item.

3. Contract Change Orders for the Interstate 405 Improvement Project from State Route 73 to Interstate 605

Director Bartlett pulled this item to inquire about the bulk of the Contract Change Orders (CCOs) and asked if the project would go over budget.

Jeff Mills, Project Manager, reported that the CCOs presented today were anticipated and that the most significant issues have been completed. Staff is confident that the contingency is adequate moving forward.

A motion was made by Director Bartlett, seconded by Director Delgleize, and following a roll call vote, declared passed 8-0, to:

- A. Authorize the Chief Executive Officer to negotiate and execute Contract Change Order No. 68.2 to Agreement No. C-5-3843 between the Orange County Transportation Authority and OC 405 Partners, a joint venture, in the amount of \$75,000, to provide additional environmental monitoring services.
- B. Authorize the Chief Executive Officer to negotiate and execute Contract Change Order No. 89 to Agreement No. C-5-3843 between the Orange County Transportation Authority and OC 405 Partners, a joint venture, in the amount of \$578,348, to incorporate lighting management system specifications.
- C. Authorize the Chief Executive Officer to negotiate and execute Contract Change Order No. 90 to Agreement No. C-5-3843 between the Orange County Transportation Authority and OC 405 Partners, a joint venture, in the amount of \$867,349, to construct the Bolsa Chica Road community wall.
- D. Authorize the Chief Executive Officer to negotiate and execute Contract Change Order No. 91 to Agreement No. C-5-3843 between the Orange County Transportation Authority and OC 405 Partners, a joint venture, in the amount of \$418,620, to provide additional traffic signal equipment at multiple intersections.
- E. Authorize the Chief Executive Officer to negotiate and execute Contract Change Order No. 92 to Agreement No. C-5-3843 between the Orange County Transportation Authority and OC 405 Partners, a joint venture, in the amount of \$995,000, to mitigate a right-of-way encroachment.



4. Comprehensive Transportation Funding Programs - 2021 Call for Projects Programming Recommendations

Director Bartlett pulled this item to thank the staff for getting the call for projects moving forward, which is essential for regional mobility planning.

A motion was made by Director Bartlett, seconded by Director Delgleize, and following a roll call vote, declared passed 8-0, to:

- A. Approve the award of \$20.2 million in 2021 Measure M2 Regional Capacity Program (Project O) funds to nine projects.
- B. Approve the award of \$8.5 million in 2021 Measure M2 Regional Traffic Signal Synchronization Program (Project P) funds to three projects.

Regular Calendar

5. Regional Planning Update

Warren Whitaker, Principal Transportation Analyst, provided a PowerPoint presentation on this item.

A discussion ensued among the Committee Members and staff regarding the following:

- Factors affecting the delay in widening the existing toll lanes;
- Collaborative efforts between the Orange County Transportation Authority (OCTA) and the Transportation Corridor Agencies on projects; and
- Signal synchronization projects.

Following the discussion, no action was taken on this receive and file as an information item.

6. Cooperative Agreement with the City of San Juan Capistrano for the Ortega Highway Widening Improvements from Calle Entradero to Reata Road

Adrian Cardoso, Department Manager, Capital Programming, provided an overview of the project and explained why the staff is seeking to cancel the original letter agreement and enter into a cooperative agreement with the City of San Juan Capistrano.

Director Bartlett noted that this is the second major project on Ortega Highway, which has been ongoing for six years, and the project costs have escalated. The project will allow for better traffic flow and safety along the highway.



6. (Continued)

Darrell Johnson, Chief Executive Officer (CEO), commented that Ortega Highway is a state highway but functions as a local arterial. Local cities and the county are eligible for Measure M2 funds, but the California Department of Transportation (Caltrans) is not. A cooperative agreement between OCTA and San Juan Capistrano (City) will allow the City to sponsor the project and receive funds and enable the City to pass the funds through to Caltrans to complete the project.

Kia Mortazavi, Executive Director of Planning, confirmed that Caltrans would complete the work. It is most efficient for the agency to do so because Caltrans is the owner/operator of the highway.

Ms. Cardoso commented that the City must provide the match, and then OCTA will provide funds.

Mr. Johnson, CEO, commented that the project has been environmentally cleared and approved by the state and that the construction plan has not yet been finalized.

A motion was made by Director Bartlett, seconded by Director Muller, and following a roll call vote, declared passed 8-0, to:

- A. Authorize the Chief Executive Officer to negotiate and execute Cooperative Agreement No. C-1-3410 between the Orange County Transportation Authority and the City of San Juan Capistrano, in the amount of \$5,250,000, in Measure M2 Project O funds for the preparation of plans, specifications, and estimates for the Ortega Highways Widening Improvement Projects from Calle Entradero to Reata Road.
- B. Approve cancelling Letter Agreement No. 5 to the Comprehensive Transportation Funding Programs Master Agreement No. C-1-2782 with the City of San Juan Capistrano.

7. Consultant Selection for the Preparation of Plans, Specifications, and Estimates for the Interstate 5 Widening Project Between Interstate 405 and Yale Avenue

Josue Vaglienty, Senior Project Manager, provided an overview of the project's procurement process and scope.

Darrell Johnson, Chief Executive Officer, commented that price is not a factor in architectural and design procurements.

A motion was made by Director Bartlett, seconded by Director Delgleize, and following a roll call vote, declared passed 8-0, to:

- A. Approve the selection of AECOM Technical Services, Inc., as the firm to prepare the plans, specifications, and estimates for the Interstate 5 Widening Project between Interstate 405 and Yale Avenue.
- B. Authorize the Chief Executive Officer to negotiate and execute Agreement No. C-0-2637 between the Orange County Transportation Authority and AECOM Technical Services, Inc., to prepare the plans, specifications, and estimates for the Interstate 5 Widening Project between Interstate 405 and Yale Avenue.

Discussion Items

8. South Orange County Projects Update

Kurt Brotcke, Director of Strategic Planning, provided a PowerPoint presentation on the TCA and Caltrans study of toll road expansion options in South Orange County in March 2020.

Mr. Brotcke discussed the technical work, public input, and policy direction for the three alternatives identified to move forward in the project development process. He noted that these included a non-tolled extension of Los Patrones Parkway from Cow Camp Road to Avenida La Pata. Also, the widening Ortega Highway between Calle Entradero to Reata Road and extension of the Interstate 5 carpool lane from Avenida Pico to the San Diego County line area.

Mr. Brotcke also discussed future projects that will be considered part of OCTA's comprehensive South Orange County Multimodal Transportation Study.

Director Bartlett commented that South County has room for growth and that planning for future growth will increase public safety and mobility.

Director Muller commented that the projects are essential to alleviate traffic and congestion on Interstate 5

9. Chief Executive Officer's Report

Coronavirus Update / Wave 2 Return

- Mr. Johnson, CEO, reported Orange County has been in the Orange Tier of the State's Blueprint for a Safer Economy for a little more than a month. Based on the Return to the Workplace plan staff developed from state guidelines, he stated that this allows for up to 25% capacity to return to the OCTA administrative offices.
- Starting May 3rd, OCTA's Wave 2 group of employees have voluntarily returned to the administrative offices.
- OCTA now has approximately 90 employees currently in the office, which is slightly less than the 25% capacity limit.
- The Executive Staff will monitor any transition to the Yellow Tier to determine when additional employees can safely and strategically return other employees to the office.

EMSD Workshops

- Last week, approximately 60 people participated in two workshops OCTA hosted for the Enhanced Mobility for Seniors and Disabled grant program.
- This grant program will offer non-profits and local public agencies opportunities to help meet the transportation needs of seniors and individuals with disabilities and augment ACCESS service.
- Pending approval of the Board in July, OCTA will release the Call for Projects of potentially up to \$4 million in local funds.
- OCTA's last call for projects under this program in 2018 awarded \$1.25 million to six agencies to provide some perspective.

10. Committee Members' Reports

There were no Committee Members' Reports.

11. Closed Session

There were no Closed Session items scheduled.



12. Adjournment

The next regularly scheduled meeting of this Committee will be held at **10:30 a.m. on Monday, June 7, 2021**, at the Orange County Transportation Authority Headquarters, Conference Room 07, 550 South Main Street, Orange, California.

ATTEST

Mark A. Murphy
Committee Chairman

Allison Cheshire
Interim Deputy Clerk of the Board



June 7, 2021

To: Regional Highways and Planning Committee
From: Darrell E. Johnson, Chief Executive Officer
Subject: Measure M2 Environmental Mitigation Program Update

Overview

Measure M2 includes a program to deliver comprehensive mitigation for specific environmental impacts of 13 freeway projects in exchange for streamlined project approvals from the state and federal Resource Agencies. The Environmental Mitigation Program has acquired conservation properties and provided funding for habitat restoration projects as part of the Natural Community Conservation Plan/Habitat Conservation Plan. A biannual status report of the Environmental Mitigation Program is presented.

Recommendation

Receive and file as an information item.

Background

Measure M2 (M2) includes the Environmental Mitigation Program (EMP) intended to mitigate certain impacts of 13 M2 freeway projects and streamline the approval process through state and federal Resource Agencies. This was achieved through the development of a Natural Community Conservation Plan/Habitat Conservation Plan (Conservation Plan), approved by the California Department of Fish and Wildlife (CDFW) and the United States Fish and Wildlife Service (collectively referred to as Wildlife Agencies) in 2017. Consistent with the Conservation Plan, the Orange County Transportation Authority (OCTA) has purchased seven conservation properties (Preserves) and funded 12 habitat restoration projects (Attachment A). An endowment was established for the long-term management of the Preserves. In a parallel process, the United States Army Corps of Engineers (ACOE) and the State Water Resources Control Board (SWRCB), commonly referred to as the Regulatory Agencies, have also established a framework to expedite the permitting process.

The development of the Conservation Plan, the subsequent purchase of these Preserves, and the restoration projects have largely met the intent of the EMP, and the mitigation needs of the M2 freeway projects. Many of the restoration projects are close to or have obtained approvals from the Wildlife Agencies. As a commitment of the Conservation Plan, OCTA is required to prepare an annual report on the implementation processes. The 2020 Annual Conservation Plan Report is complete and is being reviewed by the Wildlife Agencies. Once approved, it will be provided to the Environment Oversight Committee (EOC) and included in the next EMP staff report.

Discussion

OCTA Restoration Projects Fire Repair

The 2020 Silverado and Bond fires burned over 100 acres of OCTA-funded restoration projects. Three of the Irvine Ranch Conservancy (IRC)-managed restoration projects, including Agua Chinon, Bee Flat, and West Loma were impacted by the fires. These projects, along with the fire perimeters, are shown in Attachment B. IRC staff provided an overview of these impacts and proposed repair measures for the West Loma and Agua Chinon restoration projects during the February 3, 2021, EOC meeting. The Bee Flat project area was completed in 2020, requiring no additional efforts from OCTA.

Due to the fire damage, additional tasks will be required to meet the established success criteria for the West Loma and Agua Chinon projects. These tasks include labor and materials associated with increased weed control needs, re-seeding, reinstallation of plantings, and general maintenance. It is anticipated to take an additional two to three years to meet the required success criteria for each of these restoration projects. Updates for these projects as well as for the OCTA Conservation Plan Annual Reports will continue to be provided to the EOC.

Pacific Horizon Preserve OCTA Restoration Efforts

In October 2020, work began on the OCTA Pacific Horizon Restoration Project to decommission a trail segment. This work is focused on preserving the many-stemmed dudleya, which is a rare plant, as well as a covered species identified in OCTA's M2 Conservation Plan. OCTA obtained multiple permits and approvals prior to initiating this work. Contractors completed various tasks on the Preserve, including the removal and replacement of old barbed wire, removal of bicycle jumps, installation of restoration signs and posts for wildlife cameras, and removal of invasive plants. In March of this year, OCTA with the help of the Laguna Canyon Foundation, conducted additional outreach to the community to request cooperation in staying off this decommissioned portion of trail. In addition, invasive weed treatment occurred this winter adjacent to the OCTA-targeted restoration area. This effort also included treatment of invasive weeds on adjacent County-owned land (Attachment C).

Trabuco Rose Preserve Gully Restoration

OCTA staff began the implementation of an erosion stabilization project at the Trabuco Rose Preserve. Ongoing erosion has created a large gully in an unnamed tributary. The gully has been increasing in size, which has impacted the adjacent main access road.

Phase one of the restoration efforts included the placement of fabric and rock along approximately 80 linear feet of the upstream portion of the gully to buttress the sides. The buttressing reinforces the oak habitat and access road. The rock placement has been designed to mimic a natural creek and allows the water to flow down the gully gradually. Phase two of the project will continue the placement of rock and fabric for the downstream portion of the gully, terminating at Hickey Creek. The design will slow the water, ultimately flowing down into a larger step pool-like feature (waterfall) before meeting Hickey Creek. Native plants will be installed to help stabilize the rock and soften this new feature.

Phase one was completed in April 2021 (Attachment D). Staff worked with the Wildlife Agencies, the ACOE, the SWRCB, as well as the County to obtain the necessary permits/approvals. Phase two will require additional design and construction. OCTA is currently underway with a procurement for the design of this phase two. It is anticipated that the project will be completed in fiscal year 2022-23.

OCTA Preserves Fire Management Plans Update

As required by the Conservation Plan, OCTA began developing fire management plans for the Preserves in 2018. Each Preserve will have its own separate plan. The plans will provide guidelines for decision-making at all stages, including fire prevention, pre-fire vegetation management, suppression activities, and post-fire responses that are compatible with conservation and stewardship responsibilities. This includes annual vegetation thinning on the Preserves near homes and maintenance of the preserve access roads. An overview and status was provided to the EOC in February 2020.

The first plan for the Silverado Chaparral Preserve has been reviewed and approved by the Orange County Fire Authority. Staff is now coordinating with the Wildlife Agencies for approval. The subsequent plans are anticipated to be completed in 2021. Once completed, they will be shared with the EOC as well as interested stakeholders.

Clean Water Act Permits Update

The M2 freeway projects are anticipated to impact certain waters that are subject to regulation by the ACOE, the SWRCB, and the CDFW, and will require mitigation. Before construction activities can occur, OCTA must obtain sections

401 and 404 Clean Water Act permits from the aforementioned Regulatory Agencies. The Conservation Plan mitigation was utilized to help obtain Clean Water Act permits. This has streamlined the project-level permitting processes. These efforts are the result of years of collaboration between OCTA and the Regulatory Agencies and constitute another groundbreaking milestone for the M2 EMP.

Freeway Projects Update

The following construction projects have benefited from the EMP. Without the EMP's established process, additional mitigation-related requirements and unknown costs could have been incurred, resulting in increased project cost and schedule risks.

- Project C (Interstate 5 Improvement Project from State Route 73 [SR-73] to El Toro Road); and
- Project K (Interstate 405 Improvement Project from SR-73 to the Los Angeles County Line).

A strong partnership has been forged through collaboration with the environmental community as exemplified by their participation on the EOC. Furthermore, substantial risk reduction from the threat of potential lawsuits has occurred because of these partnerships.

EMP Endowment Fund Investment Report

Conservation Plan permits were issued by the Wildlife Agencies in mid-2017 streamlining the M2 environmental process. This allowed OCTA to expedite the M2 freeway projects. The Conservation Plan requires the establishment of a \$34.5 million endowment fund for long-term management of the Preserves. To date, OCTA has made five endowment deposits. Quarterly investment reports are provided to the Board of Directors (Board), with the most recent one presented in May 2021. As of March 31, 2021, the balance was \$18,216,874. The balance is above the fiscal year 2021 target of \$16,323,789. Staff will continue to provide regular endowment updates to the Board, Finance and Administration Committee, and the EOC.

Hikes and Equestrian Rides

Since March 2020, OCTA has postponed the docent-led hikes and equestrian rides. This is in compliance with the state's stay-at-home order to protect the health and well-being of all Californian residents and establish consistency across the state to slow the spread of the coronavirus (COVID-19). OCTA staff is monitoring the state's plan to fully reopen on June 15, 2021, if current COVID-19

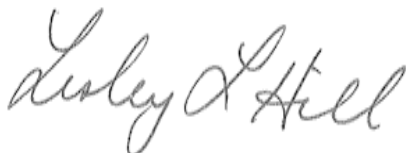
trends continue. OCTA will release the revised 2021 Wilderness Preserve Hiking and Equestrian Riding Tour calendar once it is determined safe to resume public events.

Summary

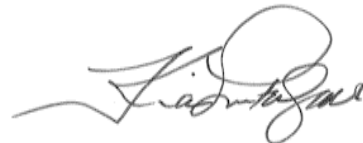
M2 includes an EMP that provides funding for programmatic mitigation to offset certain impacts of the 13 M2 freeway projects. To expedite the delivery of the M2 freeway projects, this program was initiated to implement early project mitigation through preservation and habitat restoration. This program is administered through a Conservation Plan, which was approved by the Wildlife Agencies in mid-2017. To maximize the benefits of the investments, OCTA has utilized some of that same mitigation to obtain Clean Water Act permits.

Attachments

- A. OCTA Preserves and Funded Restoration Projects
- B. OCTA Preserves and Restoration Projects Near Bond and Silverado Fires
- C. Pacific Horizon Preserve OCTA Restoration Efforts Map
- D. OCTA Trabuco Rose Gully Location Map and Photo

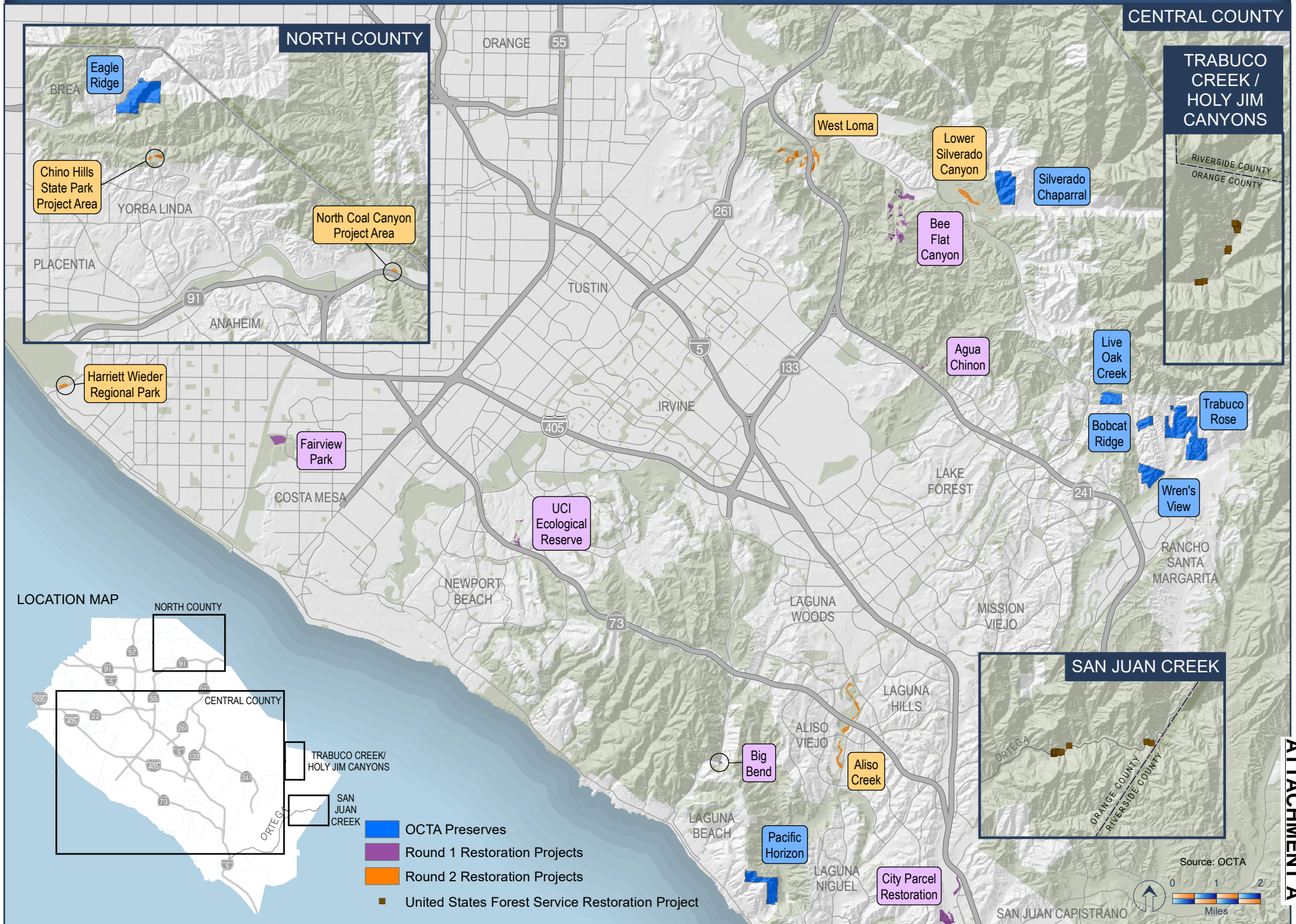
Prepared by:

Lesley Hill
Environmental Mitigation
Project Manager
(714) 560-5759

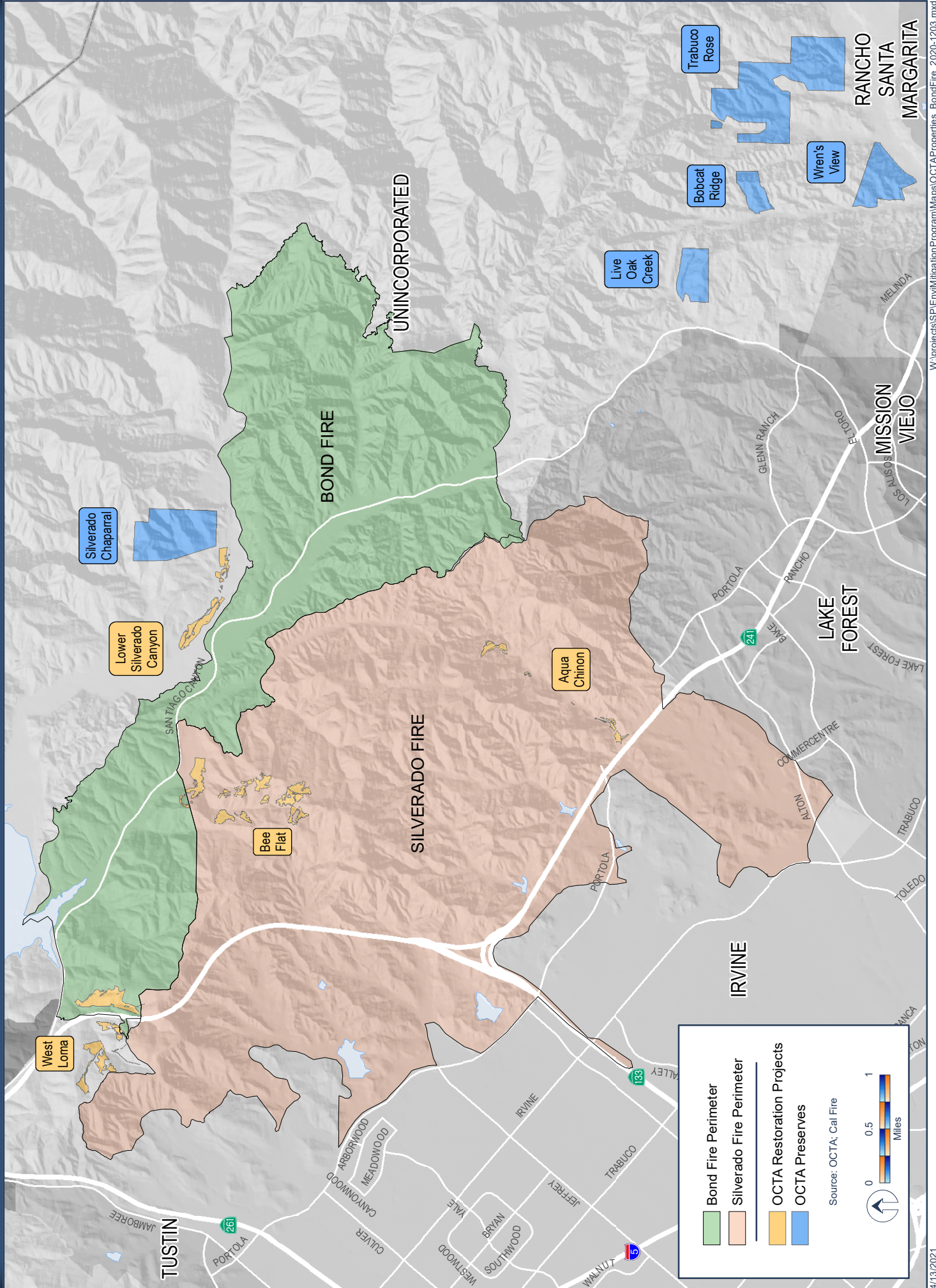
Approved by:

Kia Mortazavi
Executive Director, Planning
(714) 560-5741

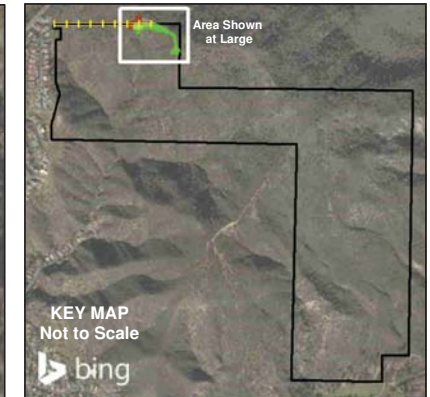
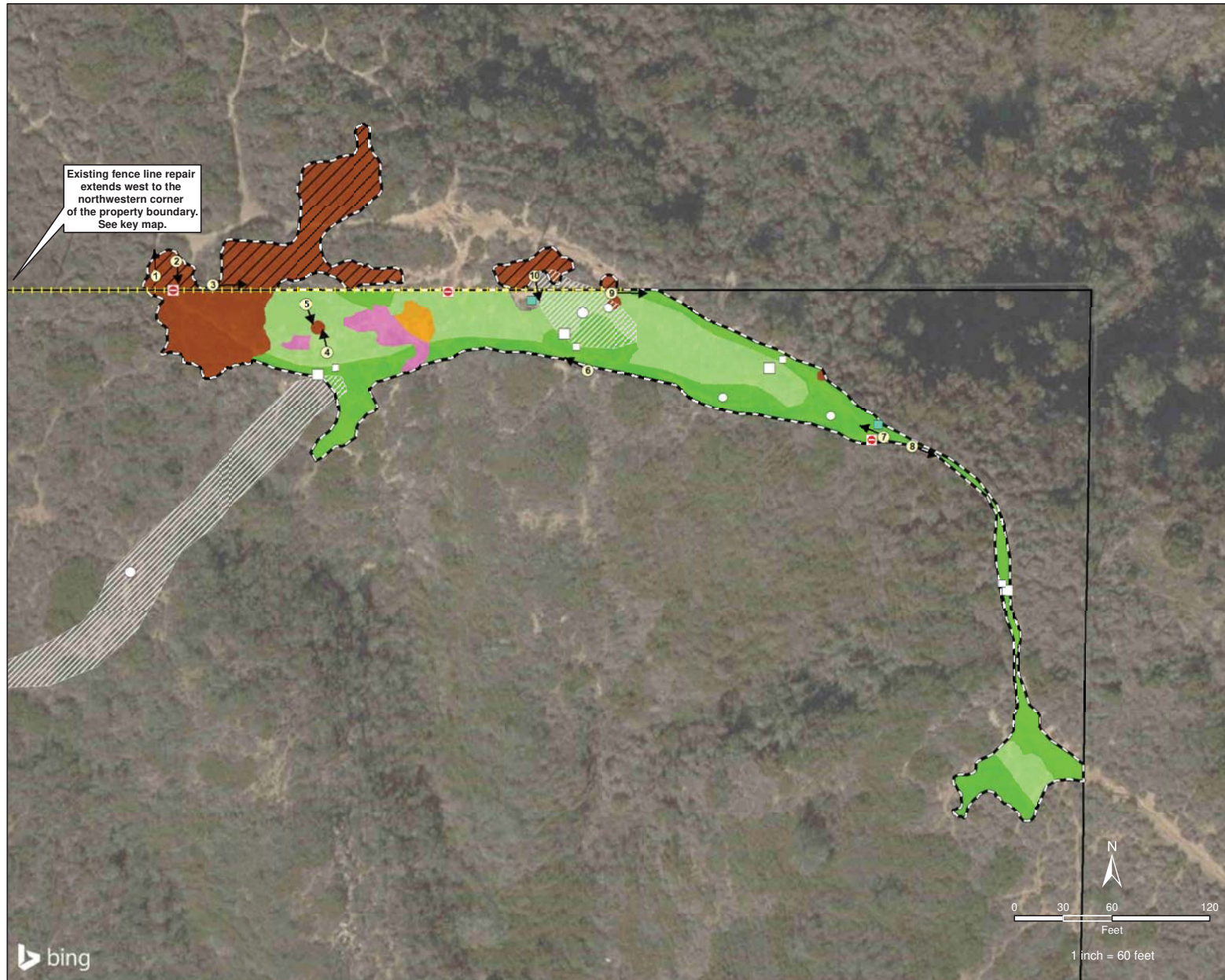
OCTA Preserves and Funded Restoration Projects



OCTA Preserves and Restoration Projects Near Bond and Silverado Fires



Pacific Horizon Preserve OCTA Restoration Efforts Map



- Pacific Horizon Preserve
 - Disturbed Lands Restoration Work Area
 - Existing Fence Repair
 - Iceplant Removal Areas (County Property) - 0.13 ac.
 - Iceplant Removal Areas - 0.07 ac.
 - Fountain Grass Removal Areas - 0.02 ac.
 - Pampas Grass Removal Areas - 0.01 ac.
 - Passive Restoration - 0.22 ac.
 - Active Restoration - 0.23 ac.
 - Proposed "Do Not Enter/Restoration in Progress" Sign
 - Proposed Approximate Location of Permanent Camera Station
 - Photo Location
- Covered Species**
- Intermediate Mariposa Lily
 - Intermediate Mariposa Lily
 - Many-stemmed Dudleya

PACIFIC HORIZON PRESERVE

Disturbed Lands Restoration Map

GLENN LUKOS ASSOCIATES

Exhibit 3



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ATTACHMENT C

OCTA Pacific Horizon Preserve Restoration Work Photos



Dudleya crushed by mountain biking activity (above). Dirt berm built by mountain bikers (right).



Breaking up large bike jump area. Workers pulled out over a dozen bags of dirt that formed the jump. Ground was left loose, broken up and dead brush was placed in the area. Site was monitored by Native American and archaeological contractors due to the proximity to sensitive resources. No cultural resources were detected.

OCTA Pacific Horizon Preserve Restoration Work Photos



(Left) Old rusty barbed wire fence line. (Right) New smooth wire fence line (wildlife friendly). Contractor was able to utilize some of the same posts. Fence is in the same location.



New signage and wildlife camera posts installed. Photo on right (photo from 2015) shows the Many-stemmed dudleya on site that we are trying to protect.

OCTA Pacific Horizon Preserve Restoration Work Photos

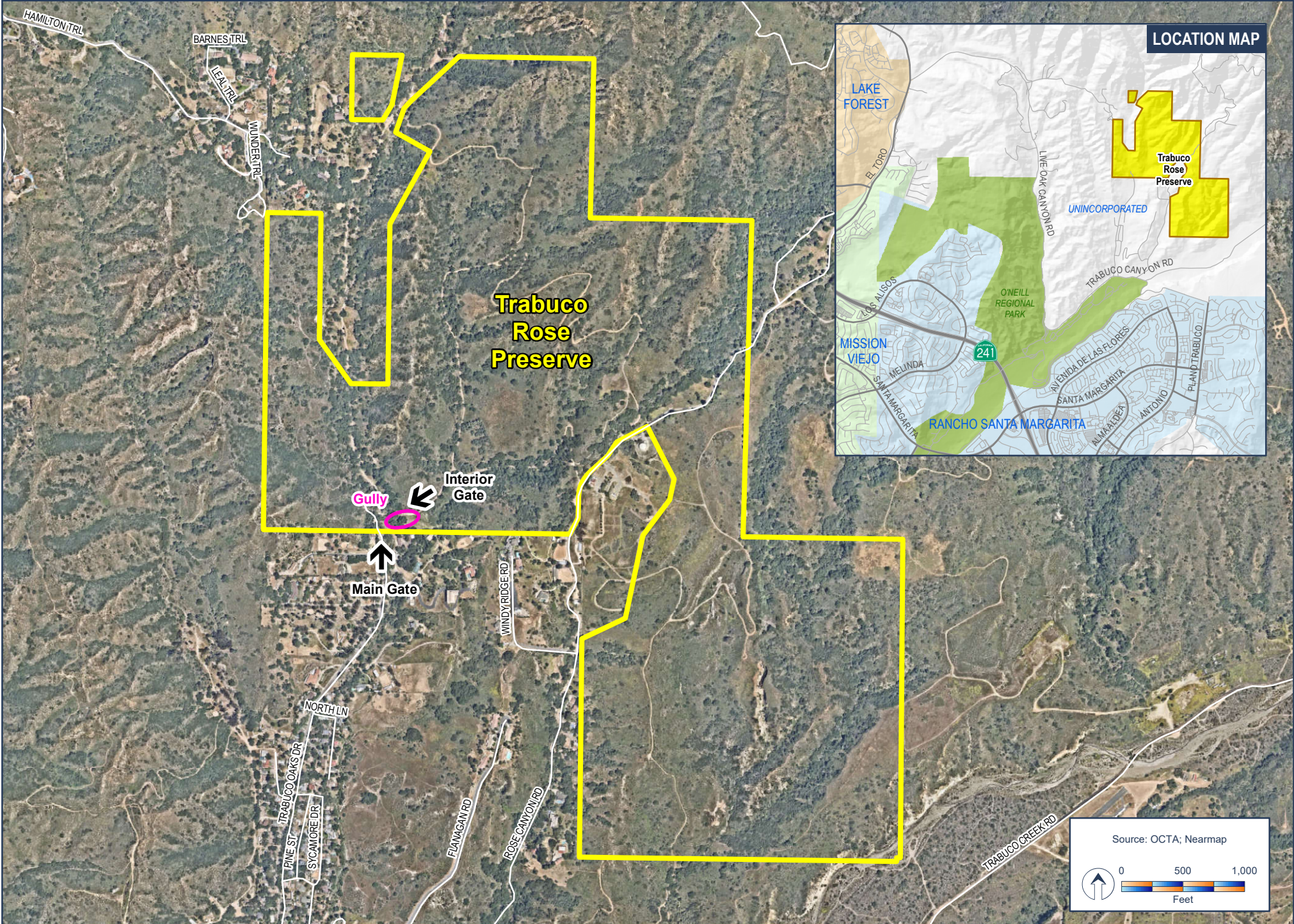


This picture depicts the main access point onto the decommissioned trail. Fence line has been fixed and signage placed.



Photo of same entry point looking at the back of the sign. Trail has been obscured with dead vegetation.

OCTA Trabuco Rose Gully Location Map and Photo





Gully – Before Construction of Phase 1 (March 2021)



Gully – Post Construction of Phase 1 (April 27, 2021)





June 7, 2021

To: Regional Planning and Highways Committee

From: Darrell E. Johnson, Chief Executive Officer

Subject: Consultant Selection for the Freeway Chokepoint Improvement Study

Overview

The Orange County Transportation Authority is retaining a consultant to conduct an 18-month study to identify freeway chokepoints remaining in Orange County after the implementation of the Measure M2 Freeway Program and to develop improvement strategies. Board of Directors' approval for the selection of a firm to perform the required work is requested.

Recommendations

- A. Approve the selection of Kittelson and Associates, Inc., as the firm to provide consulting services to conduct the Freeway Chokepoint Improvement Study.
- B. Authorize the Chief Executive Officer to negotiate and execute Agreement No. C-1-3346 between the Orange County Transportation Authority and Kittelson and Associates, Inc., in the amount of \$297,337, to provide consulting services to conduct the Freeway Chokepoint Improvement Study.

Discussion

Freeway chokepoints are areas of predictable and recurring congestion that may occur due to lane drops, merging, weaving, and other inefficient freeway operational or design elements. The 2018 Long-Range Transportation Plan (LRTP) Short-Term Action Plan recommended the development of a Freeway Chokepoint Improvement Study to identify and address future chokepoint locations, with a baseline assumption that the Measure M2 Freeway Program is fully implemented. In response, a scope of work was developed with a primary goal of identifying cost-effective, low-impact freeway chokepoint mitigation projects that increase safety, improve traffic operations, and reduce

congestion. The scope of work also includes the identification of opportunities to improve air quality, active transportation, and social equity.

A request for proposals (RFP) was issued to seek qualified consultants to conduct the Freeway Chokepoint Improvement Study. The consultant will be expected to deliver on the tasks and goals outlined in the scope of work. The Orange County Transportation Authority (OCTA) and the consultant will also incorporate a collaborative planning process to engage the California Department of Transportation (Caltrans) and potentially affected jurisdictions in the identification of chokepoints and evaluation improvement strategies. The results of this study will provide enough project detail so that the improvement options at priority locations can be considered for inclusion in the next LRTP.

Procurement Approach

This procurement was handled in accordance with OCTA's Board of Directors-approved procedures for professional and technical services. Various factors are considered in an award for professional and technical services. Award is recommended to the firm offering the most comprehensive overall proposal considering such factors as project organization and staffing, prior experience with similar projects, work plan, as well as cost and price.

On March 1, 2021, RFP 1-3346 was issued electronically on CAMM NET. The project was advertised in a newspaper of general circulation on March 1 and March 8, 2021. A pre-proposal teleconference was held on March 10, 2021, with 17 attendees representing 12 firms. An addendum was issued to provide a copy of the pre-proposal registration sheet and to respond to questions related to the RFP.

On March 25, 2021, five proposals were received. An evaluation committee consisting of OCTA staff from Contracts Administration and Materials Management, Planning and Analysis, Project Development, Transportation Modeling, and Project Management departments met to review all proposals received.

The proposals were evaluated based on the following evaluation criteria and weightings:

- | | |
|-------------------------------------|------------|
| • Qualifications of the Firm | 20 percent |
| • Staffing and Project Organization | 25 percent |
| • Work Plan | 35 percent |
| • Cost and Price | 20 percent |

Several factors were considered in developing the criteria weightings. Qualifications of the firm was weighted at 20 percent because firms had to demonstrate experience on similar projects, such as freeway chokepoint improvement projects or studies that reduce congestion, increase safety, and improve traffic operations. Staffing and project organization was weighted at 25 percent as the project team had to demonstrate expertise with project management and experience in identifying freeway chokepoints and developing improvement strategies. The work plan was weighted highest at 35 percent because the firm had to present an approach that demonstrated how they would develop a conceptual planning strategy to address chokepoints identified in the scope of work. Cost and price was weighted at 20 percent to ensure OCTA receives competitive pricing for the proposed services.

On April 14, 2021, the evaluation committee reviewed all proposals received based on the evaluation criteria and short-listed the three most qualified firms. The three short-listed firms are listed below in alphabetical order:

Firm and Location

HDR Engineering, Inc.(HDR)
Irvine, California

Iteris, Inc. (Iteris)
Santa Ana, California

Kittelson and Associates, Inc. (Kittelson)
Orange, California

On April 20, 2021, the evaluation committee interviewed the three short-listed firms. The interviews consisted of a presentation to demonstrate the firms' understanding of OCTA's requirements for this project. The firms' project managers and key team members had an opportunity to present qualifications and respond to the evaluation committee's questions. Questions were asked relative to the firms' experience performing similar services with projects

involving freeway chokepoint improvement studies. The firms were asked to discuss considerations, constraints, or risks that need to be assessed in executing the work plan and explain their approach to ensure successful completion of this study within the 18-month schedule. Finally, firms were asked clarifying questions related to each firm's proposal.

After considering the responses to the questions asked during the interviews, the evaluation committee reviewed the preliminary rankings and made adjustments to individual scores; however, the overall ranking of the firms did not change as a result of the interviews.

Based on the evaluation of the written proposals, information obtained from the interviews, as well as cost and price, the evaluation committee recommends Kittelson for award. The following is a brief summary of the proposal evaluation results.

Qualifications of the Firm

The short-listed firms are qualified and demonstrated experience providing related services.

Kittelson was founded in 1985 and has 250 employees across 24 offices in the United States. Kittelson's Southern California regional office, located in the City of Orange, provides multimodal transportation planning and traffic engineering to local, regional, and state agencies. Kittelson has experience working on relevant projects, such as the Pennsylvania Department of Transportation Freeway Planning and Operations Analysis System where the firm evaluated systemwide freeway operations to propose future improvements and traffic management strategies, some of which were at chokepoint locations. The firm also worked on several studies with the Florida Department of Transportation to identify future potential freeway-congested locations and assess freeway operation impacts of constructing dual high-occupancy vehicles/high-occupancy toll at managed lanes access points. Other relevant efforts included projects with the North Carolina Department of Transportation, Contra Costa Transportation Authority, and multiple projects for OCTA including the State Route 91 Geometric and Design Alternatives Analysis, the Beach Boulevard Corridor Study, and the Master Plan of Arterial Highways (MPAH) Complete Streets Assessment.

Iteris was founded in 1987 and the firm's headquarters, as well as project office, is located in the City of Santa Ana. Iteris' 19 offices and 425 employees specialize in transportation planning and traffic engineering. The firm has proven experience contracting with transit companies and public agencies with projects

that include the Inland Empire comprehensive corridor plans for the Southern California Association of Governments, the United States 101 Multimodal Corridor Study for Ventura County, a highway system assessment and hot spot analysis for the Los Angeles County Metropolitan Transportation Authority (LA Metro), an update to the monitoring process for the Congestion Management Program for the San Bernardino County Transportation Authority (SBCTA), an MPAH reclassification traffic analysis for the County of Orange, and development and maintenance of a traffic management plan for the Interstate 405 (I-405) Design-Build Improvement Project for OCTA.

HDR was founded in 1917 and has been in Southern California since 1973, and the local office is located in the City of Irvine. The firm has over 10,000 employees in 200 locations worldwide specializing in infrastructure planning and design, transportation planning, strategic planning, traffic studies, tolling studies, and public outreach. The firm has worked with OCTA on multiple projects including the Orange County Freeway Study, Pacific Coast Highway Corridor Study, and South Orange County Multimodal Transportation Study. Additionally, the firm has relevant experience with LA Metro, on the Interstate 605 Corridor Improvement Project, developed alternatives and proposed geometric improvements on State Route 133 for the City of Laguna Beach, and developed a strategic assessment for Riverside County Transportation Commission.

Staffing and Project Organization

Kittelson proposed a qualified team with transportation planning, traffic engineering, and conceptual design experience. The firm proposed a co-project manager approach with two project managers assigned to the effort. The first proposed co-project manager has more than 24 years of experience and six years with the firm coordinating with local and regional transportation and environmental agencies in Southern California and is experienced on planning and engineering projects in Orange County. The proposed co-project manager provided project management on the MPAH Complete Streets Assessment and has worked on other projects to develop solutions for freeway congestion and street problems in coordination with OCTA and Caltrans. The second proposed co-project manager has 41 years of experience and 35 years with the firm. The individual has conducted freeway operations studies of lane options for several freeways in the Orlando, Tampa Bay, and Fort Meyers areas of Florida. The proposed project team demonstrated transportation backgrounds and familiarity with freeway operations. During the interview, the project team provided comprehensive responses to the evaluation committee's questions.

Iteris proposed an experienced team. The proposed project manager has over ten years of experience working in the field of transportation engineering and three years with the firm. The project manager has demonstrated knowledge and experience in traffic operations analysis and transportation impact analysis. The proposed principal-in-charge has five years of experience with the firm and has a background in transportation systems development and designing, as well as designing and deploying projects involving technologies, including traffic management systems for application in the traffic and transit environments. During the interview, the project manager was unable to clarify how they would manage potential problems and escalating issues.

HDR proposed an experienced team with prior transportation and Orange County freeway project history. The project manager has 11 years of experience with the firm and has managed projects involving transportation planning, traffic engineering, and travel demand forecasting for over 40 years. His relevant projects include the Orange County Freeway Study and Pacific Coast Highway Corridor Study. The proposed planner has more than 16 years of experience in planning and transportation including multiple Southern California projects and has one year of experience with the firm. The firm proposed reasonable availability of key staff but did not include sufficient details describing the level of commitment at the support staff level. During the interview, the firm proposed to assign project staff as the project progresses but was unable to identify any specific support personnel during the interview.

Work Plan

Kittelson presented a work plan that addressed all elements of the scope of work and its requirements. The firm provided a thorough approach to completing each task and proposed enhancements to the scope of work requirements including looking at active transportation and demand management strategies, as well as identifying other issues, such as the coronavirus (COVID-19) and the work from home impacts on traffic. The firm also discussed potential future scenarios and proposed a clear plan on how the improvement strategies would be analyzed and screened. The proposed work plan focused on delivering a product tailored for OCTA's needs. The proposal included the use of datasets, such as the Caltrans Performance Measurement System, Street Light Data, INRIX, or the Federal Highway Administration's National Performance Management Research Set to identify chokepoints. The proposal demonstrated how FREEVAL, an advanced corridor-based traffic operations assessment tool can be used to assess the current and future chokepoint locations and offered to share the model with OCTA and provide any needed training at the end of the project.

Iteris' work plan demonstrated an understanding of the project requirements. The firm discussed specifics of the scope of work and presented a detailed work plan. Iteris provided details on the firm's approach using a big data analytics platform, ClearGuide, to identify freeway chokepoints and provided examples of its use in traffic management for OCTA's I-405 Improvement Project, LA Metro's Measure Up Arterial Performance Measure Pilot, and monitoring arterial roadways for SBCTA. The big data approach utilizes larger, more complex data sets that cannot be managed and analyzed by traditional data processing software. In transportation, big data may be collected from cell phone data, sensors, or connected vehicles and allows for more detailed and real time understanding of traffic congestion. The firm also identified potential issues, such as data collection through the Caltrans Performance Measurement System, uncertainty over future traffic growth due to COVID-19, and the potential for different results when utilizing different tools. The work plan relied heavily on utilizing ClearGuide, in conjunction with the Caltrans Performance Measurement System data, but did not articulate the impact of COVID-19 in identifying existing chokepoint locations as required in the scope of work.

The work plan proposed by HDR addressed the requirements of the scope of work, and the firm demonstrated an understanding of lessons learned from the 2018 Orange County Freeway Needs Study. The firm stressed the importance of big data to evaluate congestion on statewide freeways and establish a thorough understanding of existing chokepoints in Orange County. The firm identified several key issues, such as considering improvements on a corridor-wide level, the effects of emerging technologies, and the effects of COVID-19 on the transportation system. During the interview, the firm stated that they plan to utilize INRIX and the Caltrans Performance Measurement System data, but additional data sources may need to be provided by OCTA. The proposal included details on how the firm will analyze proposed chokepoint improvement strategies; however, this process was not clearly explained during the interview.

Cost and Price

Pricing scores were based on a formula, which assigned the highest score to the firm with the lowest total firm-fixed price and scored the other proposals' total firm-fixed price based on its relation to the lowest total firm-fixed price. Kittelson's total firm-fixed price to complete the study was competitive among the firms and was also lower than the OCTA project manager's independent cost estimate. Therefore, Kittelson's proposed firm-fixed price is deemed fair and reasonable.

Procurement Summary

Based on the evaluation of the written proposals, the firm's qualifications, the information obtained from the interviews, as well as cost and price, the evaluation committee recommends the selection of Kittelson as the top-ranked firm to conduct the Freeway Chokepoint Improvement Study. Kittelson demonstrated strong relevant experience, competitive pricing, and submitted a thorough and comprehensive proposal that was responsive to all requirements of the RFP.

Fiscal Impact

The project is included in OCTA's Fiscal Year 2020-21 Budget, Planning and Analysis Division, Account No. 1531-7519-A4461-0YW, and is funded by State Transportation Improvement Program funds.

Summary

Staff is recommending the Board of Directors authorize the Chief Executive Officer to negotiate and execute Agreement No. C-1-3346 between the Orange County Transportation Authority and Kittelson and Associates, Inc., in the amount of \$297,337, to provide consulting services to conduct the Freeway Chokepoint Improvement Study.

Attachments

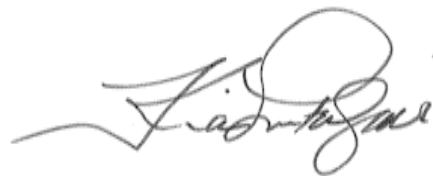
- A. Review of Proposals, RFP 1-3346 Freeway Chokepoint Improvement Study
- B. Proposal Evaluation Criteria Matrix (Short-Listed Firms), RFP 1-3346 Freeway Chokepoint Improvement Study
- C. Contract History for the Past Two Years, RFP 1-3346 Freeway Chokepoint Improvement Study

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Review of Proposals
RFP 1-3346 Freeway Chokepoint Improvement Study

Presented to the Regional Planning and Highways Committee on June 7, 2021
Five proposals were received, three firms were interviewed, one firm is being recommended

Overall Ranking	Proposal Score	Firm & Location	Sub-Contractors	Evaluation Committee Comments	Firm-Fixed Price Total
1	87	Kittelson and Associates, Inc. Orange, California	Associated Civil and Transportation Consultant Engineers, Inc.	The firm has provided planning, design, analytics and outreach strategies since 1985. The firm has 250 employees and is located in the City of Orange. The firm has worked on similar projects. The first proposed co-project manager/principal planner has 24 years of experience and six years with the firm. The second proposed co-project manager/senior principal engineer has 41 years of experience and 35 years with the firm. The firm provided a thorough approach to completing each task and proposed enhancements to the scope of work. The firm proposed FREEVAL, an advanced corridor-based traffic operations assessment tool for assessing current and future chokepoint locations. The project team provided comprehensive responses to the evaluation committee's questions and all team members participated.	\$297,337
2	81	Iteris, Inc. Santa Ana, California	Sommer Engineering	The firm was founded in 1987. The firm has 425 employees and is located in the City of Santa Ana. The firm has proven experience contracting with transit companies and public agencies. The proposed project manager has 10 years of experience and three years with the firm. The proposed principal has five years of experience. The firm provided details on the firm's approach using a data analytics platform, ClearGuide, to identify freeway chokepoints. There was no mention of field visits or aerials in the work plan. The firm provided competitive pricing. Individuals from the proposed project team responded to questions during the interview.	\$299,935
3	80	HDR Engineering, Inc. Irvine, California	SMG Traffic Operations	Firm was founded in 1917 and established in Southern California in 1973. The firm has over 10,000 employees in 200 locations worldwide. The firm has relevant experience. The proposed project manager has 41 years of experience and 11 years with the firm. The proposed planner has one year with the firm. The proposal provided little information regarding quality assurance and quality control, enhancements or potential issues, otherwise the firm had a clear understanding of the work plan. The firm responded to all questions during the interview.	\$273,994

Evaluation Committee

Contracts Administration and Materials Management (1)
Planning and Analysis (1)
Transportation Modeling (1)
Project Development (1)
Project Management (1)

Evaluation Criteria

Qualifications of the Firm
Staff and Project Organization
Work Plan
Cost and Price

Weight Factors

20 percent
25 percent
35 percent
20 percent

Acronym

RFP - Request for proposal

PROPOSAL EVALUATION CRITERIA MATRIX (Short-Listed Firms)
RFP 1-3346 Freeway Chokepoint Improvement Study

Kittelson and Associates, Inc.						Weights	Overall Score
Evaluator Number	1	2	3	4	5		
Qualifications of Firm	4.0	4.0	4.0	4.5	4.0	4	16.40
Staffing/Project Organization	4.5	4.0	4.0	4.5	4.5	5	21.50
Work Plan	4.0	4.5	4.5	4.5	4.5	7	30.80
Cost and Price	4.6	4.6	4.6	4.6	4.6	4	18.44
Overall Score	84.9	85.9	85.9	90.4	88.4		87
Iteris, Inc.						Weights	Overall Score
Evaluator Number	1	2	3	4	5		
Qualifications of Firm	4.0	4.0	4.0	4.0	3.5	4	15.60
Staffing/Project Organization	4.0	4.0	4.0	4.0	3.5	5	19.50
Work Plan	4.0	4.0	4.0	4.0	4.0	7	28.00
Cost and Price	4.6	4.6	4.6	4.6	4.6	4	18.28
Overall Score	82.3	82.3	82.3	82.3	77.8		81
HDR Engineering, Inc.						Weights	Overall Score
Evaluator Number	1	2	3	4	5		
Qualifications of Firm	4.0	4.0	4.0	4.0	4.0	4	16.00
Staffing/Project Organization	3.5	3.5	3.5	4.0	4.0	5	18.50
Work Plan	3.5	4.0	3.5	3.5	4.0	7	25.90
Cost and Price	5.0	5.0	5.0	5.0	5.0	4	20.00
Overall Score	78.0	81.5	78.0	80.5	84.0		80

Range of scores for Non-Short-Listed firms is 65 to 74.

CONTRACT HISTORY FOR THE PAST TWO YEARS
RFP 1-3346 Freeway Chokepoint Improvement Study

Prime and Subconsultants	Contract No.	Description	Contract Start Date	Contract End Date	Subconsultant Amount	Total Contract Amount
Kittelson and Associates, Inc.						
Contract Type: Time and expense	C-7-1568	Master Plan of Arterial Highways	May 1, 2017	September 30, 2019		\$187,690
Subconsultants:						
Leslie Scott Consulting					\$8,370	
Steer Davies and Gleave					\$36,260	
Contract Type: Time and expense	C-8-1683	Beach Boulevard Corridor Study	October 3, 2018	April 30, 2020		\$439,998
Subconsultants:						
Albert Grover & Associates					\$99,067	
Leslie Scott Consulting					\$10,901	
Arellano Associates					\$61,737	
Steer Davies and Gleave					\$45,970	
Optitrans Engineering					\$27,611	
Total						\$627,688
Iiteris, Inc.						
Contract Type: Firm-Fixed Price	C-9-1066	Main Street Regional Traffic Signal Synchronization Project	December 30, 2019	June 30, 2023		\$3,610,264
Subconsultants:						
Innovative Data Acquisitions LLC					\$ 49,368	
Michael Baker International					\$ 19,912	
Crosstown Electric & Data, Inc.					\$ 1,049,686	
Contract Type: Firm-Fixed Price	C-8-2038	Katella Avenue Regional Traffic Signal Synchronization Project	January 30, 2020	June 30, 2024		\$4,689,352
Subconsultants:						
National Data & Surveying Services					\$ 37,649	
Michael Baker International					\$ 88,077	
Crosstown Electric & Data, Inc.					\$ 1,037,506	
Contract Type: Contract Task Order	A29152	Newport Boulevard South Regional Traffic Signal Synchronization Project	June 26, 2014	June 30, 2019		\$1,406,267
Subconsultants:						
National Data & Surveying Services						
Crosstown Electric & Data, Inc.						
Contract Type: Contract Task Order	A32249	Bristol Street Regional Traffic Signal Synchronization Project	June 29, 2015	March 31, 2020		\$2,252,469
Subconsultants:						
Crosstown Electrical & Data, Inc.						
Contract Type: Contract Task Order	A35288	Pacific Coast Highway Regional Traffic Signal Synchronization Project	June 23, 2016	June 30, 2019		\$2,209,254
Subconsultants:						
Crosstown Electrical and Data, Inc.						
Contract Type: Contract Task Order	A39893	Brookhurst Street Regional Traffic Signal Synchronization Project	June 26, 2018	June 30, 2023		\$3,534,110
Subconsultants:						
Crosstown Electrical and Data, Inc.						

CONTRACT HISTORY FOR THE PAST TWO YEARS
RFP 1-3346 Freeway Chokepoint Improvement Study

Prime and Subconsultants	Contract No.	Description	Contract Start Date	Contract End Date	Subconsultant Amount	Total Contract Amount
Iteris, Inc., Continued						
Contract Type: Contract Task Order	C-9-1812	On-Call Traffic Engineering and Intelligent Transportation Systems Services	March 9, 2021	December 31, 2027		\$5,328,000
Subconsultants:						
Econolite						
Crosstown Electrical and Data, Inc.						
AIM Traffic Data LLC						
LIN Consulting, Inc.						
Contract Type:	C-8-1488	Intelligent Transportation Systems Update	April 17, 2018	December 31, 2027		\$104,950
Subconsultants: None						
Contract Type: Time and expense	C-8-2075	Traffic Engineering Support	April 30, 2019	March 31, 2022		\$49,800
Subconsultants: None						
Contract Type: Contract Task Order	C-1-3056	College Park Soundwall-West County Connectors	March 4, 2014	December 30, 2019		\$18,814,379
Subconsultants: None						
Total						\$41,998,845
HDR Engineering, Inc.						
Contract Type: Contract Task Order	A42030	On-Call Row and Property Management	April 8, 2019	November 30, 2020		\$974,983
Subconsultants: None						
Contract Type: Time and expense	C-0-1587	Environmental Document and Project Report for SR-55, Between I-405 and I-5.	March 21, 2011	December 31, 2019		\$6,508,025
Subconsultants:						
LSA					\$1,169,372	
Fehr & Peers					\$682,343	
Guida Surveying, Inc.					\$507,106	
Leighton Consulting, Inc.					\$348,972	
Transsystems RMC, Inc.					\$275,356	
The Wild Horse Group					\$72,505	
MTS Engineers					\$402,443	
Contract Type: Time and expense	C-4-1854	Project Management Consultant Services for the Santa Ana - Garden Grove Streetcar Project	September 4, 2015	March 31, 2022		\$29,026,290
Subconsultants:						
IBI Group						
Nossaman, LLP						
Sperry Capital, Inc.						
The Solis Group						
Steve Green and Associates						
Intueor Consulting, Inc.						
CivilSource						
SNC-Lavalin Constructors (PAC)						
Arellano Associates						
Shiels Obletz Johnsen						
Boothe Transit Consulting, Inc.						
Mott MacDonald, LLC						

CONTRACT HISTORY FOR THE PAST TWO YEARS
RFP 1-3346 Freeway Chokepoint Improvement Study


Prime and Subconsultants	Contract No.	Description	Contract Start Date	Contract End Date	Subconsultant Amount	Total Contract Amount
HDR Engineering, Inc., Continued						
Contract Type: Time and expense	C-8-1512	Program Management Consultant Services for Regional Rail Programs	March 28, 2019	March 24, 2024		\$7,500,000
Subconsultants:						
Tri-County Drilling, Inc.						
AP Engineering and Testing						
Cogstone Resource Management						
VSCE Inc.						
B A Inc.						
Prescience Corporation						
Mott MacDonald, LLC						
DB Engineering and Consulting, Inc.						
Contract Type: Time and expense	C-8-1840	GIS Technical Support Consultant Services	November 15, 2018	September 30, 2019		\$50,000
Subconsultants: None						
Contract Type: Time and expense	C-9-1121	South Orange County Multimodal Study	September 19, 2019	August 31, 2021		\$749,969
Subconsultants:						
Placeworks						
Nelson/Nygaard Consulting Associates, Inc.						
System Metrics Group, Inc.						
Alta Planning + Design						
Land CM Corporation						
Urbantrans North America						
Contract Type: Time and expense	C-9-1580	Professional Services for GIS	January 28, 2020	October 31, 2021		\$55,000
Subconsultants: None						
Contract Type: Time and expense	C-4-1786		March 1, 2015	November 30, 2020		\$10,000,000
Subconsultants:						
VA Consulting, Inc.						
Construction Surveying						
Desmond Marcello						
Pacific Real Estate						
Lazar Translating and Interpreting						
Real Estate Consulting Services						
Environmental Resources Management						
Pacific Environmental Company						
Donna Desmond Associates						
Hennessey and Hennessey						
The Bernard Johnson Group						
Cal Pacific Land Services						
Integra Realty Resources						
Wiggins and Willett, Inc.						
The Bernard Johnson Group						
Golden State Escrow, Inc.						
Title 365						
Hodges Lacey and Associates						
Total						\$54,864,267

RFP - Request for Proposal; SR-55 - State Route 55; I-405 - Interstate 405; I-5 - Interstate 5; GIS - Geographic Information System



June 7, 2021

To: Regional Planning and Highways Committee

From: Darrell E. Johnson, Chief Executive Officer 

Subject: Comprehensive Transportation Funding Programs Semi-Annual Review – March 2021

Overview

The Orange County Transportation Authority recently completed the March 2021 semi-annual review of projects funded through the Comprehensive Transportation Funding Programs. This process reviews the status of Measure M2 grant-funded projects and provides an opportunity for local agencies to update project information and request project modifications. Recommended project adjustments and a proposed Comprehensive Transportation Funding Programs Guidelines exception are presented for review and approval.

Recommendations

- A. Approve requested adjustments to Comprehensive Transportation Funding Programs projects, Local Fair Share, and Senior Mobility Program funds.
- B. Due to the impacts of the coronavirus, approve an exception to the Comprehensive Transportation Funding Programs Guidelines for Environmental Cleanup Program Tier I projects in order for project award delays to be granted.

Background

The Comprehensive Transportation Funding Programs (CTFP) is the mechanism which the Orange County Transportation Authority (OCTA) uses to administer funding for street and road, signal synchronization, transit, and water quality programs.

The CTFP contains a variety of funding programs and sources, including Measure M2 (M2) revenues, State-Local Partnership Program funds, and Local Partnership Program funds. The CTFP provides local agencies with a comprehensive set of guidelines for the administration and delivery of various transportation funding grants.

Through the semi-annual review, OCTA met with representatives from local jurisdictions, as necessary, to review the status of projects and proposed project changes. This process is known as the semi-annual review. The goals of the semi-annual review are to review project status, determine the continued viability of projects, address local agency concerns, confirm availability of local match funds, ensure timely closeout of all projects funded through the CTFP, and address any other project-related issues or concerns.

Discussion

March 2021 semi-annual review project adjustment requests include the following:

- 16 project delays,
- 11 timely-use of funds extensions for projects funded with competitive funds,
- 9 timely-use of funds extensions for the Local Fair Share Program,
- 16 timely-use of funds extensions for the Senior Mobility Program,
- 10 project scope changes,
- 11 project fund transfers,
- 1 project cancellation, and
- 5 OCTA-initiated project delay requests.

Local jurisdictions reported a variety of issues that have resulted in the need for project adjustments including project delivery challenges, stakeholder coordination issues, right-of-way coordination challenges, project design modifications, equipment procurement/installation delays, and construction delays.

It also appears that the coronavirus (COVID-19) pandemic is continuing to impact local jurisdictions' abilities to conduct normal business. For this review cycle, 59 out of a total of 79 project adjustment requests are at least partially COVID-19 related (Attachment A). These impacts were especially evident in project award delay requests and timely-use of funds extension requests.

Staff is recommending Board of Directors (Board) approval of an exception to a CTFP Guidelines requirement specifying that Project X Environmental Cleanup Program (ECP) Tier I projects not be granted delays. Due to COVID-19, it has taken longer than the current one-year expectation articulated in the CTFP Guidelines to award and execute final funding agreements. Board approval will allow five 2020 ECP Tier I awarded projects to be delivered despite delays created by the impacts of COVID-19.

Attachment B includes more detailed information on all proposed semi-annual review project adjustment requests, and Attachment C provides narrative discussions of each respective project adjustment request.

M2 CTFP Summary

The table below is provided for reference and includes a summary of M2 CTFP-funded projects by phase and funding allocation amount. The table also documents programmatic changes that have occurred since the approval of the previous September semi-annual review. Since September 2020, OCTA completed the 2020 ECP Tier I call for projects, which provided \$2.8 million in new M2 Project X funding to 12 projects throughout Orange County. Also since the September semi-annual review, 14 project phases have been completed.

Since M2 inception, OCTA has awarded over \$545 million in competitive funds, including approximately \$38 million in state and federal funds. With reductions in original programming amounts (for various reasons), the total revised M2 allocation through the March 2021 semi-annual review period equals \$546.5 million.

M2 CTFP Summary Table				
Project Status	September 2020 Semi-Annual Review		March 2021 Semi-Annual Review	
	Project Phases	Allocation	Project Phases	Allocations ¹ (after adjustments)
Planned ²	64	\$ 70.5	66	\$ 67.6
Started ³	109	\$174.6	103	\$162.2
Pending ⁴	98	\$ 83.3	107	\$ 88.1
Completed ⁵	383	\$173.9	388	\$177.0
Cancelled ⁶	56	\$ 41.3	58	\$ 51.6
Total	710	\$543.6	722	\$546.5

¹ Allocations in millions, subject to change pending final reconciliation.

² Planned - indicates that funds have not been obligated and/or are pending contract award.

³ Started - indicates that the phase is underway, and funds are obligated.

⁴ Pending - indicates that phase work is completed, and final report submittal/approval is pending.

⁵ Completed - indicates that phase work is complete, final report is approved, and final payment has been made.

⁶ Cancelled - indicates that the phase work will not be completed, and project savings will be returned to the program.

* Note: the project phase and allocations listed above are subject to frequent and regular changes due primarily to project status updates, final reconciliations, and project closeout processes.

As of publishing this report, 495 individual project phases, 107 pending, and 388 completed phases have been constructed as is shown in the table above. This represents a 75 percent project delivery rate, when cancelled projects are excluded. Another 169 project phases, 66 planned, and 103 started, are considered currently active, which represents approximately 25 percent of all project phases when cancelled projects are excluded.

The CTFP semi-annual review process also tracks project cost savings. Since the inception of M2, total accumulated savings have amounted to approximately \$64 million. These savings have been incrementally returned to M2 source programs and are used to support future funding cycles, as appropriate.

Next Steps

From a CTFP administrative perspective, the proposed project adjustments and CTFP Guidelines exception identified in this staff report are appropriate and necessary. These proposed adjustments have also been reviewed and approved by the OCTA Technical Advisory Committee, and Board approval of these adjustments is recommended. If these recommendations are approved, staff will monitor their implementation through future semi-annual review cycles, which are reported biannually.

Summary

OCTA has recently concluded the March 2021 semi-annual review of all active M2 CTFP-funded project phases and is recommending Board approval of all proposed CTFP project adjustments, as well as a CTFP Guidelines exception.

Attachments


- A. Comprehensive Transportation Funding Programs, March 2021
Semi-Annual Review Adjustment Request Statistics
- B. Comprehensive Transportation Funding Programs, March 2021
Semi-Annual Review Adjustment Requests
- C. Comprehensive Transportation Funding Programs, March 2021
Semi-Annual Review Adjustment Request Descriptions

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Comprehensive Transportation Funding Programs
March 2021 Semi-Annual Review Adjustment Request Statistics

Request	March 2021 Requests	Requests (Five-Year Average) 2017 - 2021	Requests (Five-Year Average w/o COVID-19)	March 2021 Cycle COVID-19 Related
Delays	16	12	8	12
Funds Extensions - CTFP	11	14	12	10
Funds Extensions - LFS/SMP	25	15	12	16
Scope Change	10	8	7	6
Transfer	11	8	1	10
Cancellations	1	2	2	0
Other / OCTA-initiated	5	2	0	5
Advancements	0	1	1	0
TOTAL	79	62	43	59

Project	March 2021 Requests	Requests (Five-Year Average) 2017 - 2021	Requests (Five-Year Average w/o COVID-19)	March 2021 Cycle COVID-19 Related
O (Regional Capacity Program)	6	11	10	0
P (Regional Traffic Signal Synchronization Program)	16	20	16	12
Q (LFS)	9	12	12	0
S (Transit Extensions to Metrolink)	0	0	0	0
U (SMP)	16	3	0	16
V (Community-Based Transit/Circulators)	25	12	2	25
W (Safe Transit Stops)	2	1	1	1
X (Environmental Cleanup Program)	5	3	2	5
TOTAL	79	62	43	59

Acronyms

COVID-19 - Coronavirus

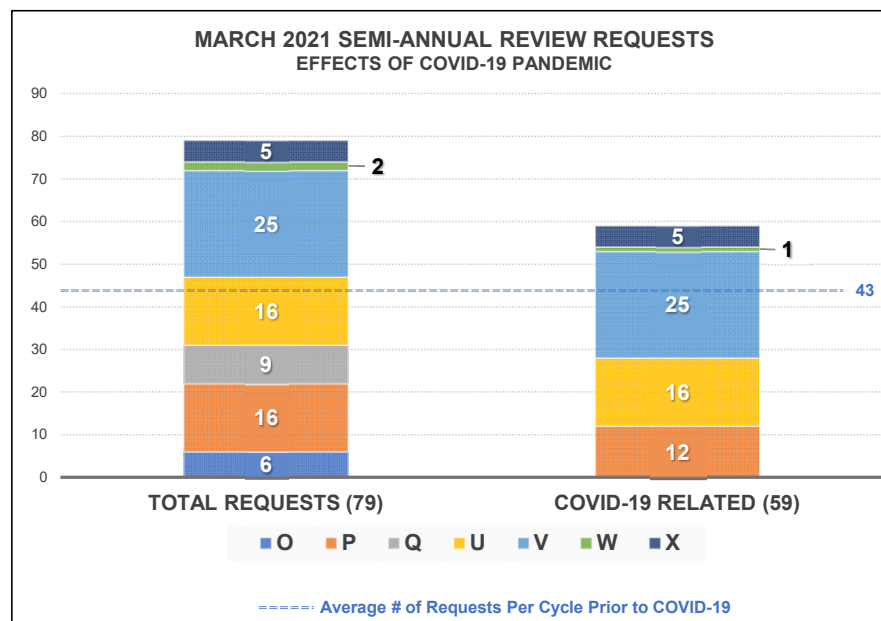
CTFP - Comprehensive Transportation Funding Programs

LFS - Local Fair Share

OCTA - Orange County Transportation Authority

SMP - Senior Mobility Program

W/O - Without



Comprehensive Transportation Funding Programs

March 2021 Semi-Annual Review Adjustment Requests

Delay Requests*									
No	Agency	Project Number	Project	Project Title	Phase	Current FY	Current Allocation	Proposed Delay (Months)	Proposed FY
1	Dana Point	20-DNPT-CBT-3959 ¹	V	Dana Point Trolley Continuity Program	Initial Marketing	21/22	\$ 45,000	24	23/24
2	Dana Point	20-DNPT-CBT-3959 ¹	V	Dana Point Trolley Continuity Program	CAP	21/22	\$ 171,810	24	23/24
3	Dana Point	20-DNPT-CBT-3959 ¹	V	Dana Point Trolley Continuity Program	O&M	21/22	\$ 1,992,929	24	23/24
4	Huntington Beach	20-HBCH-TSP-3973 ^{1,2}	P	Bolsa Chica Street TSSP (Chapman Avenue to Warner Avenue)	IMP	20/21	\$ 1,446,240	24	22/23
5	Huntington Beach	20-HBCH-TSP-3973 ^{1,2}	P	Bolsa Chica Street TSSP (Chapman Avenue to Warner Avenue)	O&M	21/22	\$ 42,240	24	23/24
6	Huntington Beach	20-HBCH-CBT-3960 ¹	V	Huntington Beach Southeast Rideshare Pilot Program	Initial Marketing	20/21	\$ 12,000	24	22/23
7	Huntington Beach	20-HBCH-CBT-3960 ¹	V	Huntington Beach Southeast Rideshare Pilot Program	O&M	20/21	\$ 794,240	24	22/23
8	La Habra	20-LHAB-CBT-3961 ¹	V	La Habra Community Special Event Shuttle	Initial Marketing	20/21	\$ 12,510	24	22/23
9	La Habra	20-LHAB-CBT-3961 ¹	V	La Habra Community Special Event Shuttle	O&M	20/21	\$ 53,725	24	22/23
10	Newport Beach	20-NBCH-CBT-3956 ¹	V	Balboa Island/Corona Del Mar Microtransit Feasibility Study	P	20/21	\$ 58,500	24	22/23
11	Orange	19-ORNG-STP-3933 ^{1,3}	W	Orange Safe Transit Stop Improvements	CON	20/21	\$ 98,300	12	21/22
12	Orange	20-ORNG-CBT-3957 ¹	V	Orange Community Circulator Transit Planning Study	P	20/21	\$ 59,400	24	22/23
13	Santa Ana	20-SNTA-STP-3978 ⁴	W	Santa Ana Transit Stop Improvements - 2020	CON	20/21	\$ 1,030,000	24	22/23
14	Santa Ana	20-SNTA-ACE-3968 ²	O	Bristol Street Improvements Phase 3A - Civic Center Drive to Washington Avenue	CON	20/21	\$ 3,273,573	24	22/23
15	Santa Ana	20-SNTA-ACE-3969 ^{2,5}	O	Bristol Street Improvements Phase 4 - Warner Avenue to St. Andrew Place	CON	20/21	\$ 7,501,206	24	22/23
16	Yorba Linda	20-YLND-ACE-3971 ³	O	Yorba Linda Boulevard Widening	ENG	20/21	\$ 1,636,500	24	22/23
Delays - Total Phase Allocations (16)							\$ 18,228,173		

*Once obligated, Comprehensive Transportation Funding Programs funds expire 36 months from the contract award date. Local agencies may request up to an additional 24 months to obligate funds.

Reasons for Project Adjustments

1. Coronavirus impacts
2. Stakeholder/partner agency coordination issues
3. Procurement related
4. FY 2021-22 budget alignment
5. Right-of-way coordination

Acronyms

- CAP - Capital
- CON - Construction
- ENG - Engineering
- FY - Fiscal year
- IMP - Implementation
- O&M - Operations and Maintenance
- P - Planning Study
- TSSP - Traffic Signal Synchronization Project

Comprehensive Transportation Funding Programs

March 2021 Semi-Annual Review Adjustment Requests

Timely-Use of Funds Extension Requests - Comprehensive Transportation Funding Programs*									
No	Agency	Project Number	Project	Project Title	Phase	Current FY	Current Allocation	Proposed Time Extension (Months)	Proposed Expenditure Deadline
1	Costa Mesa	16-CMSA-TSP-3790 ^{1,2,3}	P	Fairview Road Signal Synchronization	IMP	18/19	\$ 1,629,870	24	4/3/2023
2	Costa Mesa	17-CMSA-TSP-3873 ^{1,2,4}	P	Bear Street Signal Synchronization	IMP	17/18	\$ 467,872	24	4/3/2023
3	Costa Mesa	17-CMSA-TSP-3873 ^{1,2,4}	P	Bear Street Signal Synchronization	O&M	18/19	\$ 26,880	24	6/15/2024
4	Fullerton	15-FULL-TSP-3769 ^{1,2,4}	P	Malvern Avenue/Chapman Avenue Corridor RTSSP	IMP	17/18	\$ 2,075,104	24	7/17/2023
5	Fullerton	15-FULL-TSP-3769 ^{1,2,4}	P	Malvern Avenue/Chapman Avenue Corridor RTSSP	O&M	18/19	\$ 127,200	24	6/1/2024
6	Fullerton	18-FULL-TSP-3896 ^{1,2,4}	P	Orangethorpe Avenue/Esperanza Road Corridor RTSSP	IMP	18/19	\$ 3,413,508	24	2/19/2024
7	Fullerton	18-FULL-TSP-3896 ^{1,2,4}	P	Orangethorpe Avenue/Esperanza Road Corridor RTSSP	O&M	19/20	\$ 164,160	24	6/1/2025
8	Irvine	19-IRVN-TSP-3937 ^{1,5}	P	MacArthur Boulevard Corridor RTSSP	IMP	19/20	\$ 1,209,160	24	4/22/2025
9	Irvine	19-IRVN-TSP-3937 ^{1,5}	P	MacArthur Boulevard Corridor RTSSP	O&M	20/21	\$ 49,280	24	TBD (City has until 6/30/2021 to award contract)
10	OCTA	16-OCTA-TSP-3795 ⁶	P	Magnolia Ave TSS (Commonwealth to Banning)	IMP	17/18	\$ 2,615,694	24	5/22/2023
11	San Clemente	17-SCLM-TSP-3877 ^{1,4}	P	Camino Vera Cruz	O&M	17/18	\$ 10,080	24	4/3/2023
Comprehensive Transportation Funding Programs Timely-Use of Funds Extensions (11) - Total Phase Allocations							\$ 11,788,808		

*Once obligated, Comprehensive Transportation Funding Programs funds expire 36 months from the contract award date. Local agencies may request an extension(s) of up to an additional 24 months.

Reasons for Project Adjustments

1. Coronavirus impacts
2. Construction related
3. Stakeholder coordination issues
4. Signal timing coordination efforts
5. Staffing issues
6. Equipment procurement/installation delays

Acronyms

- FY - Fiscal year
- IMP - Implementation
- O&M - Operations and Maintenance
- RTSSP - Regional Traffic Signal Synchronization Program
- OCTA - Orange County Transportation Authority
- TBD - To be determined
- TSS - Traffic Signal Synchronization

Comprehensive Transportation Funding Programs
March 2021 Semi-Annual Review Adjustment Requests

Timely-Use of Funds Extension Requests - LFS*						
No	Agency	FY	Disbursement Date	Disbursement	Proposed Extension Amount	Extension Deadline
1-3	Brea	17/18	6/30/2018	\$ 164,667	\$ 164,667	6/30/2023
		18/19	9/18/2018	\$ 156,160	\$ 156,160	9/18/2023
			11/20/2018	\$ 185,811	\$ 185,811	11/20/2023
4-6	La Habra	17/18	6/30/2018	\$ 150,019	\$ 150,019	6/30/2023
		18/19	9/18/2018	\$ 142,230	\$ 142,230	9/18/2023
			11/20/2018	\$ 169,236	\$ 169,236	11/20/2023
7-9	Yorba Linda	17/18	6/30/2018	\$ 174,213	\$ 174,213	6/30/2023
		18/19	9/18/2018	\$ 165,616	\$ 165,616	9/18/2023
			11/20/2018	\$ 197,063	\$ 197,063	11/20/2023
LFS Timely-Use of Funds Extensions (9) - Total					\$ 1,505,015	

*Net revenues received by local jurisdictions through the LFS Program shall be expended or encumbered within three years. An extension may be granted but is limited to a total of five years from the date of receipt of funds. The Orange County Transportation Authority uses the check date as the date of receipt of funds. Requests for extension must be submitted as part of the semi-annual review process prior to the end of the third year from the date of receipt of funds. Requests for extension must include a plan of expenditure.

Acronyms

FY - Fiscal year

LFS - Local Fair Share

Comprehensive Transportation Funding Programs
March 2021 Semi-Annual Review Adjustment Requests

Timely-Use of Funds Extension Requests - SMP*						
No	Agency	FY	Disbursement Date	Disbursement	Proposed Extension Amount	Extension Deadline
1-3	Dana Point	17/18	6/30/2018 ¹	\$ 8,662	\$ 8,662	6/30/2023
		18/19	9/18/2018 ¹	\$ 8,199	\$ 8,199	9/18/2023
			11/20/2018 ¹	\$ 9,756	\$ 9,756	11/20/2023
4-6	Laguna Hills	17/18	6/30/2018 ¹	\$ 6,167	\$ 6,167	6/30/2023
		18/19	9/18/2018 ¹	\$ 5,837	\$ 5,837	9/18/2023
			11/20/2018 ¹	\$ 6,945	\$ 6,945	11/20/2023
7-9	Laguna Niguel	17/18	6/30/2018 ¹	\$ 12,977	\$ 12,977	6/30/2023
		18/19	9/18/2018 ¹	\$ 12,283	\$ 12,283	9/18/2023
			11/20/2018 ¹	\$ 14,615	\$ 14,615	11/20/2023
10-13	Mission Viejo	17/18	3/20/2018 ¹	\$ 19,799	\$ 5,542	3/20/2023
			6/30/2018 ¹	\$ 20,346	\$ 20,346	6/30/2023
		18/19	9/18/2018 ¹	\$ 19,257	\$ 19,257	9/18/2023
			11/20/2018 ¹	\$ 22,914	\$ 22,914	11/20/2023
14-16	Villa Park	17/18	6/30/2018 ¹	\$ 1,934	\$ 1,934	6/30/2023
		18/19	9/18/2018 ¹	\$ 1,830	\$ 1,830	9/18/2023
			11/20/2018 ¹	\$ 2,178	\$ 2,178	11/20/2023
SMP Timely-Use of Funds Extensions (16) - Total					\$ 159,442	

*Net revenues received by local jurisdictions through the SMP shall be expended or encumbered within three years. An extension may be granted but is limited to a total of five years from the date of receipt of funds. The Orange County Transportation Authority uses the check date as the date of receipt of funds. Requests for extension must be submitted as part of the semi-annual review process prior to the end of the third year from the date of receipt of funds. Requests for extension must include a service plan.

Reasons for Project Adjustments

1. Coronavirus impacts

Acronyms

FY - Fiscal year

SMP - Senior Mobility Program

Comprehensive Transportation Funding Programs

March 2021 Semi-Annual Review Adjustment Requests

Scope Change Requests*								
No	Agency	Project Number	Project	Project Title	Phase	Current FY	Current Allocation	Proposed Allocation
1	Dana Point	14-DPNT-CBT-3742 ^{1,2}	V	Summer Weekend Trolley/Harbor Shuttle	O&M	14/15M	\$ 2,342,591	\$ 2,342,591
2	Dana Point	16-DPNT-CBT-3823 ^{1,2}	V	Dana Point PCH Trolley	O&M	16/17M	\$ 905,968	\$ 905,968
3	Dana Point	18-DNPT-CBT-3911 ^{1,2}	V	Dana Point Trolley Continuity and Expansion and Weekend Service	O&M	19/20M	\$ 1,632,565	\$ 1,632,565
4	Dana Point	20-DNPT-CBT-3959 ^{1,2}	V	Dana Point Trolley Continuity Program	O&M	21/22M	\$ 1,992,929	\$ 1,992,929
5	Mission Viejo	17-MVJO-ICE-3864 ³	O	Los Alisos Boulevard and Santa Margarita Parkway	CON	18/19	\$ 191,037	\$ 191,037
6	OCTA	16-OCTA-TSP-3794 ^{4,5,6,7}	P	Brookhurst Street TSS (Commonwealth Avenue to PCH)	IMP	17/18	\$ 2,784,524	\$ 2,784,524
7	OCTA	16-OCTA-TSP-3795 ^{4,5,6,7}	P	Magnolia Avenue TSS (Commonwealth Avenue to Banning Avenue)	IMP	17/18	\$ 2,615,694	\$ 2,615,694
8	OCTA	16-OCTA-TSP-3796 ⁷	P	El Toro Road Traffic Signal Synchronization Project	IMP	17/18	\$ 1,074,047	\$ 1,074,047
9	San Clemente	16-SCLM-CBT-3840 ¹	V	San Clemente Summer Trolley	O&M	16/17M	\$ 1,181,393	\$ 1,181,393
10	San Clemente	18-SCLM-CBT-3914 ¹	V	San Clemente Trolley Expansion	O&M	18/19M	\$ 1,537,200	\$ 1,537,200
Scope Changes (10) - Total Phase Allocations							\$ 16,257,948	\$ 16,257,948

*Agencies may request minor scope changes for Comprehensive Transportation Funding Programs projects so long as the agency can demonstrate substantial consistency and attainment of proposed transportation benefits compared to the original project scope as committed to in the initial application.

Reasons for Project Adjustments

1. Coronavirus impacts
2. Reduction in service schedule
3. Design issue
4. Construction issue (design modifications, relocation of equipment, equipment changes)
5. Enhanced project benefits (enhanced timing equipment)
6. Equipment installed as part of another project
7. Stakeholder coordination challenges

Acronyms

- CON - Construction
- FY - Fiscal year
- IMP - Implementation
- M - Multiple years
- O&M - Operations and Maintenance
- OCTA - Orange County Transportation Authority
- PCH - Pacific Coast Highway
- TSS - Traffic Signal Synchronization

Comprehensive Transportation Funding Programs

March 2021 Semi-Annual Review Adjustment Requests

Transfer Requests*									
No	Agency	Project Number	Project	Project Title	Phase	Current FY	Current Allocation	Transfer Amount	Proposed Allocation
1-2	Anaheim	20-ANAH-CBT-3958 ¹	V	Anaheim Canyon Circulator	Initial Marketing	20/21M	\$ 9,000	TBD	TBD
					O&M	20/21M	\$ 1,132,864	TBD	TBD
3	County of Orange	15-ORCO-ACE-3779 ² 17-ORCO-ACE-3868	O	Cow Camp Road - Segment 2 (ENG Phase)	ENG	15/16	\$ 3,250,000	\$ (500,000)	\$ 2,750,000
				Cow Camp Road Segment 2A and 2B CON	CON	17/18	\$ 14,278,770	\$ 500,000	\$ 14,778,770
4-6	Dana Point	20-DNPT-CBT-3959 ¹	V	Dana Point Trolley Continuity Program	Initial Marketing	20/21M	\$ 45,000	TBD	TBD
					CAP	20/21M	\$ 171,810	TBD	TBD
					O&M	20/21M	\$ 1,992,929	TBD	TBD
7-8	Huntington Beach	20-HBCH-CBT-3960 ¹	V	Huntington Beach Southeast Rideshare Pilot Program	Initial Marketing	20/21M	\$ 12,000	TBD	TBD
					O&M	20/21M	\$ 794,240	TBD	TBD
9-10	La Habra	20-LHAB-CBT-3961 ¹	V	La Habra Community Special Event Shuttle	Initial Marketing	20/21M	\$ 12,510	TBD	TBD
					O&M	20/21M	\$ 53,725	TBD	TBD
11	Laguna Beach	20-LBCH-CBT-3962 ¹	V	Off-Season Weekend Trolley Service	O&M	20/21M	\$ 3,850,000	TBD	TBD
Transfer Requests (11) - Total Project Allocations							\$ 25,602,848	TBD	TBD

*An implementing agency may request to transfer 100 percent (100%) of savings of Measure M2 funds between the phases within a project. Funds can only be transferred to a phase that has already been awarded competitive funds. Such requests must be made prior to the acceptance of a final report and submitted as part of a semi-annual review.

Reasons for Project Adjustment

1. Coronavirus related project savings
2. General project savings

Acronyms

- CAP - Capital
- CON - Construction
- ENG - Engineering
- FY - Fiscal year
- IMP - Implementation
- M - Multiple years
- O&M - Operations and Maintenance
- TBD - To be determined

Comprehensive Transportation Funding Programs

March 2021 Semi-Annual Review Adjustment Requests

Cancellation Requests*								
No	Agency	Project Number	Project	Project Title	Phase	Current FY	Current Allocation	Proposed Allocation
1	Irvine	14-IRVN-ICE-3716 ¹	O	Jamboree/Barranca Intersection Improvement	ROW	15/16	\$ 68,904	\$ -
Cancellations (1) - Total Phase Allocations							\$ 68,904	\$ -

*Local agencies may request to cancel projects at any time for any reason. Cancelled projects are eligible to reapply upon resolution of the issues that led to the original project cancellation.

Reasons for Project Adjustments

1. ROW issues

Acronyms

FY - Fiscal year

ROW - Right-of-way

Comprehensive Transportation Funding Programs

March 2021 Semi-Annual Review Adjustment Requests

OCTA-Initiated Requests								
No	Agency	Project Number	Project	Project Title	Amount Awarded	Current Award Deadline	Proposed Delay (Months)	Proposed Award Deadline
1	Costa Mesa	20-CMSA-ECP-3980 ^{1,2}	X	Placentia Avenue Stormwater Quality Improvement Project	\$ 350,941	6/30/2021	24	6/30/2023
2	Laguna Woods	20-LWDS-ECP-3984 ^{1,2}	X	City-Maintained Catch Basins Full Capture Systems Retrofit Project	\$ 31,641	6/30/2021	24	6/30/2023
3	Newport Beach	20-NBCH-ECP-3986 ^{1,2}	X	Newport Bay Trash Interceptor Project	\$ 500,000	6/30/2021	24	6/30/2023
4	Orange	20-ORNG-ECP-3987 ^{1,2}	X	DSBB and CPS BMP Installation - 2020	\$ 308,803	6/30/2021	24	6/30/2023
5	Yorba Linda	20-YLND-ECP-3990 ^{1,2}	X	Yorba Linda Arterial Roadway Automatic Retractable Screens Retrofit Project	\$ 160,000	6/30/2021	24	6/30/2023
OCTA-Initiated Requests- Total Phase Allocations (5)					\$ 1,351,385			

Reasons for Project Adjustment

1. Coronavirus impacts

CTFP Guidelines Exception Request

2. CTFP Guidelines - Project X Tier I projects are not eligible for delay requests

Acronyms

BMP - Best Management Practice

CPS - Connector Pipe Screen

CTFP - Combined Transportation Funding Programs

DSBB - Debris Separating Baffle Box

OCTA - Orange County Transportation Authority

**Comprehensive Transportation Funding Programs
March 2021 Semi-Annual Review Adjustment Request Descriptions**

Delays

Local agencies may request up to an additional 24 months to obligate funds. During the March 2021 semi-annual review cycle, the following delay requests were submitted.

The City of Dana Point (Dana Point) is requesting a 24-month delay for the initial marketing, capital (CAP), and operations and maintenance (O&M) phases of the Dana Point Trolley Continuity Program Project (20-DNPT-CBT-3959). This grant consists of the planned extension of Dana Point's 2014 Project V grant. However, with the 2014 Project V grant being extended due to the impacts of the coronavirus (COVID-19) pandemic, implementation of this 2020 follow-on grant also now needs to be delayed so that its commencement date is in alignment with the conclusion of the 2014 Project V grant.

The City of Huntington Beach (Huntington Beach) is requesting a 24-month delay for both the primary implementation (IMP) and O&M phases of the Bolsa Chica Street Traffic Signal Synchronization Program Project (Chapman Avenue to Warner Avenue) (20-HBCH-TSP-3973) due to unforeseen staffing impacts and a partnering jurisdiction's financial concerns primarily resulting from the pandemic.

Huntington Beach is also requesting a 24-month delay for the initial marketing and O&M phases of the Huntington Beach Southeast Rideshare Pilot Program (20-HBCH-CBT-3960) due to unanticipated impacts resulting from the pandemic.

The City of La Habra is requesting a 24-month delay for the initial marketing and O&M phases of the La Habra Community Special Event Shuttle (20-LHAB-CBT-3961) due to unanticipated impacts resulting from the pandemic.

The City of Newport Beach is requesting a 24-month delay for the Planning Study (PLAN) phase of the Balboa Island/Corona Del Mar Microtransit Feasibility Study (20-NBCH-CBT-3956), due to unanticipated impacts resulting from COVID-19 and concerns regarding the ability to collect viable public input during the pandemic.

The City of Orange (Orange) is requesting a 12-month delay for the construction (CON) phase of the Orange Safe Transit Stop Improvements Project (19-ORNG-STS-3933) due to unanticipated impacts resulting from COVID-19 especially related to issuing procurements.

Orange is also requesting a 24-month delay for the PLAN phase of the Orange Community Circulator Transit Planning Study (20-ORNG-CBT-3957), due to unanticipated impacts resulting from the COVID-19 and concerns regarding the ability to collect viable public input during the pandemic.

**Comprehensive Transportation Funding Programs
March 2021 Semi-Annual Review Adjustment Request Descriptions**

The City of Santa Ana (Santa Ana) is requesting a 24-month delay for the CON phase of the Santa Ana Transit Stop Improvements – 2020 Project (20-SNTA-STS-3978) due to the desire to align project expenditures with its fiscal year (FY) 2021-22 budget.

Santa Ana is requesting a 24-month delay for the CON phase of the Bristol Street improvements Phase 3A - Civic Center Drive to Washington Avenue (20-SNTA-ACE-3968) due to utility undergrounding coordination issues with the utility stakeholder.

Santa Ana is requesting a 24-month delay for the CON phase of the Bristol Street improvements Phase 4 - Warner Avenue to St. Andrew Place (20-SNTA-ACE-3969) due to utility undergrounding coordination issues with the utility stakeholder and outstanding to right-of-way (ROW) issues pending finalization.

The City of Yorba Linda is requesting a 24-month delay for the engineering (ENG) phase of the Yorba Linda Boulevard Widening Project (20-YLND-ACE-3971) due to the complexity of the project, additional time is requested to refine and finalize the scope of work requirements.

Comprehensive Transportation Funding Programs (CTFP) Timely-Use of Funds Extensions

Once obligated, CTFP funds expire 36 months from the contract award date. Local agencies may request an extension(s) of up to 24 months. During this semi-annual review cycle, the following CTFP timely-use of funds extensions requests were submitted.

The City of Costa Mesa (Costa Mesa) is requesting a 24-month timely-use of funds extension for the IMP phase of the Fairview Road Signal Synchronization Project (SSP) (16-CMSA-TSP-3790) from April 2021 to April 2023 due to unforeseen impacts (and delays) to construction-related activities and utility stakeholder coordination efforts resulting from the pandemic.

Costa Mesa is requesting a 24-month timely-use of funds extension for both the IMP and O&M phases of the Bear Street SSP (17-CMSA-TSP-3873) from April 2021 to April 2023, for the IMP phase and from June 2022 to June 2024, for the O&M phase due to unforeseen impacts (and delays) to construction-related activities, signal timing implementation, and completion of travel time after study efforts resulting from the pandemic.

**Comprehensive Transportation Funding Programs
March 2021 Semi-Annual Review Adjustment Request Descriptions**

The City of Fullerton (Fullerton) is requesting a 24-month timely-use of funds extension for both the IMP and O&M phases of the Malvern Avenue/Chapman Avenue Corridor Regional Traffic Signal Synchronization Program (RTSSP) Project (15-FULL-TSP-3769) from July 2021 to July 2023, for the IMP phase and from June 2022 to June 2024, for the O&M phase. This request is due to unforeseen impacts (and delays) to signal timing implementation, completion of travel time after study efforts, and construction-related activities resulting from the pandemic.

Fullerton is also requesting a 24-month timely-use of funds extension for both the IMP and O&M phases of the Orangethorpe Avenue/Esperanza Road Corridor RTSSP Project (18-FULL-TSP-3896) from February 2022 to February 2024 for the IMP phase and from June 2023 to June 2025 for the O&M phase. This request is due to unforeseen impacts (and delays) to design review efforts, signal timing implementation, completion of travel time before and after studies, and intersection improvement construction activities resulting from the pandemic.

The City of Irvine (Irvine) is requesting a 24-month timely-use of funds extension for both the IMP and O&M phases of the MacArthur Boulevard Corridor RTSSP Project (19-IRVN-TSP-3937), from April 2023 to April 2025 for the IMP phase and date to be determined for the O&M phase, which will be established once a contract has been awarded but will not exceed five years. Irvine has until June 30, 2021, to award a contract for the O&M phase. This request is due to unforeseen impacts (and delays) to staffing and schedule coordination efforts during the design phase resulting from the pandemic.

The Orange County Transportation Authority (OCTA), as administrative lead, is requesting a 24-month timely-use of funds extension for the IMP phase of the Magnolia Avenue Traffic Signal Synchronization (TSS) (Commonwealth Avenue to Banning Avenue) Project (16-OCTA-TSP-3795) from May 2021 to May 2023. This request is due to unforeseen delays in equipment procurement and installation processes.

The City of San Clemente (San Clemente) is requesting a 24-month timely-use of funds extension for the O&M phase of the Camino Vera Cruz Project (17-SCLM-TSP-3877) from April 2021 to April 2023 due to unforeseen impacts (and delays) to signal timing implementation, fine-tuning, and monitoring resulting from the pandemic.

Comprehensive Transportation Funding Programs March 2021 Semi-Annual Review Adjustment Request Descriptions

Local Fair Share (LFS) Timely-Use of Funds Extensions

Once issued, LFS funds expire 36 months from the check issuance date. Local agencies may request an extension(s) of up to 24-months. During this semi-annual review cycle, the following timely-use of funds LFS extensions requests were submitted:

The City of Brea (Brea) is requesting a 24-month timely-use of funds extension for \$506,638. The funds being considered for extension were disbursed in three separate installments and must be expended by the extension deadlines provided in Attachment A. Brea has indicated these funds will be directed towards traffic signal improvements and citywide street improvements.

- \$164,667, from June 2021 to June 2023
- \$156,160, from September 2021 to September 2023
- \$185,811, from November 2021 to November 2023

The City of La Habra (La Habra) is requesting a 24-month timely-use of funds extension for \$461,485. The funds being considered for extension were disbursed in three separate installments and must be expended by the extension deadlines provided in Attachment A. La Habra has indicated these funds will be directed towards citywide street improvements and their pavement management report.

- \$150,019, from June 2021 to June 2023
- \$142,230, from September 2021 to September 2023
- \$169,236, from November 2021 to November 2023

The City of Yorba Linda (Yorba Linda) is requesting a 24-month timely-use of funds extension for \$536,892. The funds being considered for extension were disbursed in three separate installments and must be expended by the extension deadlines provided in Attachment A. Yorba Linda has indicated these funds will be directed towards traffic signal improvements, street maintenance, and projects to reduce road congestion.

- \$174,213, from June 2021 to June 2023
- \$165,616, from September 2021 to September 2023
- \$197,063, from November 2021 to November 2023

Senior Mobility Program (SMP) Timely-Use of Funds Extensions

Once issued, SMP funds expire 36 months from the check issuance date. Local agencies may request an extension(s) of up to 24 months. During this semi-annual review cycle, the following timely-use of funds SMP extensions requests were submitted as a result of the impacts from the pandemic.

**Comprehensive Transportation Funding Programs
March 2021 Semi-Annual Review Adjustment Request Descriptions**

Dana Point is requesting a 24-month timely-use of funds extension for \$26,617. The funds being considered for extension were disbursed in three separate installments and must be expended by the extension deadlines provided in Attachment A.

- \$8,662, from June 2021 to June 2023
- \$8,199, from September 2021 to September 2023
- \$9,756, from November 2021 to November 2023

The City of Laguna Hills is requesting a 24-month timely-use of funds extension for \$18,949. The funds being considered for extension were disbursed in three separate installments and must be expended by the extension deadlines provided in Attachment A.

- \$6,167, from June 2021 to June 2023
- \$5,837, from September 2021 to September 2023
- \$6,945, from November 2021 to November 2023

The City of Laguna Niguel is requesting a 24-month timely-use of funds extension for \$39,875. The funds being considered for extension were disbursed in three separate installments and must be expended by the extension deadlines provided in Attachment A.

- \$12,977, from June 2021 to June 2023
- \$12,283, from September 2021 to September 2023
- \$14,615, from November 2021 to November 2023

The City of Mission Viejo (Mission Viejo) is requesting a 24-month timely-use of funds extension for \$68,059. The funds being considered for extension were disbursed in four separate installments and must be expended by the extension deadlines provided in Attachment A.

- \$5,542, from March 2021 to March 2023
- \$20,346, from June 2021 to June 2023
- \$19,257, from September 2021 to September 2023
- \$22,914, from November 2021 to November 2023

The City of Villa Park is requesting a 24-month timely-use of funds extension for \$5,942. The funds being considered for extension were disbursed in three separate installments and must be expended by the extension deadlines provided in Attachment A.

- \$1,934, from June 2021 to June 2023
- \$1,830, from September 2021 to September 2023
- \$2,178, from November 2021 to November 2023

Comprehensive Transportation Funding Programs March 2021 Semi-Annual Review Adjustment Request Descriptions

Scope Changes

Agencies may request minor scope changes for CTFP projects if they can assure that project benefits as committed to in the initial application can still be delivered. During this semi-annual review cycle, the following scope change requests were submitted.

Dana Point is requesting approval of a scope change in order to implement a temporary reduction in its Project V service as it reinitiates services post-pandemic. The reduction includes postponing the commencement of seven-day-a-week summer shuttle service from Memorial Day weekend to the end of June 2021 and then operating only through Labor Day weekend, instead of through the first week of October. This scope change also includes a temporary reduction in revenue vehicle hours on certain days of operation.

These modifications to the four Project V services are subject to additional changes as the City will continue to evaluate the program when service is reinitiated in summer 2021.

- Summer Weekend Trolley/Harbor Shuttle (14-DPNT-CBT-3742)
- Dana Point Pacific Coast Highway Trolley (16-DPNT-CBT-3823)
- Dana Point Trolley Continuity and Expansion and Weekend Service (18-DNPT-CBT-3911)
- Dana Point Trolley Continuity Program (20-DNPT-CBT-3959)

Mission Viejo is requesting a scope change to the CON phase of the Los Alisos Boulevard and Santa Margarita Parkway Project (17-MVJO-ICE-3864). The scope change includes eliminating the second left turn-only lane on the southbound (SB) lane on Los Alisos Boulevard (Los Alisos) and only constructing the second turn lane for northbound (NB) Los Alisos in order to preserve NB and SB right turn capacities and facilitate improved operations.

OCTA, as administrative lead for the Brookhurst Street Traffic Signal Synchronization (Commonwealth to Pacific Coast Highway) Project (16-OCTA-TSP-3794), is requesting a scope change to the IMP phase with several components, which include modifications to unit types, improvement locations, removal of project components which are no longer necessary, and adherence to California Department of Transportation (Caltrans) requirements. These modifications are due to unforeseen construction issues that emerged during the project development process and are requested in order to facilitate project completion processes and utilize project cost savings to enhance overall project benefits.

Comprehensive Transportation Funding Programs March 2021 Semi-Annual Review Adjustment Request Descriptions

OCTA, as administrative lead for the Magnolia Avenue TSS (Commonwealth Avenue to Banning Avenue) Project (16-OCTA-TSP-3795), is requesting a scope change to the IMP phase with several components, which include modifications to unit types, improvement locations, removal of project components that are no longer necessary, and adherence to Caltrans' requirements. These modifications are due to unforeseen construction issues that emerged during the project development process and are requested in order to facilitate project completion processes and utilize project cost savings to enhance overall project benefits.

OCTA, as administrative lead for the El Toro Road TSS Project (16-OCTA-TSP-3796) is requesting a scope change to the IMP phase of this project. The scope change includes removal of an Econolite Centrac's Advanced Traffic Management System. This system was procured with funding from another project. The remaining unused savings will support the O&M phase expenditures.

San Clemente is requesting approval of a scope change in order to implement modifications to its Project V service as it reinitiates services post-COVID-19. These modifications include starting weekend service approximately two weeks early for both the San Clemente Summer Trolley (16-SCLM-CBT-3840) and San Clemente Trolley Expansion (18-SCLM-CBT-3914) services. In addition, initiation of weekday services will be delayed by one month.

Transfers

The CTFP Guidelines allow jurisdictions to request to transfer up to 100 percent of savings of funds between subsequent phases or years within a project. Funds can only be transferred to a phase or year that has already been awarded competitive funds. Such requests must be made prior to the acceptance of a final report and submitted as part of the semi-annual review process. During this semi-annual review cycle, the following transfer requests were submitted either as a result of the impacts of COVID-19 or the need to transfer general project savings.

Due to COVID-19, Anaheim is requesting a transfer for the Anaheim Canyon Circulator (20-ANAH-CBT-3958). The transfer includes savings from FY 2020-21 and from all FYs moving forward from the initial marketing and O&M phases in amounts to be determined and are to be distributed to FY 2021-22 or the immediately subsequent FY on a go-forward basis.

The County of Orange is requesting a transfer for the Cow Camp Road ROW - Segment II Project (15-ORCO-ACE-3779). The request is to transfer general project savings in the amount of \$500,000 from the ENG phase to the CON phase Cow Camp Road Segments 2A & 2B Construction (17-ORCO-ACE-3868).

Comprehensive Transportation Funding Programs March 2021 Semi-Annual Review Adjustment Request Descriptions

Due to COVID-19, Dana Point is requesting a transfer for the Dana Point Trolley Continuity Program (20-DNPT-CBT-3959). The transfer includes savings from FY 2021-22 and from all FYs moving forward from the initial marketing, CAP, and O&M phases in amounts to be determined and are to be distributed to FY 2022-23 or the immediately subsequent year on a go-forward basis.

Due to COVID-19, Huntington Beach is requesting a transfer for the Huntington Beach Southeast Rideshare Pilot Program (20-HBCH-CBT-3960). The transfer includes savings from FY 2020-21 and from all FYs moving forward from the initial marketing and O&M phases in amounts to be determined and are to be distributed to FY 2021-22 or the immediately subsequent year on a go-forward basis.

Due to COVID-19, La Habra is requesting a transfer for the La Habra Community Special Event Shuttle (20-LHAB-CBT-3961). The transfer includes savings from FY 2020-21 and from all FYs moving forward from the initial marketing and O&M phases in amounts to be determined and are to be distributed to FY 2021-22 or the immediately subsequent year on a go-forward basis.

Due to COVID-19, Laguna Beach is requesting a transfer for the Off-Season Weekend Trolley Service (20-LBCH-CBT-3962). The transfer includes savings from FY 2020-21 and from all FYs moving forward from the O&M phase in an amount to be determined and is to be distributed to FY 2021-22 or the immediate subsequent year on a go-forward basis.

Cancellations

Local agencies may request to cancel projects at any time for any reason. Cancelled projects are eligible to reapply upon resolution of the issues that led to the original project cancellation. During this review cycle, the following cancellation request was received.

Irvine is requesting to cancel the ROW phase for the Jamboree/Barranca Intersection Improvement Project (14-IRVN-ICE-3716) due to an inability to complete the ROW process.

**Comprehensive Transportation Funding Programs
March 2021 Semi-Annual Review Adjustment Request Descriptions**

OCTA-Initiated Requests

OCTA staff, on behalf of five local jurisdictions, is requesting delays and approval of a CTFP Guideline's exception for the five following Project X Tier I projects.

- Costa Mesa's Placentia Avenue Stormwater Quality Improvement Project (20-CMSA-ECP-3980)
- Laguna Wood's City-Maintained Catch Basins Full Capture Systems Retrofit Project (20-LWDS-ECP-3984)
- Newport Beach's Newport Bay Trash Interceptor Project (20-NBCH-ECP-3986)
- Orange's Debris Separating Baffle Box and Connector Pipe Screen Best Management Practice Installation - 2020 Project (20-ORNG-ECP-3987)
- Yorba Linda's Arterial Roadway Automatic Retractable Screens Retrofit Project (20-YLND-ECP-3990)

Due to COVID-19, OCTA awarded 2020 Project X Tier I projects later than usual. This, coupled with the pandemic's impacts on local jurisdiction's abilities to conduct routine business, has resulted in it taking longer to execute funding agreements and award contracts for these projects than was originally anticipated in the CTFP Guidelines, which specify that awarded funds need to be allocated within the FY they are programmed and that delays are not allowed. Given these COVID-19-related issues, staff is recommending Board of Directors' approval of these delay requests and an exception to the CTFP Guidelines no delay requirement.



June 7, 2021

To: Regional Planning and Highways Committee

From: Darrell E. Johnson, Chief Executive Officer

Subject: Measure M2 Eligibility Review Recommendations for Fiscal Year 2019-20 Expenditure Reports

Overview

The Measure M2 Ordinance requires that all Orange County local jurisdictions annually satisfy eligibility requirements to receive Measure M2 net revenues. As part of this requirement, fiscal year 2019-20 expenditure reports and resolutions were submitted by the local jurisdictions. In April 2020, the Taxpayer Oversight Committee affirmed that all expenditure reports were received and reviewed consistent with Measure M2 requirements. Board of Directors' approval is requested to find all Orange County local jurisdictions eligible to continue receiving Measure M2 net revenues.

Recommendation

Approve all 35 Orange County local jurisdictions eligible to continue receiving Measure M2 net revenues.

Background

Local jurisdictions are required to meet Measure M2 (M2) eligibility requirements and submit eligibility verification packages to the Orange County Transportation Authority (OCTA) annually to remain eligible to receive M2 net revenues. There are 13 eligibility requirements, which local jurisdictions must either meet and/or adhere to. However, not all 13 eligibility components require verification each eligibility cycle. For reference, a summary of M2 eligibility requirements and their respective due dates is provided in Attachment A.

While OCTA staff reviews and confirms all M2 eligibility requirements, the M2 Ordinance specifies that the Taxpayer Oversight Committee (TOC) also review five of these requirements. These include the Congestion Management Program (CMP), Mitigation Fee Programs (MFP), Local Signal Synchronization Plans (LSSP), Pavement Management Plans (PMP), and expenditure reports.

The CMP, MFPs, LSSPs, and PMPs are due on June 30 each year and are typically approved by the OCTA Board of Directors (Board) in December. Expenditure reports are due on December 31 each year, six months after the close of the fiscal year (FY), and are typically approved by the Board in June. Expenditure reports include all M2 and related transportation expenditures including maintenance of effort (MOE) spending levels. MOE is the amount of discretionary funding (e.g., general fund revenues) that local jurisdictions must spend on streets and roads purposes to ensure that they are not replacing discretionary transportation spending with M2 revenues¹.

Per the M2 ordinance, the TOC is responsible for the receipt and review of expenditure reports. To assist with this responsibility, the TOC has designated an Annual Eligibility Review (AER) Subcommittee to initially receive and review required M2 eligibility submittals prior to consideration by the full TOC. The TOC review and affirmation process is now complete, and a summary is provided below.

Discussion

At the March 25, 2021 AER Subcommittee meeting, which was conducted virtually, AER Subcommittee members affirmed receipt and review of FY 2019-20 expenditure reports for all 35 Orange County local jurisdictions.

On April 13, 2021, which also convened remotely, the TOC received the AER Subcommittee's report on these materials and affirmed receipt and review of FY 2019-20 expenditure reports for all 35 local jurisdictions. As such, the TOC's findings shown in Attachment B are now being advanced to the Board for a final finding that all 35 Orange County local jurisdictions be deemed eligible to continue receiving net M2 revenues.

If the Board approves the recommendation identified in this report, this action will conclude the current M2 eligibility process and will result in all Orange County local jurisdictions being deemed eligible to continue receiving M2 net revenues.

Summary

In April 2021, the Orange County Transportation Authority Taxpayers Oversight Committee convened and affirmed that it had received and reviewed the required fiscal year 2019-20 Measure M2 expenditure reports for all 35 Orange County local jurisdictions. Given this review, Board of Directors' approval is requested to find all 35 of Orange County's local jurisdictions eligible to continue receiving Measure M2 net revenues.

¹ It should be noted that due to the financial impacts of the coronavirus pandemic, the MOE requirement for this eligibility review cycle was modified by the Board on May 11, 2020 to allow OCTA to accept actual MOE expenditures reported as meeting the MOE requirement, even if the total expenditure amount was below the local jurisdiction's MOE benchmark requirement.

Attachments

- A. Measure M2 Eligibility Requirements and Submittal Schedule Summary, Fiscal Year 2020-21
- B. Measure M2 Eligibility Review Summary of FY 2019-20 Expenditure Reports

Prepared by:



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Approved by:



Kia Mortazavi
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**Measure M2 Eligibility Requirements and Submittal Schedule Summary
Fiscal Year 2020-21**

Compliance Category	Frequency (submitted)	Status
Capital Improvement Program	Annual (June 30, 2020)	✓
Circulation Element/Master Plan of Arterial Highways Consistency	Biennial (June 30, 2021)	N/A – next cycle
Congestion Management Program	Biennial (June 30, 2021)	N/A – next cycle
Expenditure Report	Annual (December 31, 2020)	Submitted, pending Board approval
Local Signal Synchronization Plan	Every Three Years (i.e., June 30, 2020)	✓
Maintenance of Effort	Annual (June 30, 2020)	✓
Mitigation Fee Program (MFP)	Biennial (June 30, 2021) ¹	N/A – next cycle
No Supplanting of Developer Fees	Annual (June 30, 2020)	✓
Pavement Management Plan (PMP)	Biennial (June 30, 2020) ²	✓
Timely Submittal of Project Final Reports	Within Six Months of Project Completion	Ongoing
Timely Use of Net Revenues	Annual (June 30, 2020)	✓
Traffic Forum Participation	Annual (June 30, 2020)	✓
Transit and Non-Motorized Transportation Land-Use Planning Strategies	Annual (June 30, 2020)	✓

Board – Board of Directors

N/A – Not applicable

¹ A jurisdiction must submit their updated program and revised fee schedule or process methodology when the jurisdiction updates their MFP and/or nexus study.

² 14 agencies update their PMPs on odd-numbered fiscal years, while 21 agencies update their PMPs on even-numbered fiscal years.

**Measure M2 Eligibility Review Summary
of FY 2019-20 Expenditure Reports**

Local Jurisdiction	Expenditure Report Received by Deadline	Resolution Received by Deadline	MOE Benchmark Met ¹	Received and Reviewed
Aliso Viejo	Yes	Yes	Yes	Yes
Anaheim	Yes	Yes	Yes	Yes
Brea	Yes	Yes	Yes	Yes
Buena Park	Yes	Yes	Yes	Yes
Costa Mesa	Yes	Yes	Yes	Yes
County of Orange ²	Yes	Yes	N/A	Yes
Cypress	Yes	Yes	Yes	Yes
Dana Point	Yes	Yes	Yes	Yes
Fountain Valley	Yes	Yes	Yes	Yes
Fullerton	Yes	Yes	Yes	Yes
Garden Grove	Yes	Yes	Yes	Yes
Huntington Beach	Yes	Yes	Yes	Yes
Irvine	Yes	Yes	Yes	Yes
La Habra	Yes	Yes	Yes	Yes
La Palma	Yes	Yes	Yes	Yes
Laguna Beach	Yes	Yes	Yes	Yes
Laguna Hills	Yes	Yes	Yes	Yes
Laguna Niguel	Yes	Yes	Yes	Yes
Laguna Woods	Yes	Yes	Yes	Yes
Lake Forest	Yes	Yes	Yes	Yes
Los Alamitos	Yes	Yes	Yes	Yes
Mission Viejo	Yes	Yes	Yes	Yes
Newport Beach	Yes	Yes	Yes	Yes
Orange	Yes	Yes	Yes	Yes
Placentia	Yes	Yes	Yes	Yes
Rancho Santa Margarita	Yes	Yes	Yes	Yes
San Clemente	Yes	Yes	Yes	Yes
San Juan Capistrano	Yes	Yes	Yes	Yes
Santa Ana	Yes	Yes	Yes	Yes
Seal Beach	Yes	Yes	Yes	Yes
Stanton	Yes	Yes	Yes	Yes
Tustin	Yes	Yes	Yes	Yes
Villa Park	Yes	Yes	Yes	Yes
Westminster	Yes	Yes	Yes	Yes
Yorba Linda	Yes	Yes	Yes	Yes

1. Due to the financial impacts of the coronavirus pandemic, the MOE requirement was modified by the Orange County Transportation Authority's Board of Directors for FY 2019-20, to accept actual MOE expenditures reported as meeting the MOE requirement, even if the total expenditure amount was below the MOE benchmark requirement for FY 2019-20.

2. MOE was established in 1991 with the first Measure M Program using a five-year average of the level of funding local jurisdictions spent on streets and roads between 1985 and 1990. However, Orange County Public Works and their predecessor agencies received sufficient gas tax subventions and other transportation specific funding from state, federal, and other local sources, which were required to be used for transportation. As such, they did not and do not use discretionary funds for transportation purposes. The County uses a number of fund sources for transportation including gas tax subvention or Highway User Tax Account, federal grants, assessment districts, developer impact fees, and other transportation specific fund sources.

Acronyms

FY - Fiscal Year

MOE - Maintenance of Effort

N/A - Not Applicable



June 7, 2021

To: Regional Planning and Highways Committee

From: Darrell E. Johnson, Chief Executive Officer

Subject: Programming Recommendations for Coronavirus Response and Relief Supplemental Appropriations Act of 2021 and Mid-Cycle State Transportation Improvement Program

Overview

The Coronavirus Response and Relief Supplemental Appropriations Act of 2021, signed into law on December 27, 2020, appropriated funding for transportation infrastructure and programs to mitigate revenue loss due to the coronavirus pandemic. Based on state guidelines, these funds will flow through the mid-cycle process for the State Transportation Improvement Program. Programming recommendations are presented for the Board of Directors' consideration and approval.

Recommendations

- A. Approve the 2021 mid-cycle State Transportation Improvement Program submittal to program Coronavirus Response and Relief Supplemental Appropriations Act of 2021 for the following:
- \$800,000 for the State Route 74 Ortega Highway Improvement Project, and
 - \$588,506 for planning, programming, and monitoring.
- B. Authorize staff to make all necessary amendments to the State Transportation Improvement Program and the Federal Transportation Improvement Program, as well as execute any necessary agreements to facilitate the recommendations above.

Background

The Coronavirus Response and Relief Supplemental Appropriations Act of 2021 (CRRSAA), signed into law on December 27, 2020, appropriated \$10 billion for Highway Infrastructure Programs. The State of California was apportioned \$911.8 million of which approximately \$364.7 million,

or 40 percent, will be distributed to regional agencies. The remaining 60 percent, or \$547.1 million, will be utilized by the State of California through the State Highway Operations Improvement Program and the Interregional Improvement Program. Fifty percent of the regional funds (\$182.4 million) will be distributed through a 2021 mid-cycle State Transportation Improvement Program (STIP) through the California Transportation Commission (CTC). The Orange County Transportation Authority (OCTA) will receive \$11.8 million through the mid-cycle STIP. The remaining 50 percent will be distributed through the CRRSAA program. Recommendations for the use of those funds will be presented to the Board of Directors (Board) in a future item.

The CTC approved the mid-cycle STIP schedule, share distribution, and program guidelines on May 12, 2021, with projects initially considered for adoption in June 2021. OCTA's \$11.8 million in the mid-cycle STIP CRRSAA funding can be used to support new projects, augment existing STIP projects, provide cash flow to advance existing STIP projects, or these funds may be included in the 2022 STIP, which is anticipated to be considered by the Board in fall 2021.

Projects are recommended for the mid-cycle STIP CRRSAA funding based on the CTC mid-cycle STIP Guidelines and OCTA's programming priorities included in the February 11, 2019, Board-approved Capital Programming Policies.

Discussion

For the mid-cycle STIP CRRSAA funding, staff is proposing one STIP project advancement and augmentation of the existing planning, programming, and monitoring (PPM) set of projects. In developing this recommendation, staff reviewed several existing and potential new projects, as well as the potential to program funding for the 2022 STIP.

Staff is recommending, as part of the mid-cycle STIP CRRSAA funding program, the advancement of \$800,000 of the \$8.5 million in programmed future STIP funds to support plans, specifications, and estimates (PS&E) or final design for the State Route 74 (SR-74) Ortega Highway Improvements, from Calle Entradero to Reata Road Project. The project will widen SR-74/Ortega Highway from two lanes to four lanes by adding one lane in each direction. In addition, the project will enhance safety by providing a traffic signal, a 12-foot striped median, a five-to-eight-foot shoulder to accommodate a Class II bicycle lane and reconstruct the existing sidewalk. The City of San Juan Capistrano has been approved to receive \$5.3 million in Measure M2 Project O funds for the PS&E phase for this project, matched with \$1.8 million in local match funds. The

advancement of the STIP funds will allow supplemental work related to the PS&E to be completed and ready the project for the right-of-way and construction phases. Additional information for this project is provided in Attachment A. Because this portion of the already programmed funding for the project is being advanced, it frees up 2020 STIP funding that will be incorporated into the 2022 STIP cycle.

Staff is also requesting approval to use approximately \$588,506 for PPM activities, which is the five percent STIP set aside that can be used for this purpose. OCTA uses five percent of STIP funds or STIP PPM in each cycle to support the development of the Regional Transportation Plan and to develop plans to address the short- and long-term multimodal transportation needs of Orange County and the region. Activities include preparation and updates to countywide transportation plans and feasibility studies, as well as consultant, management, and staff support to prioritize, allocate, program, and manage transportation funding. Finally, staff is proposing to program the remaining \$10.4 million in mid-cycle STIP funds as part of the 2022 STIP. The CTC guidelines indicate that these funds are guaranteed to OCTA if they are programmed as part of the 2022 STIP and are not at risk to be redistributed to other agencies. Reserving these funds for the 2022 STIP provides OCTA the opportunity to combine these with any new STIP funds for high-priority projects. The proposed mid-cycle STIP CRRSAA funding program is provided in the table below:

OCTA Projects Proposed for 2021 Mid-Cycle STIP	
Project	2021 STIP (\$ millions; rounded)
Consider for 2022 STIP	\$10.4
SR-74 Ortega Highway Improvements (Calle Entradero to Reata Road)	\$0.8
PPM	\$0.6
Total:	\$11.8

With Board approval, OCTA will confirm the project list with CTC. The CTC is expected to adopt the program on June 23, 2021. Attachment B provides the updated Capital Funding Plan, which includes recommended changes pending Board approval on June 14, 2021.

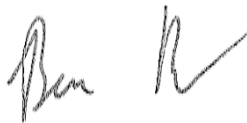
Summary

OCTA is responsible for the development and programming of CRRSAA funding for Orange County. OCTA is proposing to submit two projects for \$1.4 million in CRSAA STIP and will return later this year with a recommendation for the remaining mid-cycle STIP and the CTC CRRSAA funds.

Attachments

- A. Orange County Transportation Authority, Coronavirus Response and Relief Supplemental Appropriations Act of 2021, Project Descriptions and Programming Information
- B. Capital Funding Program Report

Prepared by:



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**Orange County Transportation Authority
Coronavirus Response and Relief Supplemental
Appropriations Act of 2021
Project Descriptions and Programming Information**

Project Augmentation

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. State Transportation Improvement Program (STIP) funds will be used to develop plans that recommend programs and projects that address the short- and long-term multimodal transportation needs of Orange County and the region. Activities include preparation and updates to the countywide transportation plan and feasibility studies, as well as consultant, management, and staff support to prioritize, allocate, program, and manage transportation funding. The California Transportation Commission allows a set aside five percent of the STIP for regional agencies to carry out planning activities.

The Orange County Transportation Agency is requesting the set aside of \$588,506 in STIP PPM to support consultants and staff in developing the Long-Range Transportation Plan and multimodal strategies to address the short- and long-term transportation needs for Orange County and regional connections, and to guide the expenditure of federal, state, and local transportation funds.

Project Advancement

State Route 74 (SR-74) Ortega Highway Improvements from Calle Entradero (postmile 1.0) to Reata Road (postmile 2.1)

This project will widen SR-74/Ortega Highway from two to four lanes by adding one lane in each direction in the City of San Juan Capistrano from Calle Entradero (postmile 1.0) to Reata Road (postmile 2.1). The project preliminary plans include 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 reconstruct the existing sidewalk. The project also requires seven retaining walls. The plans, specifications, and estimates phase is anticipated to take 12-18 months to complete.

This is an existing project approved in the 2020 STIP, and staff is recommending the advancement of \$800,000 of the STIP funds for the design phase in fiscal year (FY) 2021-22. Currently, the \$8.5 million in STIP is programmed in FY 2024-25. The Coronavirus Response and Relief Supplemental Appropriations Act of 2021 funds will be used in place of 2020 STIP funds which were previously programmed to the project. Those funds will be added into the available programming as part of the 2022 STIP program of projects.

**Orange County Transportation Authority
Coronavirus Response and Relief Supplemental
Appropriations Act of 2021
Project Descriptions and Programming Information**

The SR-74/Ortega Highway Widening Project is an important project for the region and one of the most heavily utilized local roads in the area. Currently, the existing traffic demand exceeds traffic capacity and operates at a level of service (LOS) E and will operate at a LOS F in the year 2025. LOS is used to measure traffic flow with LOS A being free flow, and F being stop-and-go or heavily congested. It has also received funding in the past through the Measure M2 (M2) Project O - Regional Capacity Program.

Existing funding levels are depicted below.

Existing Funding (\$000s)	STIP*	M2	Local**	SHOPP	TOTAL
Environmental	\$ 5,513	\$ 1,950	\$ 400	\$ 250	\$ 8,113
Design	\$ 8,540	\$ 5,250	\$ 1,750	\$ -	\$ 15,540
Total	\$ 14,053	\$ 7,200	\$ 2,150	\$ 250	\$ 23,653

Proposed Funding (\$000s)	STIP*	M2	Local**	SHOPP	TOTAL
Environmental	\$ 5,513	\$ 1,950	\$ 400	\$ 250	\$ 8,113
Design	\$ 800	\$ 5,250	\$ 1,750	\$ -	\$ 7,800
TBD	\$ 7,740	\$ -	\$ -	\$ -	\$ 7,740
Total	\$ 14,053	\$ 7,200	\$ 2,150	\$ 250	\$ 23,653

SHOPP - State Highway Operations and Protection Plan

TBD – To be determined

*\$5.5 million in environmental phase was from STIP - Interregional Program

** \$0.4 million is County developer fees and \$1.750 million are city funds



Capital Funding Program Report

Pending OCTA Board of Directors (Board) Approval - June 14, 2021

State Highway Project											
Project Title	M Code	Total Funding	Federal Funds			State Funds			Local Funds		
			STBG/CMAQ	FTA	Other Fed.	STIP	SB1	Other State	M1	M2	Other Local
I-5 from SR-55 to SR-57, add one HOV lane each direction	A	\$41,500	\$36,191							\$5,309	
I-5 widening, I-405 to Yale Avenue (Segment 1)	B	\$230,482	\$52,357			\$95,338	\$44,791			\$37,996	
I-5 widening, Yale Avenue to SR-55 (Segment 2)	B	\$17,425	\$15,027							\$2,398	
I-5 HOV lane each direction s/o PCH to San Juan Creek Road	C	\$74,300	\$11,326					\$20,789		\$42,185	
I-5 HOV lanes from s/o Avenida Vista Hermosa to s/o PCH	C	\$75,300	\$12,065			\$46,779				\$16,456	
I-5 widening, Alicia Parkway to El Toro Road (Segment 3)	C	\$181,327	\$49,897		\$4,728		\$9,388			\$117,314	
I-5 widening, Oso Parkway to Alicia Parkway (Segment 2)	C	\$205,695	\$47,676		\$7,921					\$150,098	
I-5 widening, SR-73 to Oso Parkway (Segment 1)	C	\$213,267	\$28,167		\$6,433	\$91,977		\$29,832		\$56,858	
I-5, SR-73 to El Toro Road landscaping/replacement planting	C	\$12,365				\$6,000				\$6,365	
I-5/El Toro Interchange	D	\$4,400	\$4,400								
SR-55 (I-5 to SR-91)	F	\$13,921	\$5,000							\$8,921	
SR-55 widening between I-405 and I-5	F	\$504,000	\$160,500		\$41,900	\$80,000	\$140,000			\$81,600	
SR-57 Orangewood Avenue to Katella Avenue	G	\$9,327	\$2,500		\$3,240					\$3,587	
SR-91, Acacia Avenue to La Palma Avenue (Segment 3)	I	\$16,201	\$1,770							\$30	\$14,401
SR-91, La Palma Avenue to SR-55 (Segment 2)	I	\$46,314	\$3,460							\$40	\$42,814
SR-91, SR-55 to Lakeview Avenue (Segment 1)	I	\$15,779	\$1,770							\$30	\$13,979
SR-91, SR-241 to I-15	J	\$41,800									\$41,800
I-405 improvements, SR-73 to I-605	K	\$2,080,234	\$35,000		\$10,648			\$89,771		\$1,315,885	\$628,930
I-405 (I-5 to SR-55)	L	\$8,000	\$8,000								
I-405 s/b aux lane - University to Sand Canyon and Sand Canyon to SR-133	L	\$2,328				\$2,328					
I-605/ Katella Avenue interchange	M	\$4,824								\$4,824	
241/91 Express Lanes (HOT) Connector		\$182,298	\$50								\$182,248
I-5 HOV Lane Extension from Avenida Pico to San Diego County Line (PSR/PDS)		\$6,071	\$6,071								
SR-74 widening, Calle Entradero to Reata Road ¹		\$23,653			\$250	\$14,053				\$7,200	\$2,150
SR-74 widening, City/County line to Antonio Parkway		\$40,905	\$5,285			\$10,000					\$25,620
State Highway Project Totals		\$4,051,716	\$486,512		\$75,120	\$346,475	\$194,179	\$140,392		\$1,857,096	\$951,942
Federal Funding Total		\$561,632									
State Funding Total		\$681,046									
Local Funding Total		\$2,809,038									
Total Funding (000's)		\$4,051,716									

State Highway Project Completed											
Project Title	M Code	Total Funding	Federal Funds			State Funds			Local Funds		
			STBG/CMAQ	FTA	Other Fed.	STIP	SB1	Other State	M1	M2	Other Local
I-5 HOV lanes: s/o Avenida Pico to s/o Vista Hermosa	C	\$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



Capital Funding Program Report

Pending OCTA Board of Directors (Board) Approval - June 14, 2021

State Highway Project Completed

Project Title	M Code	Total Funding	Federal Funds			State Funds			Local Funds		
			STBG/CMAQ	FTA	Other Fed.	STIP	SB1	Other State	M1	M2	Other Local
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	H	\$62,977						\$27,227		\$35,750	
SR-91 w/b connecting existing aux lanes, I-5 to SR-57 - landscaping	H	\$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 replacement planting	J	\$2,898				\$2,898					
SR-91 widening, SR-55 to Gypsum Canyon (Weir/SR-241)	J	\$76,993				\$22,250		\$54,045		\$698	
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		\$849,856	\$110,629		\$97,888	\$134,007		\$359,663	\$20,578	\$110,489	\$16,602

Federal Funding Total	\$208,517
State Funding Total	\$493,670
Local Funding Total	\$147,669
Total Funding (000's)	\$849,856

Board Actions:

1. Approve the 2021 Mid-Cycle State Transportation Improvement Program submittal to program \$0.800 million for the SR-74 Ortega Highway Improvement Project in Coronavirus Response and Relief Supplemental Appropriations Act, 2021 Highway Infrastructure Program funds

Acronyms:

Aux - Auxilliary

CMAQ - Congestion Mitigation Air Quality Improvement Program

FTA - Federal Transit Administration

FY - Fiscal Year

HOT - High-Occupancy Toll

HOV - High-Occupancy Vehicle

Hwy - Highway

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

RSTP - Regional Surface Transportation Program

S/B - Southbound

S/O - South of

SR-133 - State Route 133

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-90 - State Route 90

SR-91 - State Route 91

SS - Southside

STBG - Surface Transportation Block Grant

STIP - State Transportation Improvement Program

W/B - Westbound



June 7, 2021

To: Regional Planning and Highways Committee
From: Darrell E. Johnson, Chief Executive Officer
Subject: Regional Traffic Signal Synchronization Program Update

Overview

The Orange County Transportation Authority has been working with local cities, the County of Orange, and the California Department of Transportation to fund and implement key regional traffic signal synchronization projects. This report provides an update on the Measure M2 Regional Traffic Signal Synchronization Program, including results from recently completed projects.

Recommendation

Receive and file as an information item.

Background

The Orange County Transportation Authority (OCTA) provides funding and assistance to implement multi-agency signal synchronization as part of the Measure M2 (M2) Regional Traffic Signal Synchronization Program (RTSSP) (Project P). Annually, OCTA provides competitive grants specifically dedicated to the coordination of traffic signals across jurisdictional boundaries. The goal of Project P is to improve the flow of traffic by developing and implementing regional signal coordination that crosses local agencies' boundaries and maintains coordination through freeway interchanges, where possible.

Since 2008, OCTA and local agencies have implemented signal synchronization for 89 projects that included 3,003 signalized intersections and 772 centerline miles of streets (Attachment A). The projects have improved travel times, reduced delays and congestion, and increased the number of successive green light drivers see in their daily commutes. The results of the program translate into direct benefits to motorists in time and cost savings from lower fuel consumption and a reduction of greenhouse gas (GHG) emissions.

Discussion

Signal synchronization is a cost-effective way to increase roadway throughput without major new construction. Projects are corridor-based and new optimized signal timings are developed based on traffic conditions and current travel patterns. These projects optimize traffic signal timing to reduce travel times, stops, delays, and ultimately give users an overall better driving experience. Key to these efforts is regular dialogue between partner agencies and the California Department of Transportation, resulting in agencies working together towards the multijurisdictional goal of the program.

Funding is provided through annual calls for projects (call), with 80 percent of funding from M2 Project P and 20 percent from local agencies' matching funds. Supplemental funding is used whenever available, including SB 1 (Chapter 5, Statutes of 2017) Local Partnership Program funds, and Solutions for Congested Corridors Program grants. A variety of sources have been used in the past to fund signal synchronization projects, including Measure M1, Proposition 1B Traffic Light Signal Synchronization Program, and air quality funds.

Signal synchronization projects implement a coordination strategy involving time-based synchronization of the respective agencies' systems, including the necessary upgrades to the traffic signal infrastructure. This includes modifications to prepare for future connected and autonomous vehicle technologies and applications. Existing synchronization on crossing arterials is incorporated when and where possible. Optimized timings are developed and implemented for identified peak periods, which are typically weekday mornings, midday, and evenings. For weekend operations, the peak is typically mid-morning through early evening. To quantify signal synchronization benefits, "before" and "after" travel time studies are conducted to evaluate the improvements from these new optimized timing plans.

These studies are conducted during peak traffic periods with specially equipped vehicles that have computer-linked global positioning system devices to collect traffic data. Several runs are made in each direction with the car "floating" in the middle of the traffic platoon of vehicles for each run. These studies showed improvements across all performance measures, including travel time, number of stops, and average safe speed. Additionally, fuel consumption, GHG, and other vehicle emission data are reported (Attachment B). Historically, signal synchronization efforts nationwide have resulted in travel time and speed improvements, as well as a reduction in stops in the range between five percent and 15 percent. Comparisons of the corridors' before and after studies indicate results in the high-end of this range due to the combination of the optimized traffic signal timing plans, cooperation between all participating agencies, and minor signal upgrades to maximize traffic flow.

Signal Synchronization Projects

The signal synchronization program's target is to regularly synchronize 2,000 signalized intersections, as expressed in the M2 voter guide. OCTA and local agencies have completed 89 signal synchronization projects since 2008. A total of 3,003 signalized intersections and 772 centerline miles of streets have been implemented. The total Board of Directors grant allocations for the completed projects were approximately \$64.81 million. The completed projects are identified on the map in Attachment A. A summary of the results for the 89 completed signal synchronization projects is identified in Attachment B. The early acceleration of Project P allowed the benefits of signal synchronization to be experienced by travelers much earlier than originally promised.

The completed projects have reduced average travel time by 13 percent and the average number of stops by 29 percent. Average speed improved by 14 percent. Consumers will save approximately \$178.4 million (at \$3.90 per gallon in today's dollars) on fuel costs and reduce GHG emissions by approximately 919 million pounds over the three-year project cycle. The reduction of GHG emissions is made possible by reducing the number of stops, smoothing the flow of traffic, and reducing the amount of acceleration and deceleration of vehicles. These results are comparable to signal synchronization efforts nationwide.

The following table lists nine signal synchronization projects, where new timing plans were implemented within the last two years, along with the corresponding travel time and speed improvements:

Corridor	Limits	Length (Miles)	Travel Time Improvements	Average Speed Improvements
Alicia Parkway*^	Crown Valley Parkway to Rustic Oak	10.50	12 percent	13 percent
Camino Vera Cruz	Avenida Pico to Camino De Los Mares	1.43	9 percent	8 percent
Coast Highway*	Orange Street to Reef Point Drive	9.01	5 percent	5 percent
El Toro Road*^	Bridger Road to Ridgeline Road	7.17	20 percent	25 percent
Irvine Boulevard*	Jamboree Road to Bake Parkway	7.25	17 percent	21 percent
Irvine Center Drive/ Edinger Avenue^	Newport Avenue to Lake Forest Drive	9.12	16 percent	19 percent
Orangewood Avenue*	Batavia Street to Harbor Boulevard	3.21	17 percent	22 percent
Von Karman Avenue/ Tustin Ranch Road	Campus Drive to Pioneer Way	7.88	13 percent	14 percent
Westminster Avenue/ 17 th Street*^	Apollo Drive to Newport Avenue	16.33	5 percent	5 percent

* Project corridor reported on previous RTSSP update to the Board of Directors

^ Denotes a project corridor that has been revisited

The travel time collection for all completed projects, including these nine corridors, occurred prior to March 2020 and the State's stay-at-home executive order. Traffic engineers are continuing to monitor and update the signal timing to respond to changes in traffic patterns and to ensure travelers experience benefits from the completed projects.

OCTA is currently funding an additional 31 signal synchronization projects that are in various stages of implementation. The committed funding from OCTA is primarily from the competitive signal program and the grant allocation of these projects is approximately \$55.7 million. Once completed, these funded projects will synchronize an additional 1,213 signals and 316 miles of roadway.

It is good practice to periodically resynchronize traffic signals to make sure they consider changes in traffic. The signal program encourages previously completed streets and highways projects to compete again for funding during the annual call. Previous investments made as part of earlier projects are incorporated into the revisited projects. An example of this would be the Alicia Parkway and Westminster Avenue/17th Street corridors. The signals along Alicia Parkway were synchronized in 2010 and the signals along Westminster Avenue/17th Street in 2011. Both of these corridors were updated in 2019. The result is a program that can regularly coordinate intersections as the basis for synchronized operation across Orange County.

Next Steps

OCTA continues to work with local agencies through various venues, including the Technical Steering Committee, Technical Advisory Committee, and the traffic forum to identify corridors that are eligible for funding and would benefit from signal program funding as part of the annual call.

Summary

OCTA and local agencies have successfully implemented new cooperative traffic signal synchronization timing on 89 corridors. Another 31 projects are planned or underway. The synchronization of traffic signals along these regional corridors continually results in significant improvements to traffic flow by reducing total travel times, stops per mile, and improving average safe speeds while decreasing fuel costs, GHG, and overall vehicle emissions.

Attachments

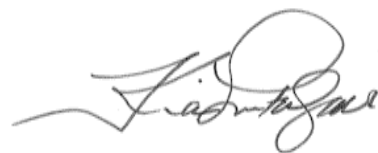
- A. Orange County Transportation Authority-Funded Signal Synchronization Projects, (2008 – Present)
- B. Summary of Results for Completed Regional Traffic Signal Synchronization Projects

Prepared by:



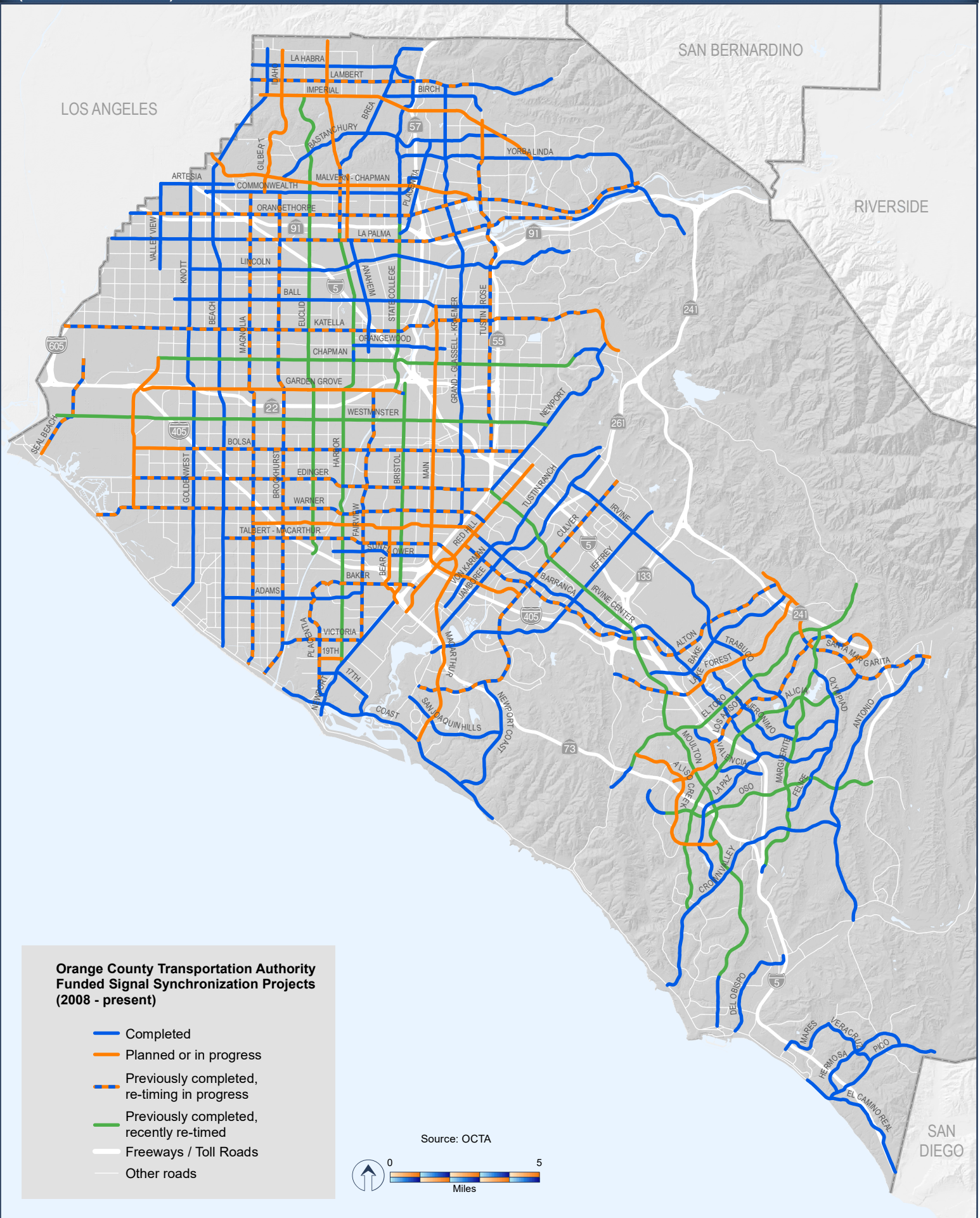
Alicia Yang
Project Manager III
(714) 560-5362

Approved by:



Kia Mortazavi
Executive Director, Planning
(714) 560-5741

Orange County Transportation Authority-Funded Signal Synchronization Projects (2008 - Present)



Summary of Results for Completed Regional Traffic Signal Synchronization Projects

	Corridor Name	Timing Completed	Lead Agency	Length (Miles)	Signals	Board Allocation	Estimated Project Life Gas Savings (Dollars) ^{1A}	Estimated Project Life Greenhouse Gas Savings (lbs.)	Travel Time Improvement	Average Speed Improvement	Stops Improvement
1	Euclid Street*	2008	OCTA	15	62	\$ 480,083	\$ 3,091,631	16,188,276	20%	24%	43%
2	Pacific Park Drive/Oso Parkway*	2009	OCTA	9	34	\$ 248,272	\$ 3,647,370	19,098,249	22%	29%	50%
3	Alicia Parkway ¹	2010	OCTA	11	41	\$ 939,144	\$ 806,001	4,220,358	13%	12%	40%
4	Beach Boulevard ¹	2010	OCTA	21	70	\$ 1,243,859	\$ 10,469,722	54,821,202	14%	21%	28%
5	Chapman Avenue (South) ^{1A}	2010	OCTA	14	52	\$ 798,161	\$ 3,244,679	16,989,696	16%	18%	46%
6	Edinger Avenue/Irvine Center Drive/ Moulton Parkway ^{1A}	2011	OCTA	22	109	\$ 846,217	\$ 4,609,706	24,137,220	11%	14%	34%
7	Harbor Boulevard ^{1A}	2011	OCTA	16	107	\$ 890,377	\$ 3,226,111	16,892,430	11%	12%	23%
8	Orangefhorpe Avenue ¹	2011	OCTA	17	47	\$ 697,585	\$ 2,659,036	13,923,183	17%	20%	42%
9	State College Boulevard/Bristol Street ^{1A}	2011	OCTA	17	97	\$ 574,639	\$ 4,089,735	21,414,531	15%	18%	28%
10	Westminster Avenue ¹	2011	OCTA	13	48	\$ 308,847	\$ 4,233,390	22,166,736	14%	17%	35%
11	Brookhurst Street ¹	2012	OCTA	16	56	\$ 631,764	\$ 7,850,213	41,105,031	19%	18%	31%
12	El Toro Road ^{1A}	2012	OCTA	11	40	\$ 478,916	\$ 3,302,828	17,294,160	19%	24%	32%
13	Katella Avenue ¹	2012	OCTA	17	69	\$ 673,845	\$ 4,435,716	23,226,165	14%	14%	36%
14	La Palma Avenue ¹	2012	OCTA	18	61	\$ 803,999	\$ 6,281,546	32,391,229	18%	22%	27%
15	Bastanchury Road	2013	Fullerton	8	27	\$ 539,936	\$ 1,053,007	5,513,723	13%	15%	49%
16	Euclid Street*	2013	Fullerton	17	66	\$ 1,000,000	\$ 4,316,031	22,599,458	15%	17%	39%
17	Lambert Avenue	2013	La Habra	10	26	\$ 520,000	\$ 4,578,312	23,972,807	14%	16%	41%
18	Tustin Avenue/Rose Drive	2013	OCTA	10	43	\$ 683,200	\$ 2,309,842	12,094,717	15%	17%	37%
19	Yorba Linda Boulevard ¹	2013	OCTA	12	46	\$ 521,837	\$ 1,813,693	9,496,799	12%	10%	21%
20	Lincoln Avenue	2014	Anaheim	13	53	\$ 777,910	\$ 1,564,300	8,190,935	9%	15%	25%
21	Valley View Street	2014	Buena Park	3	20	\$ 280,000	\$ 3,056,089	16,002,194	28%	24%	37%
22	17th Street	2014	Costa Mesa	3	9	\$ 220,000	\$ 123,098	644,563	7%	3%	0%
23	Baker Street/Placentia Avenue	2014	Costa Mesa	8	27	\$ 519,960	\$ 540,228	2,828,724	14%	16%	34%
24	Fairview Road/Street	2014	Costa Mesa	8	31	\$ 620,001	\$ 1,735,472	9,087,220	11%	12%	24%
25	Victoria Street	2014	Costa Mesa	3	11	\$ 200,000	\$ 124,820	653,581	22%	15%	25%
26	Brea Boulevard	2014	Fullerton	4	16	\$ 320,000	\$ 813,531	4,259,783	12%	13%	43%
27	Commonwealth Avenue	2014	Fullerton	8	30	\$ 600,000	\$ 803,023	4,204,761	11%	12%	36%
28	Lemon Street/Anaheim Boulevard	2014	Fullerton	2	13	\$ 280,000	\$ 531,872	2,784,969	16%	21%	40%
29	Placentia Avenue	2014	Fullerton	4	15	\$ 380,000	\$ 570,921	2,989,436	18%	22%	48%
30	Culver Drive	2014	Irvine	11	39	\$ 779,856	\$ 3,625,648	18,984,498	12%	12%	19%
31	Jamboree Road	2014	Irvine	9	27	\$ 230,608	\$ 3,173,217	16,615,495	9%	9%	19%
32	Jeffrey Road	2014	Irvine	9	40	\$ 410,032	\$ 1,910,910	10,005,845	9%	10%	26%
33	La Habra Boulevard/Central Avenue/ State College Boulevard	2014	La Habra	6	23	\$ 460,000	\$ 1,550,184	8,117,025	10%	11%	27%
34	Paseo de Valencia	2014	Laguna Hills	3	12	\$ 190,742	\$ 169,859	889,411	8%	5%	34%
35	Ball Road	2014	OCTA	11	38	\$ 733,416	\$ 1,532,115	8,022,411	5%	7%	13%

Summary of Results for Completed Regional Traffic Signal Synchronization Projects

	Corridor Name	Timing Completed	Lead Agency	Length (Miles)	Signals	Board Allocation	Estimated Project Life Gas Savings (Dollars)^	Estimated Project Life Greenhouse Gas Savings (lbs.)	Travel Time Improvement	Average Speed Improvement	Stops Improvement
36	Crown Valley Parkway	2014	OCTA	9	30	\$ 367,200	\$ 556,861	2,915,820	4%	3%	20%
37	Edinger Avenue*	2014	OCTA	12	38	\$ 753,800	\$ 1,264,832	6,622,870	2%	5%	25%
38	First Street/Bolsa Avenue	2014	OCTA	12	49	\$ 980,000	\$ 3,506,276	18,359,448	11%	12%	26%
39	Lake Forest Drive	2014	OCTA	2	10	\$ 119,679	\$ 685,904	3,591,510	19%	23%	33%
40	Los Alisos Boulevard	2014	OCTA	7	21	\$ 332,617	\$ 27,876	145,962	5%	3%	16%
41	MacArthur Boulevard/Talbert Avenue	2014	OCTA	7	24	\$ 392,256	\$ 524,129	2,744,427	7%	8%	13%
42	Magnolia Street	2014	OCTA	16	54	\$ 399,943	\$ 2,208,937	11,566,362	10%	12%	26%
43	Marguerite Parkway	2014	OCTA	9	31	\$ 323,056	\$ 609,084	3,189,264	11%	12%	21%
44	Pacific Park Drive/Oso Parkway*	2014	OCTA	8	32	\$ 490,222	\$ 1,912,481	10,014,071	16%	19%	29%
45	Warner Avenue	2014	OCTA	13	43	\$ 621,848	\$ 1,797,186	9,410,366	8%	6%	15%
46	Avenida Pico	2014	San Clemente	4	21	\$ 416,453	\$ 705,991	3,696,687	9%	10%	21%
47	El Camino Real	2014	San Clemente	4	19	\$ 359,998	\$ 1,482,733	7,763,838	9%	10%	25%
48	Del Obispo Street	2014	San Juan Capistrano	4	16	\$ 138,800	\$ 992,762	5,198,269	13%	10%	11%
49	Knott Avenue	2015	Buena Park	7	28	\$ 448,000	\$ 1,918,098	10,043,483	23%	26%	37%
50	Newport Coast Drive	2015	Newport Beach	5	15	\$ 260,000	\$ 651,984	3,413,896	10%	0%	6%
51	San Joaquin Hills Road	2015	Newport Beach	4	11	\$ 220,000	\$ 584,913	3,062,701	11%	12%	32%
52	Jeronimo Road ¹	2015	OCTA	6	16	\$ 267,360	\$ 1,508,063	7,896,471	12%	3%	35%
53	Santa Margarita Parkway	2015	OCTA	5	20	\$ 311,912	\$ 1,705,334	8,929,416	15%	18%	41%
54	Trabuco Road ¹	2015	OCTA	5	16	\$ 266,971	\$ 1,294,844	6,780,018	15%	18%	32%
55	Avenida Vista Hermosa	2015	San Clemente	3	17	\$ 305,856	\$ 252,899	1,324,219	17%	19%	54%
56	Camino De Los Mares	2015	San Clemente	2	13	\$ 248,208	\$ 1,806,683	3,153,365	27%	37%	57%
57	Artesia Boulevard	2016	Buena Park	2	11	\$ 422,142	\$ 795,156	4,163,572	20%	16%	38%
58	Alton Parkway	2016	Irvine	14	48	\$ 1,209,396	\$ 3,082,089	16,138,332	12%	14%	39%
59	Barranca Parkway	2016	Irvine	13	44	\$ 2,106,434	\$ 2,734,900	14,320,395	10%	11%	26%
60	Adams Avenue ¹	2016	OCTA	5	17	\$ 1,042,374	\$ 2,065,973	10,817,781	7%	14%	27%
61	Antonio Parkway ¹	2016	OCTA	10	27	\$ 1,156,920	\$ 2,274,125	11,907,699	16%	19%	23%
62	Bake Parkway	2016	OCTA	6	19	\$ 532,603	\$ 1,434,344	7,510,464	12%	12%	28%
63	La Paz Road	2016	OCTA	8	23	\$ 328,192	\$ 1,951,861	10,220,270	14%	16%	21%
64	Newport Avenue/Boulevard (North) ¹	2016	OCTA	7	24	\$ 946,045	\$ 581,731	3,046,041	12%	15%	36%
65	Newport Boulevard (South)	2016	OCTA	7	33	\$ 1,304,596	\$ 944,446	4,945,276	5%	7%	17%
66	State College Boulevard* ¹	2016	OCTA	5	35	\$ 1,041,579	\$ 1,484,920	7,775,289	10%	11%	16%
67	Seal Beach Boulevard/Los Alamitos Boulevard	2016	Seal Beach	3	13	\$ 586,720	\$ 1,016,379	5,321,931	10%	11%	31%
68	Anaheim Boulevard	2017	Anaheim	4	18	\$ 787,940	\$ (95,430)	(499,686)	-1%	0%	9%
69	Harbor Boulevard*	2017	Anaheim	4	22	\$ 731,867	\$ 1,414,593	7,407,047	8%	9%	15%
70	Birch Street/Rose Drive	2017	Brea	4	14	\$ 664,230	\$ 629,603	3,296,709	23%	30%	37%

Summary of Results for Completed Regional Traffic Signal Synchronization Projects

	Corridor Name	Timing Completed	Lead Agency	Length (Miles)	Signals	Board Allocation	Estimated Project Life Gas Savings (Dollars)^	Estimated Project Life Greenhouse Gas Savings (lbs.)	Travel Time Improvement	Average Speed Improvement	Stops Improvement
71	Bristol Street*	2017	OCTA	8	45	\$ 1,884,620	\$ 1,649,926	8,639,290	7%	8%	13%
72	Goldenwest Street	2017	OCTA	8	32	\$ 380,800	\$ 374,406	1,960,454	11%	7%	23%
73	Harbor Boulevard*	2017	Santa Ana	10	46	\$ 1,852,080	\$ 4,320,825	22,624,563	10%	10%	15%
74	Sunflower Avenue	2018	Costa Mesa	3	14	\$ 617,960	\$ 631,288	3,305,529	15%	32%	38%
75	El Toro Road*	2018	Laguna Woods	3	15	\$ 514,000	\$ 1,116,724	5,847,356	17%	20%	33%
76	Moulton Parkway*	2018	Laguna Woods	11	37	\$ 645,440	\$ 939,620	4,920,008	12%	2%	41%
77	Marguerite Parkway*	2018	Mission Viejo	9	30	\$ 759,232	\$ 1,663,372	8,709,695	8%	9%	18%
78	Olympiad Road-Felipe Road	2018	Mission Viejo	6	18	\$ 515,656	\$ 197,900	1,036,240	3%	3%	6%
79	Chapman Avenue*	2018	OCTA	14	55	\$ 2,344,044	\$ 2,322,428	12,160,622	8%	9%	0%
80	Kraemer Boulevard/Glassell Street/Grand Avenue	2018	OCTA	15	61	\$ 2,433,520	\$ 1,722,240	441,600	12%	7%	8%
81	Orangewood Avenue	2019	Anaheim	3	15	\$ 683,328	\$ 1,140,726	5,973,032	17%	22%	46%
82	Irvine Boulevard	2019	Irvine	7	29	\$ 378,166	\$ 2,757,359	14,437,996	17%	21%	37%
83	Irvine Center Drive/Edinger Avenue*	2019	Irvine	9	39	\$ 1,824,000	\$ 3,402,931	17,818,317	16%	19%	31%
84	Von Karman Avenue/Tustin Ranch Road	2019	Irvine	8	30	\$ 1,439,980	\$ 2,231,534	11,684,688	13%	14%	27%
85	Alicia Parkway*	2019	OCTA	11	40	\$ 1,847,200	\$ 3,550,240	18,589,652	12%	13%	31%
86	Coast Highway	2019	OCTA	9	27	\$ 1,799,210	\$ 1,907,001	9,985,376	5%	5%	8%
87	El Toro Road*	2019	OCTA	7	25	\$ 1,112,447	\$ 4,079,112	21,358,911	20%	25%	42%
88	Westminster Avenue/17th Street*	2019	OCTA	16	63	\$ 2,820,102	\$ 141,754	742,246	5%	5%	16%
89	Camino Vera Cruz	2019	San Clemente	1	5	\$ 192,686	\$ 145,831	763,596	9%	8%	35%
Summary of All Projects				772	3003	\$ 64,812,893	\$ 178,451,633	919,019,575	13%	14%	29%

* Euclid Street, Pacific Park Drive/Oso Parkway, Harbor Boulevard, State College Boulevard, Bristol Street, Moulton Parkway, Chapman Avenue, Westminster Avenue, El Toro Road, Alicia Parkway, Marguerite Parkway, and Irvine Center Drive/Edinger Avenue are included multiple times because these corridors have been revisited

^ \$3.90 per gallon gasoline price used to estimate savings

Note: Improvements are averaged across both directions over the full corridor

¹ Project Board of Directors allocation includes external funding

lbs - pounds

OCTA - Orange County Transportation Authority



June 7, 2021

To: Regional Planning and Highways Committee
From: Darrell E. Johnson, Chief Executive Officer
Subject: Draft 2021 State Route 91 Implementation Plan

A handwritten signature in blue ink, appearing to read "Darrell E. Johnson", is written over a light blue rectangular background.

Overview

The Orange County Transportation Authority and the Riverside County Transportation Commission annually prepare a plan for potential improvements along the State Route 91 corridor between State Route 57 in Orange County and Interstate 15 in Riverside County. The plan includes a listing of proposed improvements, preliminary cost estimates, and potential implementation timeframes. These improvements are sponsored by various agencies, such as the Orange County Transportation Authority, the Riverside County Transportation Commission, the Transportation Corridor Agencies, the California Department of Transportation, and cities along the corridor. The Draft 2021 State Route 91 Implementation Plan is provided for information purposes.

Recommendation

Receive and file as an information item.

Background

SB 1316 (Chapter 714, Statutes of 2008) requires the Orange County Transportation Authority (OCTA) and the Riverside County Transportation Commission (RCTC) to prepare a plan for potential improvements annually along the State Route 91 (SR-91) corridor between State Route 57 (SR-57) in Orange County and Interstate 15 (I-15) in Riverside County. The Draft 2021 SR-91 Implementation Plan (Plan) serves as a snapshot of current and planned activities within the SR-91 corridor. The Plan describes projects, transportation benefits, and anticipated costs and schedules to implement through the post-2035 timeframe. The intent of the Plan is to provide a compilation of information for projects along the SR-91 corridor. This Plan was prepared in consultation with the California Department of Transportation (Caltrans), the Transportation Corridor Agencies (TCA), and the cities of Anaheim, Corona, Orange, and Yorba Linda.

Discussion

Since 2003, substantial progress has been made in improving the SR-91 corridor. Over \$1.9 billion has been invested with the completion of nine projects, including the addition of 66.5 lane miles throughout the SR-91 corridor. Average daily traffic throughput has also increased by 15 percent. This indicates that improvements within the corridor have helped alleviate population growth and employment between Orange and Riverside counties by enhancing capacity and improving mobility. Completed projects include:

- Green River Road Overcrossing Improvement Project;
- North Main Street Corona Metrolink Parking Structure Project;
- Eastbound (EB) lane addition from State Route 241 (SR-241) to State Route 71 (SR-71);
- Lane addition in both directions between State Route 55 (SR-55) and SR-241;
- Westbound (WB) lane addition at Tustin Avenue;
- Metrolink service improvements;
- SR-91 Corridor Improvement Project initial phase;
- Express Bus Service; and
- La Sierra Metrolink parking improvements.

OCTA and RCTC have adopted similar goals for the 91 Express Lanes to continue to maintain a safe, reliable, and predictable travel time for motorists traversing seamlessly between the two counties. These guiding principles include:

- Optimizing vehicle throughput at free-flow speeds and increasing average vehicle occupancy;
- Balancing capacity and demand to serve customers who pay tolls, as well as carpoolers (3+) who are offered discounted tolls;
- Generating sufficient revenue to sustain the financial viability of the 91 Express Lanes;
- Paying debt service and maintaining debt service coverage; and
- Reinvesting net revenues on the SR-91 corridor to improve regional mobility, when appropriate.

Information for projects in the Plan is updated annually. This ensures that the planning and implementation of each project are carefully coordinated to determine the appropriate timing to provide maximum benefits within the SR-91 corridor. Additionally, projects in the corridor should be coordinated to minimize construction impacts to commuters and the surrounding communities. In the future, operational analysis by OCTA and RCTC will be prepared for each project before implementation to ensure that the projects meet the OCTA and RCTC goals for the SR-91 corridor.

In October 2019, a consensus was reached that set the stage for a series of projects included in the Plan to be implemented sequentially to improve the SR-91 corridor. OCTA, RCTC, TCA, Caltrans District 8 and District 12, as well as Caltrans Headquarters agreed to project sequencing in order to enable the streamlining of the SR-241/SR-91 Tolled Express Lanes Connector Project while minimizing impacts to the SR-91 corridor. The agencies reached a consensus on a program of projects and sequencing as follows:

1. 15/91 Express Lanes Connector
2. SR-91 Corridor Operations Project
3. SR-71/SR-91 interchange improvements*
4. SR-241/SR-91 Tolled Express Lanes Connector

*Note: SR-241/SR-91 Tolled Express Lanes Connector is not dependent upon completing SR-71/SR-91 interchange improvements.

Coordination efforts for the Plan (Attachment A) resulted in various updates to project status, costs, and schedules. Projects included in the Plan are organized as follows: Orange County projects, Riverside County projects, and bi-county projects.

- Orange County projects include three improvements at a total cost of approximately \$524 million:
 - SR-91 improvements between SR-57 and SR-55;
 - Anaheim Canyon Metrolink Station improvements; and
 - Placentia Metrolink Rail Station.
- Riverside County projects include three improvements, totaling over \$390 million:
 - 15/91 Express Lanes Connector;
 - SR-71/SR-91 interchange; and
 - Improvements east of I-15.
- Bi-county projects, which benefit both Orange and Riverside counties, total over \$288 million and include:
 - SR-91 Corridor Operations Project;
 - Sixth general-purpose lane addition from SR-241 to SR-71; and
 - SR-241/SR-91 Tolled Express Lanes Connector.

Due to the effects of the coronavirus (COVID-19) pandemic, the 2020 traffic patterns are not considered a true reflection of the typical existing conditions nor as a proper baseline to forecast the future demand and operations of the SR-91 corridor. Daily travel demand on the SR-91 corridor shifted from an uptrend of four percent in January and February 2020 compared to the same months in 2019.

There was a 12 percent reduction in March 2020 and a reduction of 30 percent in April 2020, when compared to the respective months in 2019. From May 2020 through December 2020, the SR-91 traffic demand changes varied from three percent to 16 percent lower than the same months in 2019. Therefore, the pre-COVID-19 traffic conditions are being utilized for the 2021 Plan.

The operations analysis quantified travel time savings for WB morning and EB afternoon conditions for the capacity-enhancing projects in 2030 and beyond. The WB morning traffic analysis results indicate that for the year 2030 forecasts, travel times are anticipated to improve in Riverside County (by about six minutes), and in Orange County (by about 11 minutes). The EB afternoon traffic analysis indicates that for the year 2030 forecasts, travel times in Riverside County are anticipated to improve (by about seven minutes), and increase (by about 11 minutes) in Orange County. OCTA and RCTC will continue monitoring the SR-91 traffic pattern changes throughout 2021. If traffic conditions show a trend of normalization, then the traffic analysis will be updated for the 2022 Plan.

The improvements included in Appendix A of the Plan are highly conceptual in nature. Some of the concepts are derived from the Riverside-Orange County Major Investment Study (MIS). Appendix A includes the following concepts:

- Elevated four-lane facility between SR-241 and I-15 (MIS Corridor A);
- Anaheim to Ontario International Airport high-speed ground transportation system;
- Irvine-Corona Expressway (ICE) from SR-241/State Route 133 to I-15/Cajalco Road;
- Connector improvements at the SR-91/SR-55 interchange;
- EB fifth lane addition near SR-241; and
- Improvements at Fairmont Boulevard.

The projected cost of the conceptual improvements exceeds \$14 billion, and the implementation would require a significant amount of planning, design, external funding, and future policy and public input.

Staff continues to monitor the financial viability and geotechnical feasibility of the ICE concept as requested by the SR-91 Advisory Committee and the Riverside Orange Corridor Authority in 2010. A review of recent tunneling projects shows feasibility for the ICE tunnel concept is slowly improving as tunneling technology progresses. Technology has not advanced to the point where long, wide highway tunnels can be constructed at a reasonable, fundable, or viable cost. However, modern boring methods have lowered the cost on smaller, shorter tunnels. If this scales to larger tunnels, then the ICE corridor could become more feasible. Although some tunneling projects have been completed in California with similar lane configurations as the ICE concept, without significant state and federal funding, this project will be a major challenge to complete.

Summary

OCTA and RCTC have completed the 2021 update to the Plan required by SB 1316. As the Plan is updated annually, it is important to ensure that projects are coordinated in such a way that they provide maximum benefits to the SR-91 corridor. This would be achieved through implementing projects that optimize the operations of the corridor and the 91 Express Lanes.

The Plan serves as a compilation of future potential projects and project-level decisions can be made when individual projects are being considered for implementation. Traffic conditions on the SR-91 corridor are expecting continued changes due to uncertainties related to the COVID-19 pandemic. OCTA and RCTC will continue monitoring the SR-91 traffic pattern changes throughout the 2021 year.

Attachment

- A. Draft State Route 91 Implementation Plan 2021

Prepared by:



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Approved by:

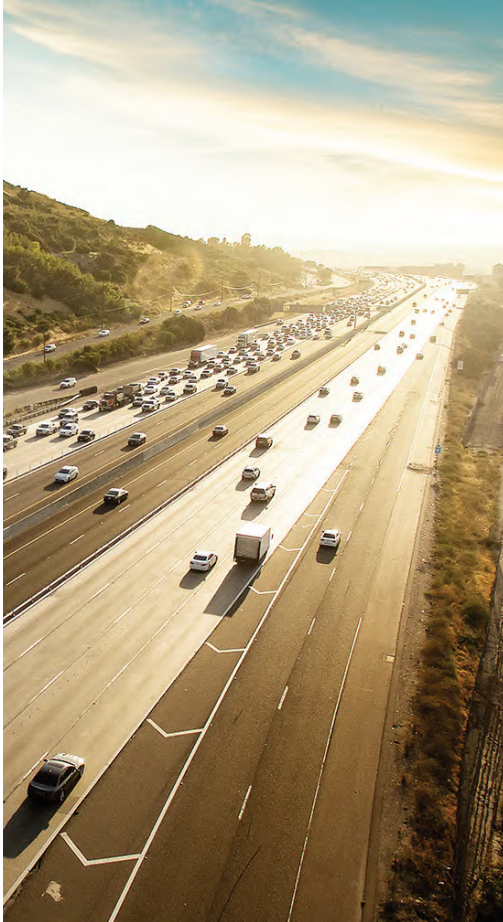


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STATE ROUTE 91

IMPLEMENTATION PLAN 2021

DRAFT



PREPARED BY:

Michael Baker
INTERNATIONAL



RIVERSIDE
COUNTY
TRANSPORTATION
COMMISSION

STATE ROUTE 91 (SR-91) IMPLEMENTATION PLAN

KEEPING MOTORISTS MOVING ON THE SR-91 CORRIDOR

Every year since 2003, OCTA, RCTC, and stakeholders have worked collaboratively to review a program of projects along the SR-91 corridor.

BENEFITS		<ul style="list-style-type: none"> • Provides seamless connectivity between Orange and Riverside Counties • Increases travel options • Optimizes vehicle throughput • Reinvests net 91 Express Lanes revenues on the SR-91 corridor to improve regional mobility • Investments to date: \$1.9 billion 		
COMPLETED EFFORTS		PROJECT	COST (MILLIONS)	COMPLETION
	Orange County	Eastbound Lane Addition (SR-241 to SR-71)	\$51.2	2010
		Fifth Lane Addition (SR-55 to SR-241)	\$85.2	2013
		Westbound Lane at Tustin Avenue	\$43.2	2016
	Riverside County	Green River Road Overcrossing	\$24.3	2009
		North Main Street Corona Metrolink Parking Structure	\$25	2009
		91 Corridor Improvement Project (Initial Phase)	\$1,407	2017
		La Sierra Metrolink Parking Improvements	\$6.3	2019
	Bi-County	Metrolink Service Improvements	\$249	2016
		Express Bus Service	\$6	2019
ANTICIPATED PROJECTS		PROJECT	COST (MILLIONS)	CURRENT PHASE
	Orange County	SR-91 Improvements (SR-57 to SR-55)	\$460	Final Design
		Anaheim Canyon Metrolink Station Improvements	\$29.8	Final Design
		Placentia Metrolink Rail Station	\$34.8	Final Design
	Riverside County	15/91 Express Lanes Connector	\$270	Final Design
		SR-71/SR-91 Interchange Improvements	\$121	Final Design
		Improvements East of I-15	TBD	Environmental
	Bi-County	SR-91 Corridor Operations Project	\$38	Construction
		6th General Purpose Lane Addition (SR-241 to SR-71)	TBD	Preliminary Engineering
		SR-241/SR-91 Tolloed Express Lanes Connector	\$250	Final Design
CONCEPTS	LOCATION		COST (MILLIONS)	
	Elevated 4-Lane Facility (MIS Corridor A) from SR-241 to I-15 (Post-2035)		\$2,720	
	Anaheim to Ontario International Airport Maglev High Speed Rail (Post-2035)		\$2,770 - \$3,200	
	Irvine-Corona Expressway (ICE) 4-Lane Facility from SR-241/SR-133 to I-15/Cajalco Road (Post-2035)		\$8,855	
	WB SR-91 to SB SR-55 Connector Improvements (Post-2035)		\$75 - \$150	
	EB SR-91 Fifth Lane Addition at SR-241		\$31	
	Fairmont Boulevard Improvements		\$76.8	

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SECTION 1: INTRODUCTION

2021 STATUS REPORT AND UPDATE

Previous law authorized the California Department of Transportation (Caltrans) to enter into franchise agreements with private companies to construct and operate four demonstration toll road projects in California. This resulted in the development of the 91 Express Lanes facility in Orange County. The four-lane, 10-mile toll road runs along the median of State Route 91 (SR-91) in northeast Orange County between the Orange/Riverside County line and State Route 55 (SR-55). Since the 91 Express Lanes carried its first vehicle on December 27, 1995, the facility has saved users tens of millions of hours of commuting time.

While the 91 Express Lanes facility has improved travel time along the SR-91 corridor, provisions in the franchise agreement between Caltrans and the private franchisee, the California Private Transportation Company (CPTC), prohibited Caltrans and county transportation agencies from adding transportation capacity or operational improvements to the SR-91 corridor through the year 2030 from Interstate 15 (I-15) in Riverside County to the Orange/Los Angeles Counties border. Consequently, the public agencies were barred from adding new lanes, improving interchanges, and adding other improvements to decrease congestion on the SR-91 freeway.

Recognizing the need to eliminate the non-compete provision of the franchise agreement, Governor Gray Davis signed Assembly Bill 1010 (Lou Correa) (AB 1010) into law in September 2002, paving the way for much-needed congestion relief for thousands of drivers who use SR-91 to travel between Riverside and Orange Counties each day. The bill allowed the Orange County Transportation Authority (OCTA) to purchase the 91 Express Lanes franchise and eliminate non-compete clause that prohibited capacity-enhancing improvements from being made to SR-91. Although the 91 Express Lanes operate within a 10-mile stretch of Orange County, between SR-55 and Orange/Riverside county lines the franchise technically allowed operation of toll lanes into Riverside County. The purchase agreement for the 91 Express Lanes was completed on January 3, 2003, placing the road in public hands at a cost of \$207.5 million. With the elimination of the non-compete

provision through AB 1010 and the subsequent 91 Express Lanes purchase by OCTA, Orange County and Riverside County public officials and Caltrans Districts 8 and 12 have been coordinating improvement plans for SR-91.

Senate Bill 1316 (Lou Correa) (SB 1316) was signed into law in September 2008 as an update to the provisions of AB 1010. SB 1316 authorizes OCTA to transfer its rights and interests in the Riverside County portion of SR-91 toll lanes by assigning them to the Riverside County Transportation Commission (RCTC) and authorizes RCTC to operate tolls for 50 years. In 2017, RCTC opened the extension of the 91 Express Lanes to traffic into Riverside County with completion of the initial phase of the SR-91 Corridor Improvement Project (see Appendix B). SB 1316 also requires OCTA and RCTC, in consultation with Caltrans, to continue to issue an annual SR-91 Implementation Plan (Plan) for SR-91 improvements between State Route 57 (SR-57) and I-15. The Plans prior to adoption of SB 1316 included a westerly project limit of SR-55. The Plan establishes a program of potential improvements to relieve congestion and improve operations in the SR-91 corridor.

The 2021 Plan fulfills the requirement to provide the State Legislature with an annual Implementation Plan for SR-91 improvements and builds on the 2020 Plan. This year's update includes concepts that were identified in the 2006 Riverside County – Orange County Major Investment Study (MIS) as well as other project development efforts, including the RCTC 10-Year Western County Highway Delivery Plan that outlines a number of projects such as the extension of the 91 Express Lanes from the Orange/Riverside County line to I-15. The projects included in the 2021 Plan have been infused with various sources of local, state, and federal funding. The 2021 Plan includes overviews, status summaries, and proposed costs and schedules for project packages to improve mobility on SR-91. Also included are conceptual lane diagrams (as appropriate), and discussions of key considerations that need to be addressed in the planning and development of each project. This Plan will provide OCTA, RCTC, and Caltrans with a framework to



implement SR-91 and other related improvements. Future annual Plan updates will continue to refine the scope, cost, and schedule of each project included in this version of the Plan.

91 EXPRESS LANES TOLL POLICY GOALS

With the completion of the State Route 91 Corridor Improvement Project's initial phase in spring 2017, there are now approximately 18 miles of Express Lanes between Orange and Riverside counties. OCTA and RCTC have adopted goals for the 91 Express Lanes to continue to maintain a safe, reliable, and predictable travel time for express lane users traversing seamlessly between the two counties. The goals below take into consideration the 91 Express Lanes as well as the SR-91 corridor at large. These guiding principles include:

- optimizing vehicle throughput at free flow speeds;
- increasing average vehicle occupancy;
- balancing capacity and demand to serve customers who pay tolls as well as carpoolers (3+) who are offered discounted tolls;
- paying debt service and maintaining debt service coverage;
- generating sufficient revenue to sustain the financial viability of the 91 Express Lanes; and
- when appropriate, reinvesting net revenues on the SR-91 corridor to improve regional mobility.

PROJECT ACCOMPLISHMENTS

Much progress has been made since the initial 2003 SR-91 Implementation Plan was approved. The 2021 Plan includes select completed project exhibits as a historical reference (see Appendix B).

Completed Construction/Improvement Projects

The following improvements have been constructed or implemented:

- ❖ Repaved and sealed pavement surfaces, restriped, and replaced raised channelizers on the 91 Express Lanes.
- ❖ On EB SR-91 the roadway was restriped, and the median barrier was reconstructed. This

project removed the CHP enforcement area and extended the EB auxiliary lane from SR-71 to the Serfas Club Drive off-ramp.

- ❖ The WB auxiliary lane was extended between the County line and SR-241. This project eliminated the lane drop at the 91 Express Lanes and extended the existing auxiliary lane from the County line to SR-241 in the westbound direction. This improvement minimized the traffic delays at the lane drop area, resulting in improved vehicle progression.
- ❖ On WB SR-91 the roadway was restriped to extend the auxiliary lane between SR-71 and the County line. This resulted in a new continuous lane between SR-71 and SR-241.
- ❖ Safety Improvements were constructed at the Truck Scales. Existing shoulders were improved, lanes were re-striped, illumination improved, and signage was modified into and out of the EB facilities.
- ❖ Green River Road overcrossing replacement (see Appendix B).
- ❖ Metrolink parking structure at the North Main Street Corona Metrolink Station (see Appendix B).
- ❖ EB SR-91 lane addition from SR-241 to SR-71 (see Appendix B).
- ❖ Additional SR-91 WB and EB travel lane between SR-55 and SR-241 (see Appendix B).
- ❖ SR-91 WB bypass lane to Tustin Avenue at SR-55 (see Appendix B).
- ❖ Metrolink Service Improvements (see Appendix B).
- ❖ Initial SR-91 Corridor Improvement Project (CIP) (see Appendix B).
- ❖ La Sierra Metrolink Parking Improvements (see Appendix B)
- ❖ Express Bus Service (see Appendix B)

These projects provide enhanced freeway capacity and/or improved mobility for one of the most congested segments of SR-91.

The completed EB SR-91 lane addition project from SR-241 to SR-71 (see Appendix B) has improved highway operations. This project reduced travel time by approximately 20 minutes during its opening year.

The Initial CIP project has provided significant benefits to drivers on SR-91. This \$1.4 billion investment project included widening SR-91 by one GP lane in each direction east of SR-71, adding collector-distributor (CD) roads and direct south connectors at I-15/SR-91, extending the 91



Express Lanes to I-15, and providing system/local interchange improvements. The new lanes and other improvements save time, offer choice and reliability, boost safety, enhance access and job creation, promote ridesharing, reduce pollution and aid the movement of goods along the region's roadways.

The WB SR-91 Widening Project completed construction in 2016 from State College Blvd to Interstate 5 (I-5). This project added one WB general purpose lane and removed the dedicated exit lane to State College Blvd from the SB SR-57 to WB SR-91 Connector that contributed to operational issues due to the short weaving distance. While this project falls just to the west of the limits for the Plan study area, it will have an influence on operations within the Plan area.

In addition, there are two projects that impact future SR-91 widening projects. The first is the \$2.8 billion U.S. Army Corps of Engineers (Corps) Santa Ana River Mainstem project that provides flood protection from the recently improved Prado Dam (near SR-71) to the Pacific Ocean. The project includes many features that have already been completed, including improvements to Seven Oaks Dam, 30 miles of levees and modifications to original project features including raising the Prado Dam embankment and installation of new, larger capacity outlet works. The Corps and Orange County Flood Control District recently amended a cooperative agreement which would allow the Corps to use federal funds under the Bipartisan Budget Act to complete select features of the project.

The other project with a direct impact to SR-91 is the \$120 million Santa Ana Regional Interceptor (SARI) sewer trunk line relocation. The existing SARI line is within the Santa Ana River floodplain and was in jeopardy of failure due to scour from the potential increased flood releases by the aforementioned Corps project. This project was completed in 2014.

SR-91 project teams have coordinated with the Corps, Orange County Flood Control District, Caltrans, and other federal, regional, and local agencies to accommodate planned SR-91 improvements adjacent to the Santa Ana River.

Completed Designs and Reports

There are various project development phase documents (Feasibility Reports, Studies, PSR, PA/ED, or PS&E) that are completed, or are in draft form and anticipated to be approved that identify mobility improvements. These

documents include:

- ❖ MIS – Final Project Report: Locally Preferred Strategy Report (January 2006).
- ❖ Renewed Measure M Transportation Investment Plan (November 2006).
- ❖ RCTC 10-Year Western County Highway Delivery Plan (December 2006).
- ❖ SR-91/Fairmont Boulevard Feasibility Study (December 2009).
- ❖ Corridor System Management Plan (CSMP) Orange County SR-91 Corridor Final Report (August 2010).
- ❖ Renewed Measure M Early Action Plan, approved August 2007 and subsequently renamed as the Capital Action Plan (April 2011).
- ❖ PSR-PDS for SR-241/SR-91 Tolled Express Lanes Connector (January 2012).
- ❖ Project Report & Environmental Document for 91 Corridor Improvement Project (October 2012)
- ❖ PSR-PDS on SR-91 between SR-57 and SR-55 (October 2014).
- ❖ SR-71/SR-91 Interchange Environmental Phase (2011) and Final Design (2015).
- ❖ 2020 Next 10 Delivery Plan approved by OCTA Board, (October 2020).
- ❖ Project Report & Environmental Document for 15/91 Express Lanes Connector (June 2019)
- ❖ Project Report & Environmental Document for 91 Corridor Operations Project (April 2020)
- ❖ Project Report & Environmental Document for SR-241/SR-91 Tolled Express Lanes Connector (April 2020).

SR-91 CORRIDOR CONDITIONS

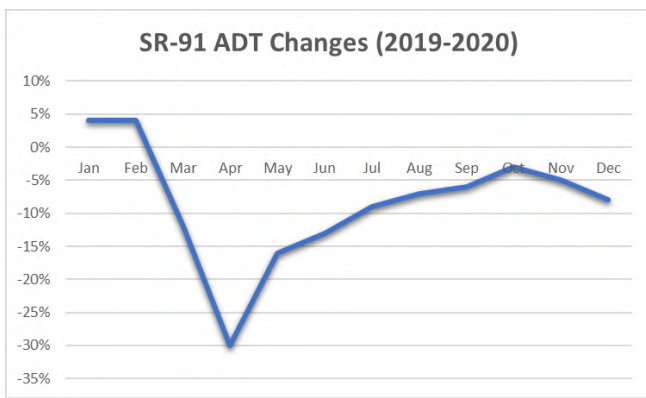
Project Limits

The project study limits encompass the segment of SR-91 from west of the junction of SR-57 and SR-91 in the City of Anaheim in Orange County, to east of the junction of SR-91 and I-15 in the City of Corona in Riverside County. The freeway segment is approximately 20.3 miles long and includes 12.7 miles within Orange County and 7.6 miles within Riverside County.

Existing Traffic Conditions Summary

Similar to other parts of the state, traffic conditions on Orange County roadways including the SR-91 corridor encountered significant variations in 2020. Due to the COVID-19 pandemic, the Stay-at-Home Order was imposed in mid-March of 2020 and this significantly influenced travel patterns. Daily travel demand on the SR-91 corridor shifted from an uptrend of 4% in January and February of 2020 compared to the same months in 2019, to a reduction of 12% in March and a reduction of 30% in April, when compared to the respective months in 2019. From May 2020 through December 2020, the SR-91 traffic demand changes ranged from 3% to 16% lower than the same months in 2019 (see Figure 1).

Figure 1



Due to the effects of the COVID-19 pandemic, the 2020 traffic patterns are not deemed as a true reflection of the typical existing conditions nor as a proper baseline to forecast the future demand and operations of the SR-91 corridor. Therefore, the 2019 traffic conditions are being utilized for the 2021 Plan.

Traffic conditions on the SR-91 corridor are expecting continued changes due to uncertainties related to the COVID-19 effect. OCTA and RCTC will continue monitoring the SR-91 traffic pattern changes throughout the year of 2021. If traffic conditions are showing a trend of normalization (reverting back to pre-pandemic conditions), then the traffic analysis will be updated for the 2022 Plan.

A review of the 2019 traffic conditions in the corridor indicates that the existing capacity of the facility is inadequate to accommodate current and future peak demand volumes. Level of Service (LOS) F

prevails in the peak direction during the entire peak period. The definition of LOS F is a density of more than 45 passenger cars/lane/mile and the worst freeway operating condition. The results also indicate that there are several physical conditions that contribute to unacceptable traffic queues.

During the weekdays, westbound SR-91 experiences heavier traffic conditions during the morning commute for travelers leaving Riverside County to employment areas in Orange and Los Angeles counties. The corridor is generally congested between the peak period of 6 a.m. to 10 a.m. in the westbound direction and the peak period of 3 p.m. to 7 p.m. in the eastbound direction. Due to the high demand, congestion in the corridor occurs before and after the peak periods. The eastbound afternoon conditions tend to be exacerbated by the lack of receiving capacity in the Riverside County portion of the SR-91 corridor. Accordingly, RCTC is working closely with Caltrans District 8 to sponsor improvements that will provide congestion relief for the eastbound afternoon condition. Some of these improvements include the 15/91 Express Lane Connector, SR-71/SR-91 Interchange, and Improvements East of I-15.

The following is a summary of the deficiencies identified along the SR-91 corridor:

- ❖ Heavy traffic volumes to/from I-15 converge with the SR-91 and increase delay during the morning and evening peak hours.
- ❖ SR-71 traffic demand as well as physical and operational constraints for the EB SR-91 to NB SR-71 connector contribute to mainline and EB SR-91 corridor delays.
- ❖ Traffic entering the WB SR-91 from the Green River Road and SR-71 on-ramps contribute to mainline congestion during the AM peak period.
- ❖ High traffic volumes entering the freeway from Gypsum Canyon Road, Santa Ana Canyon Road, Green River Road, Weir Canyon Road, Imperial Highway and Lakeview Avenue contribute to congestion on the SR-91 mainline.
- ❖ One of the two lanes from the Eastern Transportation Corridor (State Route 241) connector is dropped at the merge to EB SR-91 causing additional congestion on the EB SR-91 general purpose lanes.

- ❖ At the NB SR-55 interchange with EB SR-91, a lane on SR-91 is dropped (as a dedicated exit) at Lakeview Avenue and a second lane is dropped (as a dedicated exit) at Imperial Highway creating a weave condition.
- ❖ WB SR-91 drops two GP lanes and a 91 Express Lane to SB SR-55, contributing to mainline congestion. This drop also occurs on the left-hand side of SR-91, creating a weaving condition.
- ❖ WB traffic entering SR-91 at Lakeview Avenue traveling to SB SR-55 contributes to mainline congestion by weaving across three lanes on SR-91. The existing two-lane connector from WB SR-91 to SB SR-55 traffic volume exceeds operational capacity causing a queue on the SR-91 mainline.
- ❖ A lane drop on EB SR-91 at SB SR-241 creates a chokepoint.

Logical Project Sequencing

As noted, the SR-91 Corridor in Riverside County, in the EB direction, lacks the receiving capacity during the afternoon peak period which creates a bottleneck condition. Due to the high levels of congestion experienced on this segment of the corridor, there is sensitivity to any changes that may affect traffic operations. Without first addressing the congestion in Riverside County, any performance or capacity enhancing projects upstream would further exacerbate congested conditions causing additional delays and queueing. Therefore, projects that have the potential to impact demand and/or provide additional capacity in the EB direction should be considered in a logical sequence to ensure that there is sufficient receiving capacity in Riverside County.

In October 2019, a consensus was reached between OCTA, RCTC, Caltrans, and the TCA that would set the

stage for a series of projects to be implemented in sequential order to improve the SR-91 corridor. OCTA, RCTC, TCA, and Caltrans, Districts 8 and 12, as well as Caltrans Headquarters directors, worked through five major issues. This framework will enable the streamlining of the implementation of the SR-241/SR-91 TOLLED Express Lanes Connector project while minimizing impacts to the 91 corridor. The subject matter of the multi-agency consensus is outlined below:

1. Setting priorities for SR-91 corridor projects to reduce construction-related impacts;
2. Allowing completion of the environmental approval process and updating related programming documents;
3. Clarifying lead agencies for final design, construction, and maintenance;
4. Identifying the principal funding agency for final design, construction, and maintenance; and
5. Designating lead agencies for retaining toll revenue and toll setting/operational control.

Based on the above framework, the agencies reached consensus on a 91 Corridor program of projects and sequencing as outlined below:

- ❖ 15/91 Express Lanes Connector
- ❖ SR-91 Corridor Operations Project
- ❖ SR-71/SR-91 Interchange Improvements*
- ❖ SR-241/SR-91 TOLLED Express Lanes Connector

*Note: SR-241/SR-91 TOLLED Express Lanes Connector is not dependent upon completion of SR-71/SR-91 Interchange Improvements

PROJECT SUMMARY

Many of the highway projects and concepts identified in this 2021 Plan are based on the MIS that was completed in January 2006. The projects are presented in the following groups: Orange County Projects, Riverside County Projects and Bi-County Projects. The stage of development for each project, such as planning, final design, construction, or procurement and implementation, varies as noted in the project summaries. Table 1 summarizes the various planned projects, concept projects, and completed projects. For details on each project refer to Section 2 for planned projects and Appendix B for selected complete projects:

- ❖ The Orange County projects have a total cost of approximately \$524 million. The projects include the SR-91 improvements between SR-57 and SR-55, Anaheim Canyon Metrolink station improvements, and Placentia Metrolink rail station.
- ❖ The Riverside County projects have a total cost of over \$391 million. The improvements include: a 15/91 Express Lanes Connector, the SR-71/SR-91 Interchange Improvements, and the SR-91 improvements east of I-15.
- ❖ The Bi-County projects benefit both Orange and Riverside Counties. The total cost for the Bi-County projects exceeds \$288 million. The improvements include: SR-91 Corridor Operations Project, a Sixth General Purpose Lane Addition (SR-241 to SR-71), and a SR-241/SR-91 Tolloed Express Lanes Connector.

Traffic Analysis

For the 2021 Plan, the traffic analysis for major SR-91 capacity projects used the Caliper TransModeler software model and traffic data calibrated to reflect existing traffic patterns of 2019 as described in the prior section. This traffic simulation model provides a better depiction of actual travel delays experienced by motorists compared to traditional travel demand models. The model can be used to analyze freeway bottlenecks sometimes neglected in traditional travel demand models. This approach is especially important given high SR-91 traffic volumes and the potential for relatively few vehicles to significantly slow down traffic. For example, a minor freeway

Table 1 – SR-91 Implementation Plan Projects

Project Summary	Cost (\$M)
Orange County Projects	
SR-91 Improvements between SR-57 and SR-55	460
Anaheim Canyon Metrolink Station Improvements	29.8
Placentia Metrolink Rail Station	34.8
SUBTOTAL	524.6
Riverside County Projects	
15/91 Express Lanes Connector	270
SR-71/SR-91 Interchange Improvements	121
SR-91 Improvements East of I-15	TBD
SUBTOTAL	391+
Bi-County Projects	
SR-91 Corridor Operations Project	38
Sixth General Purpose Lane Addition (SR-241 to SR-71)	TBD
SR-241/SR-91 Tolloed Express Lanes Connector	250
SUBTOTAL	288+
Concept Project Summary	Cost (\$M)
Conceptual Projects	
Elevated 4-Lane Facility (MIS Corridor A) from SR-241 to I-15	2,720
Anaheim to Ontario International Airport Maglev High Speed Rail	2,770 – 3,200
Irvine-Corona Expressway (ICE) 4-Lane Facility from SR-241/SR-133 to I-15/Cajalco Road	8,855
Westbound SR-91 to Southbound SR-55 Improvements	75 – 150
Eastbound SR-91 Fifth Lane Addition at SR-241	31
Fairmont Boulevard Improvements	76.8
SUBTOTAL	14,527.8–15,032.8
Completed Project Summary Since 2006 (Constructed Year)	Cost (\$M)
Green River Road Overcrossing Replacement (March 2009)	24.3
North Main Street Corona Metrolink Station Parking Structure (June 2009)	25
Eastbound Lane Addition from SR-241 to SR-71 (September 2010)	51.2
Widen SR-91 between SR-55 and SR-241 by Adding a 5 th GP Lane in Each Direction (January 2013)	85.2
SR-91 WB Lane at Tustin Avenue (April 2016)	43.2
Metrolink Service Improvements (June 2016)	249
Initial Phase CIP: Widen SR-91 by One GP Lane in Each Direction East of Green River Rd, CD Roads and I-15/SR-91 Direct South Connector, Extension of Express Lanes to I-15 and System/Local Interchange Improvements (2017)	1,407
Express Bus Service (2019)	6
La Sierra Metrolink Parking Improvements (2019)	6.3
SUBTOTAL	1,897

merging area can cause many vehicles to slow, cascading delay through the traffic stream, and rapidly decreasing both speed and volume for major segments of the freeway. The metrics reported in the Plan include travel time from the beginning to the end of the study corridor and vehicle hours of delay experienced on study corridor, which both focus on operations for vehicles on SR-91. A third metric includes vehicles served by the system in the study corridor and takes into consideration vehicles on ramps and freeways that feed into or are fed by SR-91 in the study area. The operations analysis quantified travel time savings for WB morning and EB afternoon conditions for the following major capacity enhancing projects:

Year 2030

- ❖ SR-91 Improvements between SR-57 and SR-55
- ❖ 15/91 Express Lanes Connector
- ❖ SR-71/SR-91 Interchange Improvements
- ❖ SR-91 Corridor Operations Project
- ❖ SR-241/SR-91 Tolled Express Lanes Connector

Year 2045

- ❖ Projects completed in 2030
- ❖ SR-91 Improvements East of I-15
- ❖ SR-91 Sixth General Purpose Lane Addition
- ❖ Fairmont Boulevard Improvements

Westbound Analysis

The WB morning (a.m.) traffic analysis results indicate that for the year 2030 forecasts, peak hour travel times are anticipated to improve in Riverside County (by about 6 minutes) and in Orange County (by about 11 minutes). In addition to decreasing travel time, overall vehicle hours of delay in the corridor will decrease (by about 20 percent), while the entire system is serving more vehicles (by about 9 percent). Bottlenecks are anticipated at the Orange-Riverside County line and at the SR-241 interchange/Gypsum Canyon interchange area. The main bottlenecks in Riverside County will be relieved due to the

completion of proposed projects. The bottleneck at the SR-55 interchange will also be relieved. However, with the additional vehicles traveling downstream, there is additional congestion at the SR-57 interchange. For the year 2045, travel times are anticipated to decrease (by about 16 minutes) in Riverside County, and increase (by about 23 minutes) in Orange County when compared to 2030. Overall vehicle hours of delay will increase (by about 68 percent) in the corridor, but the number of vehicles the system is serving will increase (by about 6 percent). Bottlenecks appear at SR-71 and at SR-57. Due to the SR-71 Corridor Improvement Project, there is a large increase of vehicles going to and from SR-71. Travel time in Orange County shows an increase in 2045 due to the growth in traffic, projects relieving congestion upstream allowing more vehicles to travel downstream, and no additional capacity enhancing projects in Orange County. OCTA and RCTC are exploring multi-modal opportunities on, or adjacent to, the SR-91 corridor that could provide additional congestion relief.

Express Lanes in the westbound direction operate satisfactorily in all the analysis years.

Eastbound Analysis

The EB evening (p.m.) traffic analysis indicates that for the year 2030 forecasts, peak hour travel times are anticipated to decrease (by about 7 minutes) in Riverside County and increase (by about 11 minutes) in Orange County. Although the overall travel time through the corridor will increase slightly, the vehicle hours of delay will decrease (by about 25 percent) and the number of vehicles served by the system will increase (by about 12 percent). The major bottleneck still occurs at the county line. Improvement projects near SR-55 and I-15 should alleviate congestion in those areas. For the year 2045, travel times are anticipated to increase (by about 4 minutes) in Riverside County and decrease in Orange County (by about 18 minutes) when compared to 2030. Overall vehicle hours of delay will increase (by about 40 percent) but the number of vehicles the system is serving will be greater (by about 8 percent). The main bottleneck remains at the county line. However, with the inclusion of the Sixth General Purpose Lane Addition project, the congestion at the county line will be reduced. More vehicles traveling downstream will slightly increase congestion in Riverside County near I-15.

Express Lanes in the eastbound direction operate satisfactorily in all the analysis years.

Figures 1-1 and 1-2 below summarize the westbound corridor vehicle hours of delay and systemwide served

vehicles, respectively. Figures 1-3 and 1-4 below summarize the eastbound corridor vehicle hours of delay and systemwide served vehicles, respectively.

Figure 1-1 – Westbound SR-91 from I-15 to SR-57 A.M. Peak Period Corridor Vehicle Hours of Delay

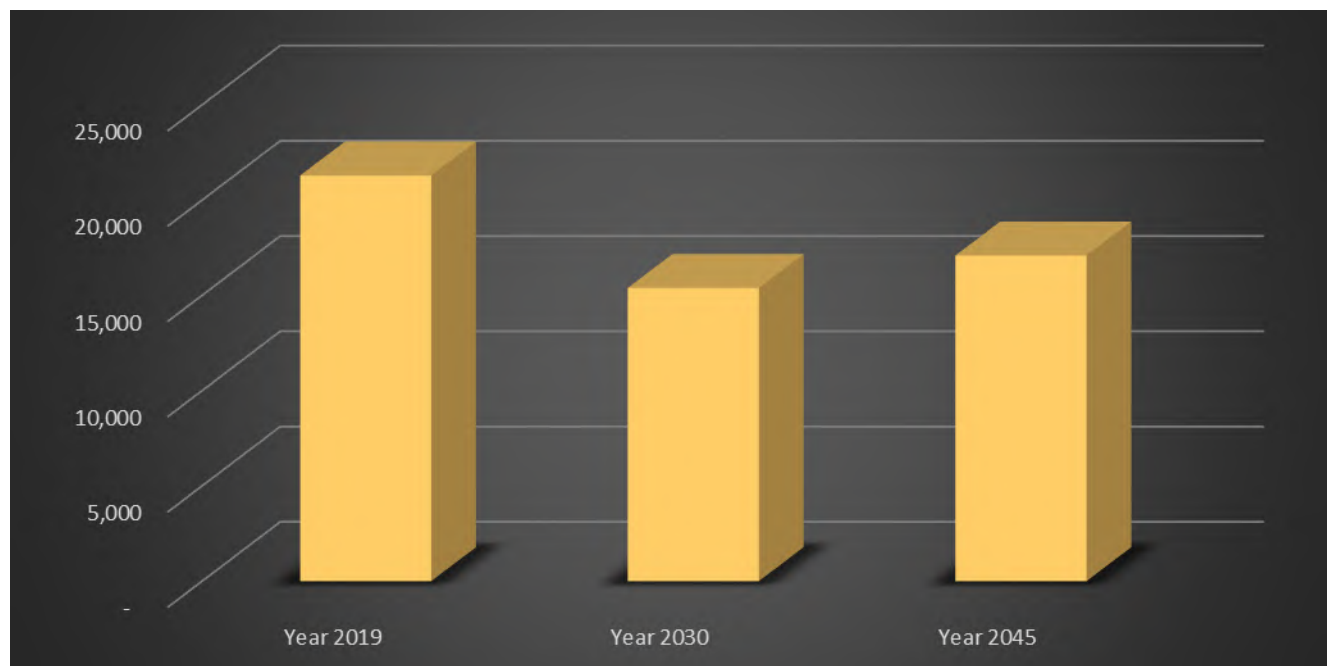


Figure 1-2 – Westbound SR-91 from I-15 to SR-57 A.M. Peak Period Systemwide Served Vehicles

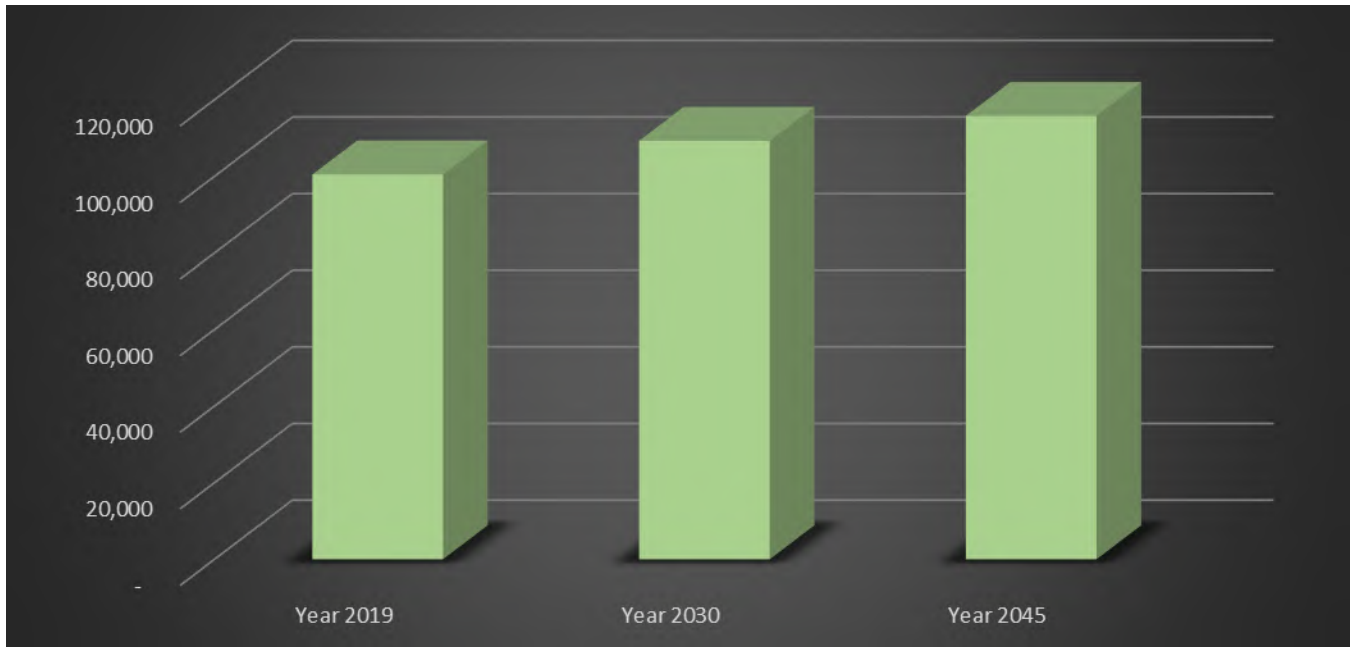


Figure 1-3 – Eastbound SR-91 from SR-57 to I-15 P.M. Peak Period Corridor Vehicle Hours of Delay

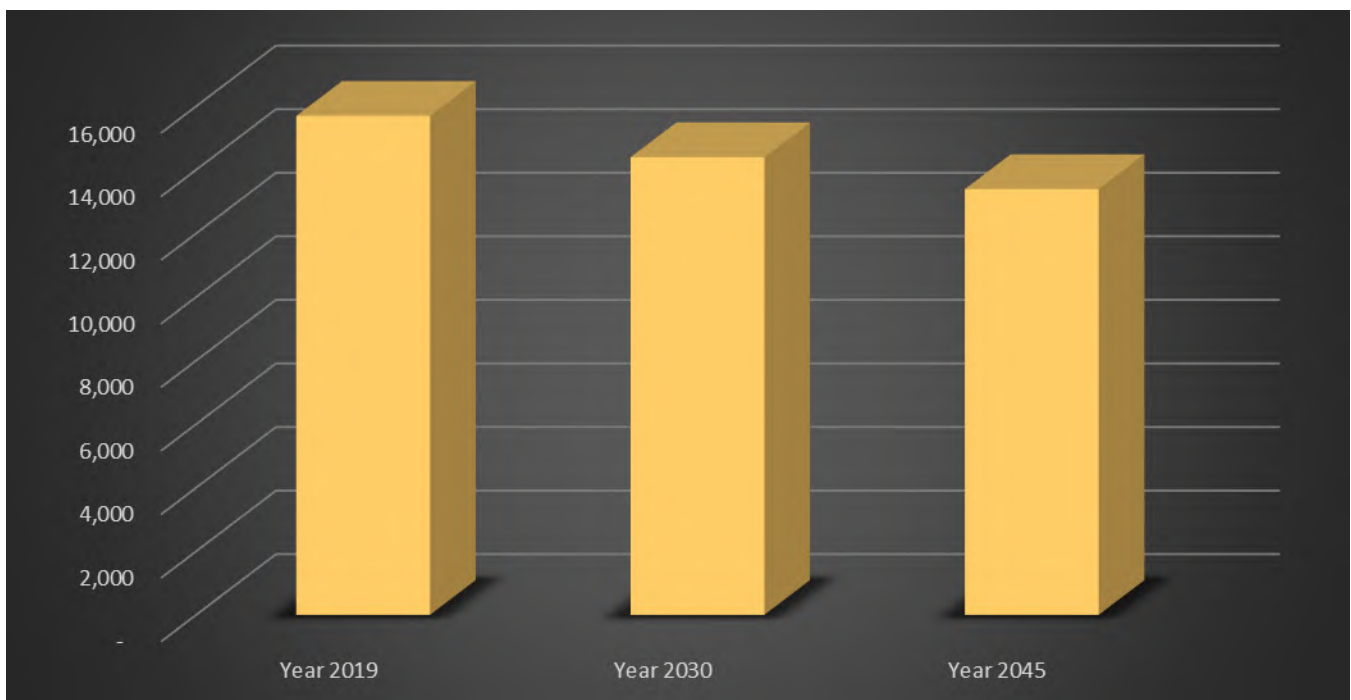
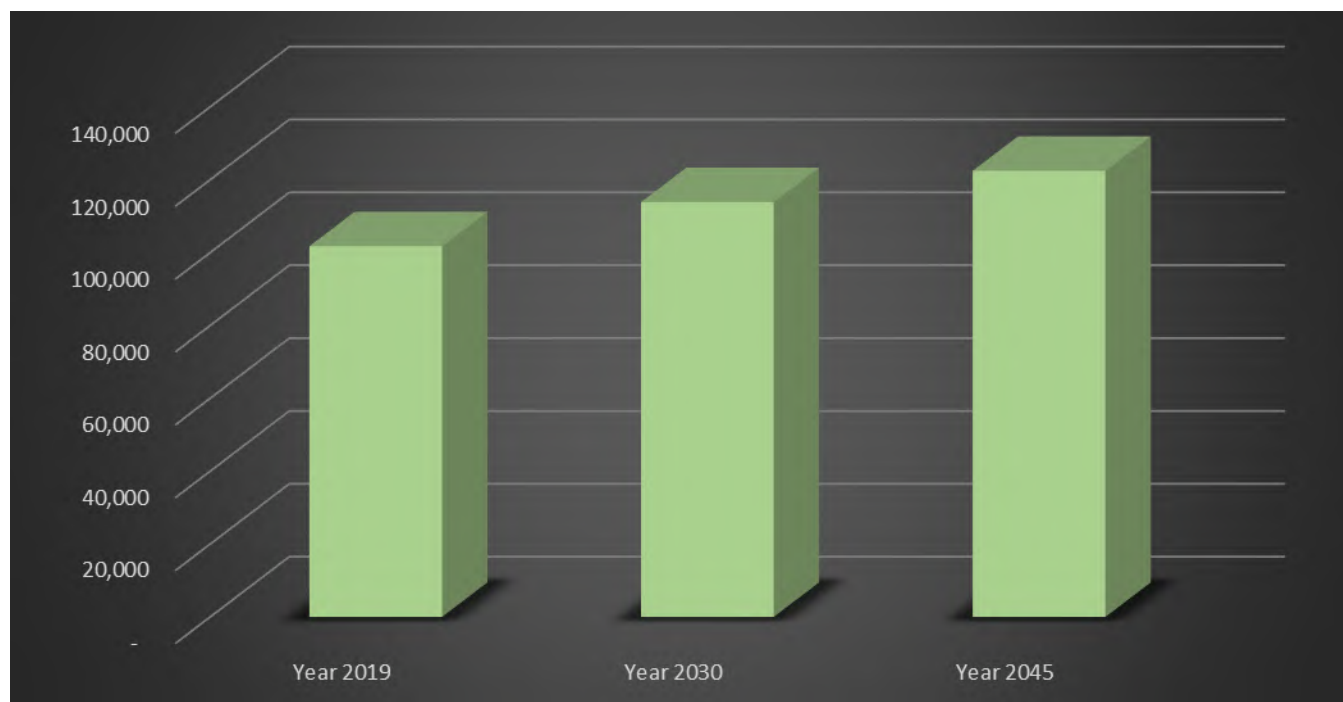


Figure 1-4 – Eastbound SR-91 from SR-57 to I-15 P.M. Peak Period Systemwide Served Vehicles



CONCEPT PROJECT SUMMARY

Many of the highway concept projects identified in this 2021 Plan are long lead time projects and/or projects without sufficient project development detail to be advanced into the Project Summary section. These potential concepts include significant environmental constraints and right of way requirements in addition to requiring a significant amount of planning, design, and future policy and public input. Many of these concept projects are multi-billion-dollar improvements that will remain a challenge to implement. Refer to Appendix A for details on each concept project.

IRVINE CORONA EXPRESSWAY STATUS SUMMARY

The Irvine Corona Expressway (ICE) concept was conceived as part of the MIS and was established as part of a suite of projects to support future peak demand volumes between Riverside and Orange Counties. The ICE was further evaluated in the 2009 ICE Feasibility Study for financial and geotechnical feasibility. Seven (7) primary feasibility issues were considered:

- ❖ Geologic, hydrogeologic/hydrologic, and geotechnical conditions.
- ❖ Corridor concepts (full tunnel and partial tunnel/partial surface road).
- ❖ Tunnel configuration.
- ❖ Tunnel excavation and support methods.
- ❖ Tunnel systems (e.g., ventilation, emergency fire system, operation building, toll system, etc.).
- ❖ Construction considerations.
- ❖ Construction, Operation & Maintenance (O&M) costs.

Per the direction of the Riverside-Orange Corridor Authority Board (ROCA) in 2010, staff has reevaluated the concept annually, as part of the preparation of this Plan, to determine if construction costs and tunneling technology have changed and become less prohibitive.

Planned and constructed tunnel projects were reviewed for insight into how tunnel construction technology is changing. Projects such as the Las Vegas

Convention Center (LVCC) Loop and the Ontario International Airport (ONT) Loop are utilizing innovative ideas that could deliver transit tunnel projects with faster construction timelines and at a lower cost. These projects propose smaller diameter tunnels (12-14 feet) and are designed to accommodate specialized vehicles with the intent of eventually incorporating autonomous vehicles. The Boring Company constructed the 1.7-mile LVCC Loop dual tunnels for \$52.5 million over approximately two years. The current estimated cost (including all phases and support) for the 4-mile ONT Loop is \$85 million.

The Boring Company plans to develop technology to construct tunnels faster and at lower cost. To accomplish this, The Boring Company plans to reduce tunnel diameters and increase the speed and efficiency of TBMs. Additional initiatives include electrifying and automating TBMs to increase safety and efficiency.

Two shorter tunnels were constructed in California with similar lane configurations to the ICE concept. The Devil's Slide Tunnel in San Mateo County and the Caldecott Fourth Bore Tunnel in Contra Costa County both opened in 2013. These tunnels used a method of drilling and blasting (known as the New Austrian Tunneling Method), rather than operating a TBM. Both tunnels were approximately 1.2 miles long and took six years and three years to construct, respectively.

Based on recent tunnel projects, the challenges that were identified in the ICE Feasibility Study were also experienced by other tunnel construction projects which provides insight into how tunneling technologies have changed. The New Austrian Tunneling Method may be a way to reduce the cost of boring for the ICE tunnel. This method was discussed in the 2009 ICE Feasibility Study but was dismissed due to the proposed length of the ICE tunnel concept. In the future, more investigation would be required to assess the feasibility of using a boring method other than a TBM, and to qualitatively assess possible impacts to the ICE corridor construction cost and duration.

Reducing the bore diameter and proposed cross section of the ICE corridor concept may be another way to reduce the cost of the project. More investigation is required to

determine how the cross section and bore size could be reduced. Additionally, there are several regulatory requirements that would likely need to be considered in designing the cross section. While it may be difficult to reduce the highway or rail tunnel cross section, a smaller diameter could be considered for an alternative design vehicle. The ONT Loop and LVCC Loop are example projects where smaller diameter bores were allowable for autonomous transit use.

The review of recent tunneling projects shows feasibility for the ICE tunnel concept is slowly improving as tunneling technology is progressing. Technology has not advanced to the point where long, wide highway tunnels can be constructed at a lower cost. However, modern boring methods have lowered the cost on smaller, shorter tunnels. If this scales to larger tunnels, then the ICE corridor could become more feasible.

OVERVIEW

The 2021 Plan describes projects, key considerations, benefits, current status, schedule, and costs (in 2021 dollars, or as noted) for major projects and concepts through Post-2035. Some of the projects and concepts identified in this Implementation Plan are based on the MIS that was completed in January 2006. The projects are grouped as follows: Orange County Projects, Riverside County Projects and Bi-County Projects.

The intent of the Implementation Plan is to present a list of projects and studies along the SR-91 corridor and highlight coordination between OCTA, RCTC and Caltrans to improve the corridor.

As part of the project development process, detailed operational analysis will need to be conducted to evaluate operational issues associated with each project. The project development phases are discussed in the status updates and are defined as follows:

- ❖ **Conceptual Engineering = Pre-Project Study Report (Pre-PSR)** – Conceptual planning and engineering for project scoping and feasibility prior to initiating the PSR phase.
- ❖ **Preliminary Engineering = Project Study Report (PSR)** – Conceptual planning and engineering phase that allows for programming of funds.
- ❖ **Environmental = Project Approval/Environmental Document (PA/ED)** – The detailed concept design that provides environmental clearance for the project and programs for final design and right of way acquisition. The duration for this phase is typically 2-3 years.
- ❖ **Design = Plans, Specifications and Estimates (PS&E)** – Provide detailed design to contractors for construction bidding and implementation.
- ❖ **Construction** = The project has completed construction and will provide congestion relief to motorists.

Figure 2-1 – SR-91 Project Study Area from SR-57 to I-15



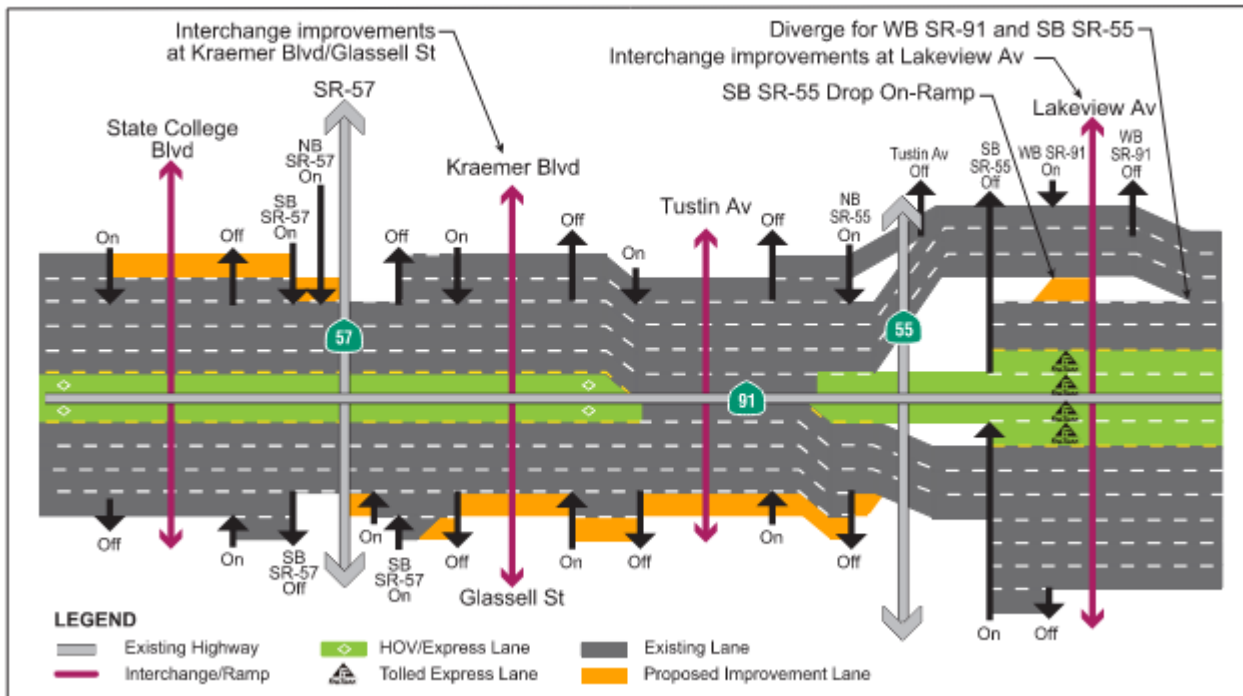
ORANGE COUNTY PROJECTS

The Orange County set of projects includes three improvements at a total cost of approximately \$524.6 million (in 2021 dollars, or as noted). The projects include: SR-91 improvements between SR-57 and SR-55, Anaheim Canyon Metrolink station improvements, and new Placentia Metrolink rail station. Further details for each of the projects are included in the following summaries.

Orange County Project Summary	Cost (\$M)
SR-91 Improvements between SR-57 and SR-55	460
Anaheim Canyon Metrolink Station Improvements	29.8
Placentia Metrolink Rail Station	34.8
SUBTOTAL	524.6



SR-91 Improvements between SR-57 and SR-55



Project Description

The project proposes to add EB capacity between SR-55 and SR-57, improve the SR-91/SR-57 and SR-91/SR-55 interchanges and local interchanges. In the SR-91/SR-57 interchange area, improvements identified in Project Approval/Environmental Document (PA/ED) phase include splitting the WB SR-91 Connector into separate exits for NB and SB SR-57 and extending an additional lane on WB SR-91 from the NB SR-57 to WB SR-91 connector through State College Boulevard and terminating at the auxiliary lane to Raymond Avenue-East Street. At the SR-91/SR-55 interchange area, a drop on-ramp from Lakeview Avenue would be constructed between realigned WB SR-91 lanes for direct access to SB SR-55, allowing for the exit to SB SR-55 to be moved further east, with a barrier separating WB SR-91 and SB SR-55 traffic west of the Lakeview Avenue bridge. The 91 Express Lanes will not be impacted by the project. In order to accommodate the improvements, the Lakeview, Tustin, Kraemer/Glassell, and La Palma bridges are proposed to be replaced. The improvements have been developed in cooperation with local jurisdictions and affected communities.

Key Considerations

The proposed project improvements on WB and EB SR-91 may require minor partial right-of-way acquisition and Temporary Construction

Easements (TCEs). In some areas, a non-standard geometric cross-section is proposed to reduce the right-of-way impacts.

Benefits

The proposed project improvements on WB and EB SR-91 between SR-57 and SR-55 include, among other features, adding one EB general purpose lane to achieve lane balancing and interchange improvements. Project improvements will reduce congestion and delay and reduce weaving.

Current Status

The project improvements were originally studied in the SR-91 Feasibility Study, which was completed in June 2009. The Project Study Report was completed in 2014 and the Project Approval/Environmental Document (PA/ED) was completed in 2020. This project was then split into three separate segments and the Plans Specifications and Estimate (PS&E) phase began in 2020 for all three segments. The proposed improvements are included in the Measure M program.

Schedule and Cost

Construction is anticipated to be completed in 2027 and the total project cost is estimated to be approximately \$460,000,000.

Anaheim Canyon Metrolink Station Improvements

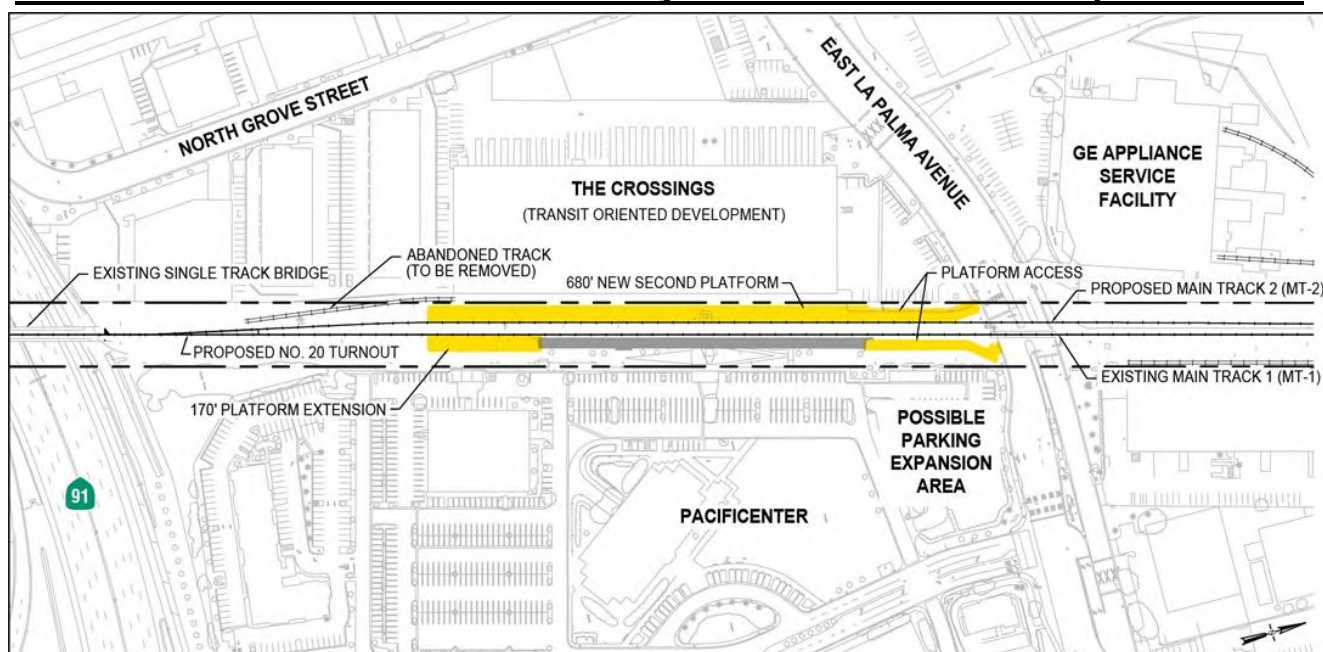


Image source:
Anaheim Canyon Station Project Definition Report, February 23, 2015

Project Description

The Anaheim Canyon Metrolink Station Improvement Project will include the addition of approximately 3,400 linear feet of secondary track; a second platform; extending the existing platform; improvements at two at-grade railroad crossings located at Tustin and La Palma; as well as new shade structures, benches and ticket vending machines. These project improvements will accommodate planned future train service and will enhance on time service and safety.

Benefits

The project will enable future Metrolink service expansion, improve train service efficiency, and foster train ridership growth in the region, which will contribute to congestion relief on SR-91.

Current Status

OCTA is the lead agency on the project. Funding for the project is programmed to use Federal Congestion Mitigation and Air Quality Improvement Program (CMAQ), 5307 Federal Formula, M2 (OC Go), and City of Anaheim funds.

Schedule and Cost

The plans were completed, and the project was advertised for bid in October 2020. Construction began in May 2021 and is anticipated to be completed in October 2022. The total project cost is estimated to be \$29.8 million.



Image source: www.placentia.org/Placentia-Metrolink-Site-Plan (Wildan Engineering)

Project Description

The new Placentia Metrolink Station will serve the Metrolink 91/Perris Valley Line, providing commuter rail service between Perris and Los Angeles, via Riverside and Orange counties. The project includes construction of a parking structure, OCTA bus access, an area for passenger pick-up and drop-off, and two station platforms.

Benefits

The station will meet the current transit demand and foster train ridership growth in the region, contributing to congestion relief on SR-91.

Current Status

The City of Placentia is the lead on right-of-way and environmental clearance, and OCTA is the lead agency for design and construction of the project. Funding for the project is programmed to use 91 Toll

Revenues, M2 (OC Go) and the City of Placentia funds for the construction phase. State Transportation Improvement Program (STIP), Public Transportation Modernization, Improvement, and Service Enhancement Account (PTMISEA), OC Go and City funds are programmed for the design and right-of-way costs.

Schedule and Cost

Plans are 100 percent complete, however, the construction contract cannot be advertised until a Construction and Maintenance Agreement is in place with BNSF Railway, the right-of-way owner. The project will be advertised for bids once an agreement is in place. The total project cost is estimated to be \$34.8 million.

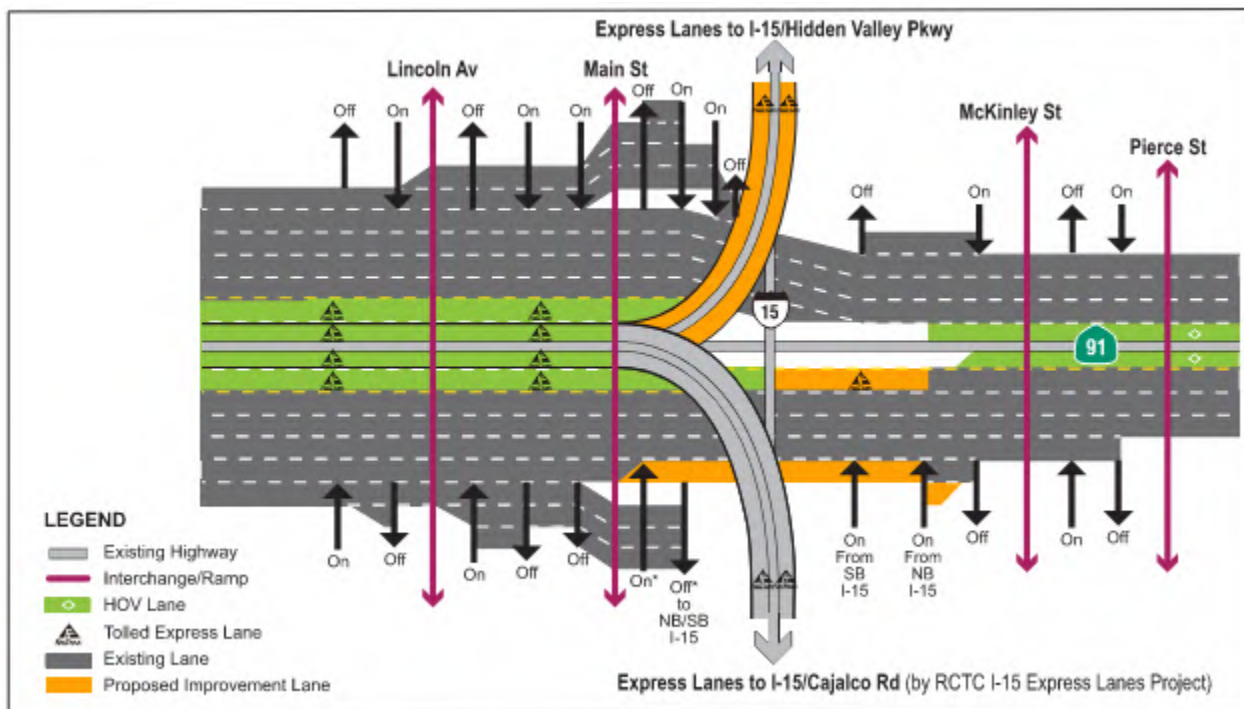
RIVERSIDE COUNTY PROJECTS

The Riverside County set of projects includes three improvements: a 15/91 Express Lanes Connector, the SR-71/SR-91 Interchange Improvements, and SR-91 Improvements east of I-15. Projects for implementation in Riverside County are anticipated to cost in excess of \$391 million (in 2021 dollars, or as noted).

Riverside County Project Summary		Cost (\$M)
15/91 Express Lanes Connector		270
SR-71/SR-91 Interchange Improvements		121
SR-91 Improvements East of I-15		TBD
SUBTOTAL		391+



15/91 Express Lanes Connector



Project Description

The Project Approval and Environmental Document (PA/ED) for the SR-91 Corridor Improvement Project (CIP), from SR-241 to Pierce Street, included the addition of a 5th lane in each direction, the addition of auxiliary lanes at various locations, the addition of collector-distributor lanes at the I-15/SR-91 interchange, the extension of the 91 Express Lanes from the Orange County line to I-15, the construction of a SR-91 Express Lanes median direct connector to and from I-15 South, a SR-91 Express Lanes median direct connector to and from I-15 North (15/91 Express Lanes Connector, the subject project), and the construction of one Express Lane in each direction from the I-15/SR-91 interchange southerly to I-15/Cajalco Road (now part of RCTC I-15 Express Lanes Project), and easterly to east of McKinley Street. Due to funding constraints, a Project Phasing Plan was developed to allow an Initial Phase, with reduced improvements, to move forward as scheduled, with the remaining ultimate improvements to be completed later. Subsequently, the proposed 15/91 Express Lanes Connector improvements (the subject of this project) have been pulled out from the CIP as a standalone project.

Key Considerations

Coordination among many of the SR-91 freeway projects that overlap the project limits is critical to successfully delivering these projects on schedule and within budget. Designing to accommodate future projects is a recurring theme for each of these projects. Minimizing conflicts in scope between projects requires direct coordination between each

project team. Additionally, future projects frequently have multiple alternatives under study, each with differing scope and construction footprints. Specifically, the project improvements need to continue to be coordinated with the SR-71/SR-91 interchange, the SR-241/SR-91 Tolled Express Lanes Connector, and RCTC's I-15 Express Lanes Project.

Benefits

The 15/91 Express Lanes Connector project will reduce congestion and operational delays by providing direct median-to-median access between the SR-91 Express Lanes and I-15 Express Lanes. Traffic operations will improve by eliminating weaving conflicts and out-of-direction travel along SR-91 and I-15 by the use of the direct connectors. The project will provide motorists a choice to use the 15/91 Express Lanes Connector for a fee in exchange for time savings.

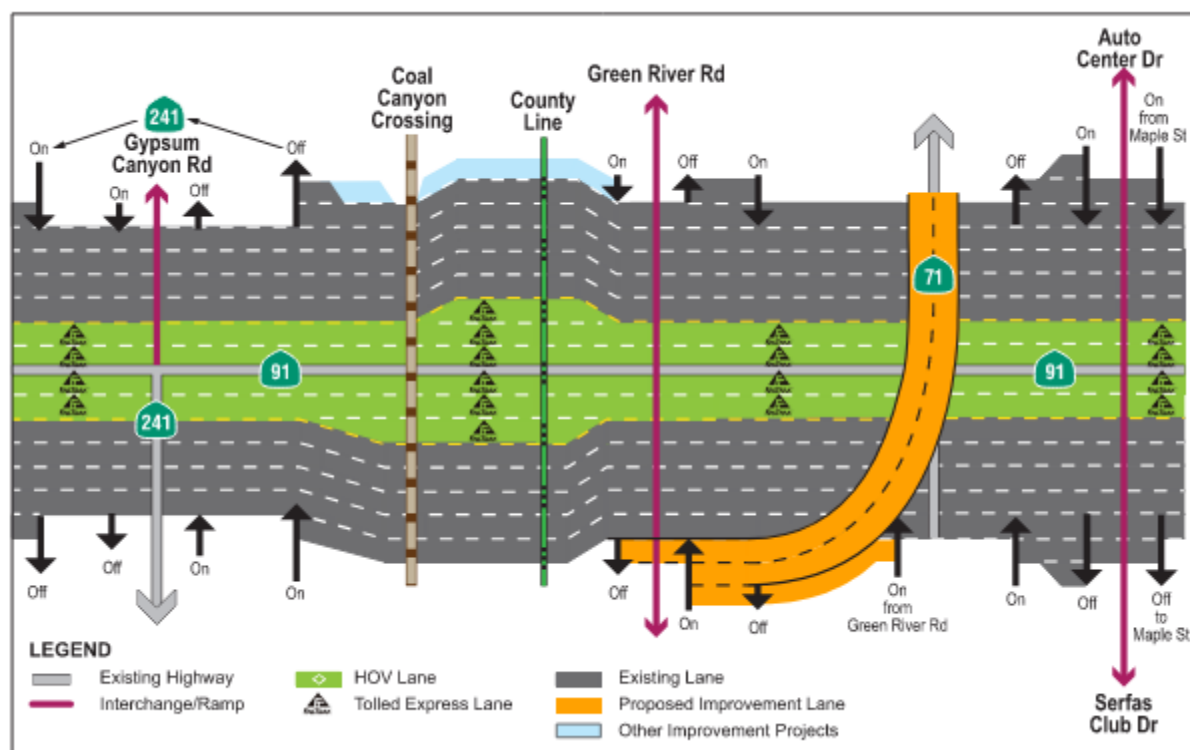
Current Status

The 15/91 Express Lanes Connector is currently discussed in the environmental document for the SR-91 CIP that was completed in 2012. An environmental revalidation was completed in 2019. A Design-Build contract was awarded in Spring 2020.

Schedule and Cost

Construction is planned to be completed in 2023. The total project cost is estimated to be \$270,000,000.

SR-71/SR-91 Interchange Improvements



Project Description

The current project includes a new two-lane direct connector from eastbound (EB) SR-91 to northbound (NB) SR-71 and realignment of the existing Green River Road SR-91 EB on-ramp to provide connection to NB SR-71 and EB SR-91.

Key Considerations

Project improvements must be coordinated with the following projects: the SR-91 Sixth GP Lane Addition and the SR-241/SR-91 Tolled Express Lanes Connector. Close coordination with the U.S. Army Corps of Engineers, U.S. Fish and Wildlife Service, and California Department of Fish and Wildlife will also be required as the connector crosses the Santa Ana River west of the Prado Dam.

Benefits

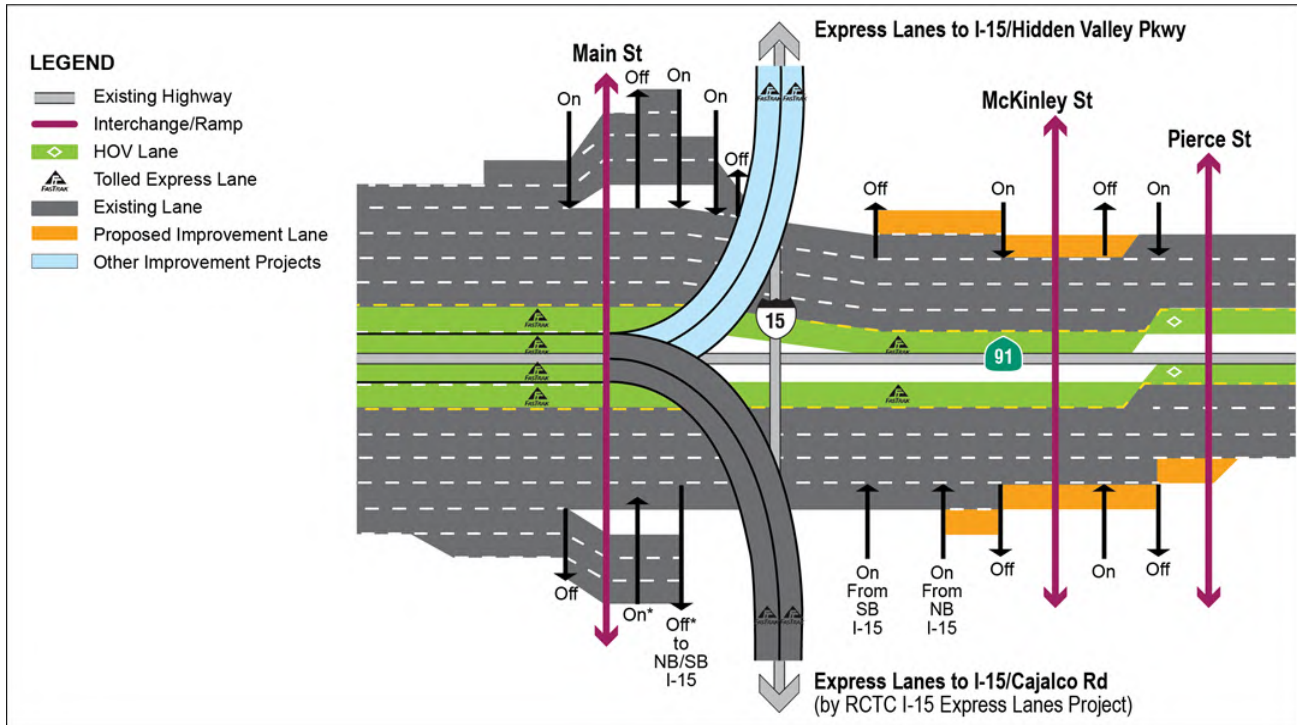
The project will provide a new direct connector improvement from EB SR-91 to NB SR-71, replacing the geometric choke point created by the existing loop connector. The project will also improve traffic operations and operational efficiency by eliminating or minimizing weaving conflicts through the use of auxiliary lanes.

Current Status

The environmental phase was completed in 2011 and final design in 2015. An environmental revalidation and update to the final design is underway.

Schedule and Cost

Construction is planned for completion in 2024. Construction cost is estimated to be \$121,000,000.



Project Description

The Project Approval and Environmental Document (PA/ED) for the SR-91 Corridor Improvement Project (CIP), from SR-241 to Pierce Street, included the addition of a 5th lane in each direction, the addition of auxiliary lanes at various locations, the addition of collector-distributor lanes at the I-15/SR-91 interchange, the extension of the 91 Express Lanes from the Orange County line to I-15, the construction of a SR-91 Express Lanes median direct connector to and from I-15 South, a SR-91 Express Lanes median direct connector to and from I-15 North, and the construction of one Express Lane in each direction from the I-15/SR-91 interchange southerly to I-15/Cajalco Road (now part of RCTC I-15 Express Lanes Project), and easterly to east of McKinley Street. Due to funding constraints, a Project Phasing Plan was developed to allow an Initial Phase, with reduced improvements, to move forward as scheduled, with the remaining ultimate improvements to be completed later. The SR-91 improvements east of I-15, which includes extending an Express Lane east of McKinley Street and adding a general purpose lane to Pierce Street in each direction (the subject project), is a component of the SR-91 CIP that was not constructed with the Initial Phase.

Key Considerations

Coordination among many of the SR-91 freeway projects that overlap the project limits is critical to successfully delivering these projects on schedule and within budget. Designing to

accommodate future projects is a recurring theme for each of these projects. Minimizing conflicts in scope between projects requires direct coordination between each project team. Additionally, future projects frequently have multiple alternatives under study, each with differing scope and construction footprints. Specifically, the project improvements need to continue to be coordinated with the SR-71/SR-91 interchange, the SR-241/SR-91 Tolled Express Lanes Connector, 15/91 Express Lanes Connector, and RCTC's I-15 Express Lanes Project.

Benefits

The SR-91 Improvements east of I-15 will reduce congestion and delays by providing additional SR-91 capacity from I-15 to Pierce Street.

Current Status

Preliminary engineering is complete but may need to be revisited at a future date. The SR-91 Improvements east of I-15 is currently discussed in the SR-91 CIP environmental document for the SR-91 that was completed in 2012.

Schedule and Cost

Anticipated project completion and cost are to be determined.

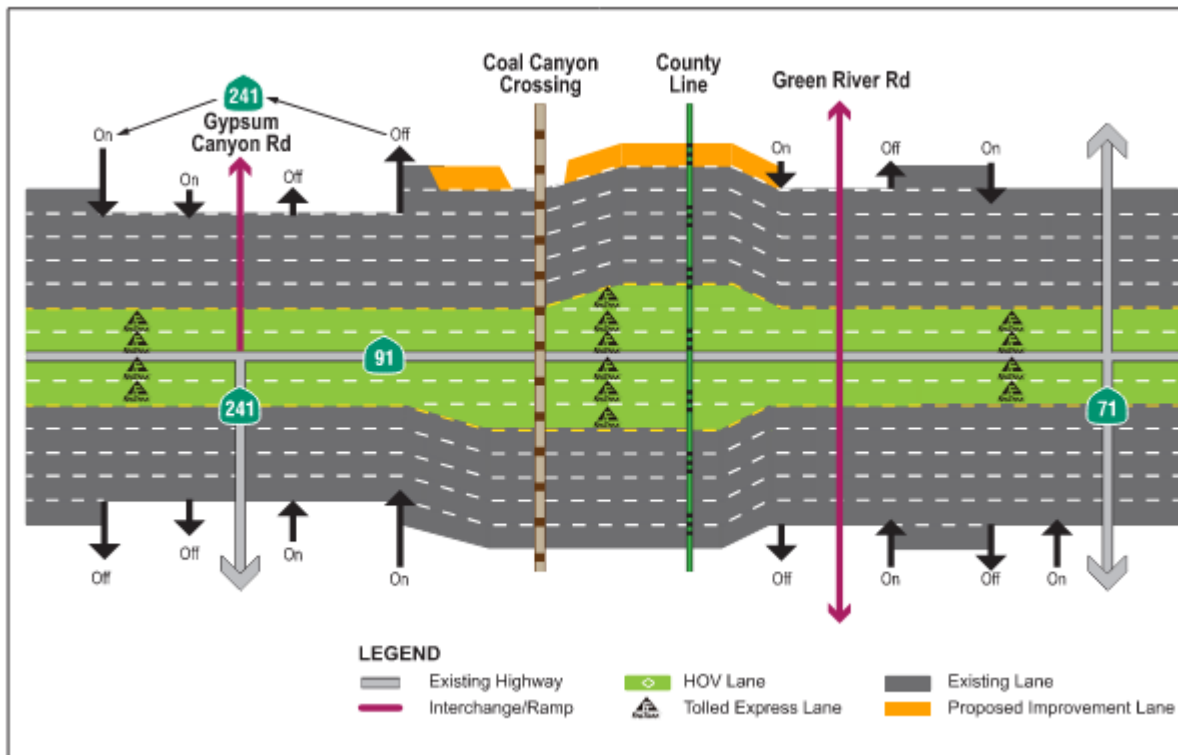
BI-COUNTY PROJECTS

There are three Bi-County improvement projects that will benefit both Orange and Riverside Counties. These projects include: SR-91 Corridor Operations Project, a Sixth General Purpose Lane Addition (SR-241 to SR-71), and the SR-241/SR-91 Tolled Express Lanes Connector. The total cost for the three projects is expected to be more than \$288 million (in 2021 dollars, or as noted).

Bi-County Project Summary	Cost (\$M)
SR-91 Corridor Operations Project	38
Sixth General Purpose Lane Addition (SR-241 to SR-71)	TBD
SR-241/SR-91 Tolled Express Lanes Connector	250
SUBTOTAL	288+



SR-91 Corridor Operations Project



Project Description

The Riverside County portion of the 91 Express Lanes began operation in March 2017. Throughout the first year of operation, RCTC made minor operational improvements to improve the SR-91 corridor travel between State Route 241 (SR-241) and McKinley Street. In November 2018, RCTC implemented additional striping and signage improvements to westbound SR-91 at the McKinley entrance to the 91 Express Lanes as well as the County Line access location to further enhance efficiency along the westbound SR-91 corridor between McKinley Street and SR-241. In December 2018, the RCTC Commission authorized its staff to proceed with a project to construct an additional westbound lane along SR-91 between Green River Road and SR-241 (the subject of this project). This new project is now known as the SR-91 Corridor Operations Project (91 COP).

Key Considerations

The goal of this project is to implement a substantial operational improvement that is cost effective and timely to address the peak period bottleneck conditions along westbound SR-91 near the County Line. Key considerations

include reducing impacts to adjacent land and local streets by the use of retaining walls and minimizing throw-away costs with future projects. Specifically, the project improvements need to be coordinated with the SR-241/SR-91 Tolled Express Lanes Connector and the SR-91 Sixth GP Lane Addition projects.

Benefits

The 91 COP will reduce congestion and delays along westbound SR-91 between McKinley Street and SR-241.

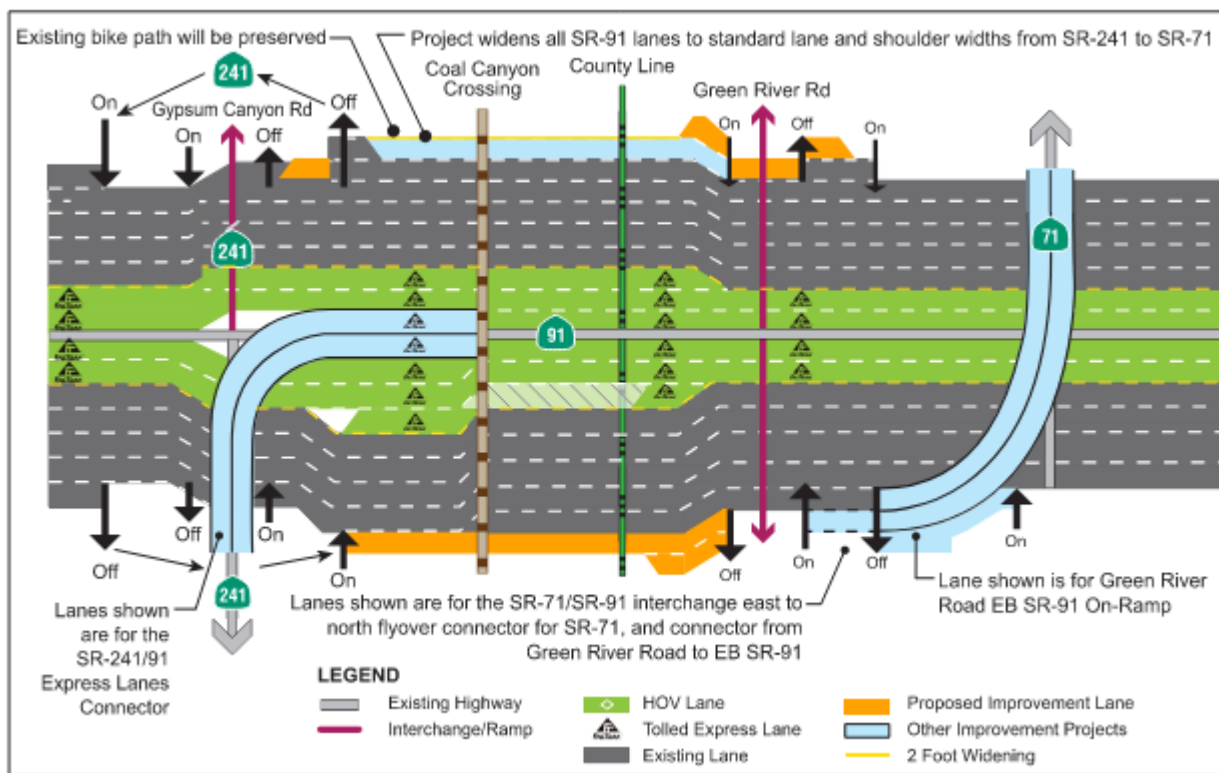
Current Status

This project is within the footprint of the SR-91 Sixth GP Lane Addition project that was an element of the SR-91 CIP environmental document approved in 2012. An environmental revalidation for the 91 COP was completed in Spring 2020. Construction began in November 2020.

Schedule and Cost

Construction is planned for completion in 2022. The total project cost is estimated to be \$38,000,000.

Sixth General Purpose Lane Addition (SR-241 to SR-71)



Project Description

The Project Approval and Environmental Document (PA/ED) for the SR-91 Corridor Improvement Project (CIP), from SR-241 to Pierce Street, included the addition of a 5th lane in each direction, the addition of auxiliary lanes at various locations, the addition of collector-distributor lanes at the I-15/SR-91 interchange, the extension of the 91 Express Lanes from the Orange County line to I-15, the construction of a SR-91 Express Lanes median direct connector to and from I-15 South, a SR-91 Express Lanes median direct connector to and from I-15 North, and the construction of one Express Lane in each direction from the I-15/SR-91 interchange southerly to I-15/Cajalco Road (now part of RCTC I-15 Express Lanes Project), and easterly to east of McKinley Street. Due to funding constraints, a Project Phasing Plan was developed to allow an Initial Phase, with reduced improvements, to move forward as scheduled, with the remaining ultimate improvements to be completed later. The SR-91 sixth general purpose lane in each direction between SR-241 and SR-71 (the subject of this project) is a component of the SR-91 CIP that was not constructed with the Initial Phase.

Key Considerations

Coordination among many of the SR-91 freeway projects that overlap the project limits is critical to successfully delivering these projects on schedule and within budget. Designing to accommodate future projects is a recurring theme for

each of these projects. Minimizing conflicts in scope between projects requires direct coordination between each project team. Additionally, future projects frequently have multiple alternatives under study, each with differing scope and construction footprints. Specifically, the project improvements need to continue to be coordinated with the 91 COP, SR-71/SR-91 interchange and the SR-241/SR-91 Tolled Express Lanes Connector.

Benefits

The SR-91 Sixth General Purpose Lane Addition will reduce congestion and delays by providing additional SR-91 capacity from SR-241 to SR-71.

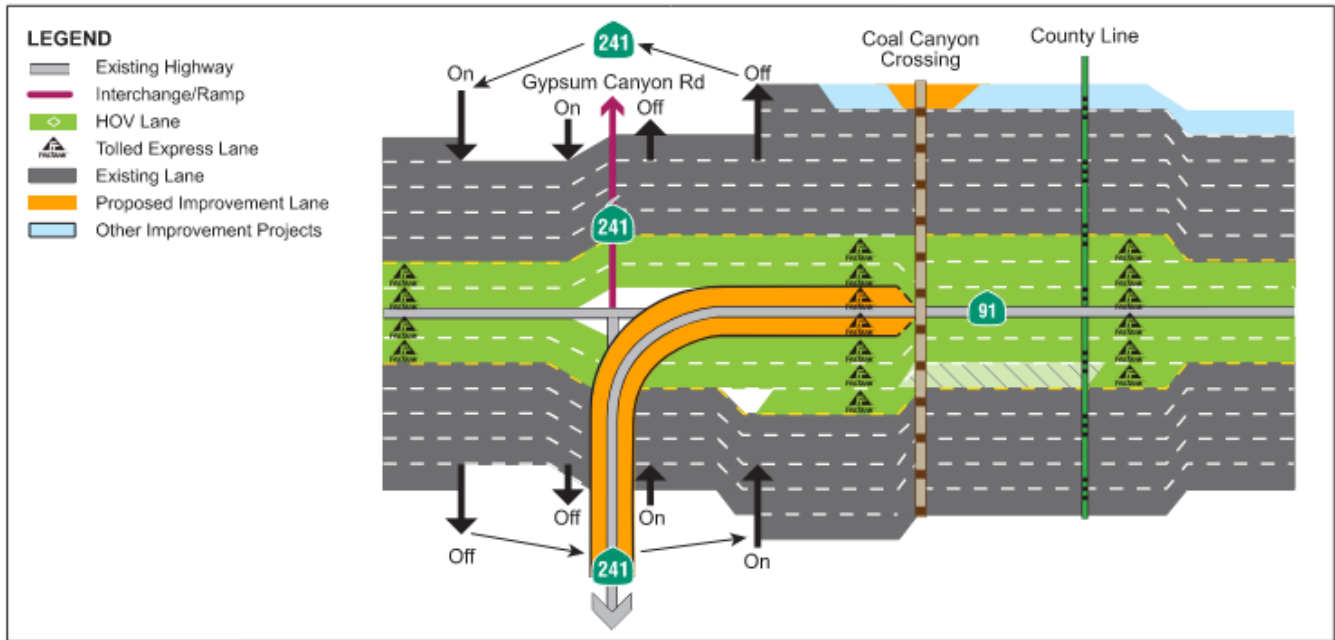
Current Status

An Alternatives Analysis (to be completed in 2021) is being performed to evaluate potential alternatives. Prior preliminary engineering was completed but may need to be revisited at a future date. The SR-91 Sixth General Purpose Lane Addition is currently discussed in the SR-91 CIP environmental document for the SR-91 that was completed in 2012.

Schedule and Cost

Anticipated project completion and cost are to be determined

SR-241/SR-91 Tolloed Express Lanes Connector



Project Description

The SR-241/SR-91 Tolloed Express Lanes Connector will consist of a direct connector between the 241 Toll Road and 91 Express Lanes, carrying northbound 241 Toll Road traffic to the eastbound 91 Express Lanes and westbound 91 Express Lanes traffic to the southbound 241 Toll Road.

Key Considerations

The purpose of the project is to implement the build out of the Eastern Transportation Corridor as approved in 1994 in order to improve traffic operations on the northbound 241 Toll Road and the SR-91 general-purpose lanes while also maintaining reliable travel times and free flow speeds during peak periods on the 91 Express Lanes which were all key considerations in Caltrans' approval of the project. The project will require widening of SR-91 to accommodate the direct connector and associated Express Auxiliary Lanes in the median. The project's planned construction is aligned with the implementation of other planned improvements in the area including the 15/91 Express Lanes Connector, SR-91 Corridor Operations Project, and SR-71/SR-91 Interchange Improvements. Coordination will be conducted with local agencies to ensure the project avoids impacts to planned bicycle and trail connections on Gypsum Canyon Road per the City of Anaheim General Plan and OCTA Commuter Bikeways Strategic Plan.

Benefits

The project will provide connectivity between the 91 Express Lanes and the 241 Toll Road, which will enhance

operations along the SR-91 general purpose lanes while also improving traffic operations on the northbound 241 Toll Road.

Current Status

Preliminary engineering concepts for a SR-241/SR-91 Tolloed Express Lanes Connector have been developed by the Foothill/Eastern Transportation Corridor Agency (F/E TCA) and Caltrans, which were utilized for the environmental analysis. The 91 Express Lanes Extension and SR-241 Connector Feasibility Study was completed in March 2009 and was initiated to evaluate various alternatives. A Project Study Report was initiated in January 2011 and was completed in January 2012. The Draft Environmental Document was circulated for public review from November 7, 2016, through January 9, 2017. Caltrans's approval of the project with the Record of Decision was completed in March 2020. Final design is in progress.

Schedule and Cost

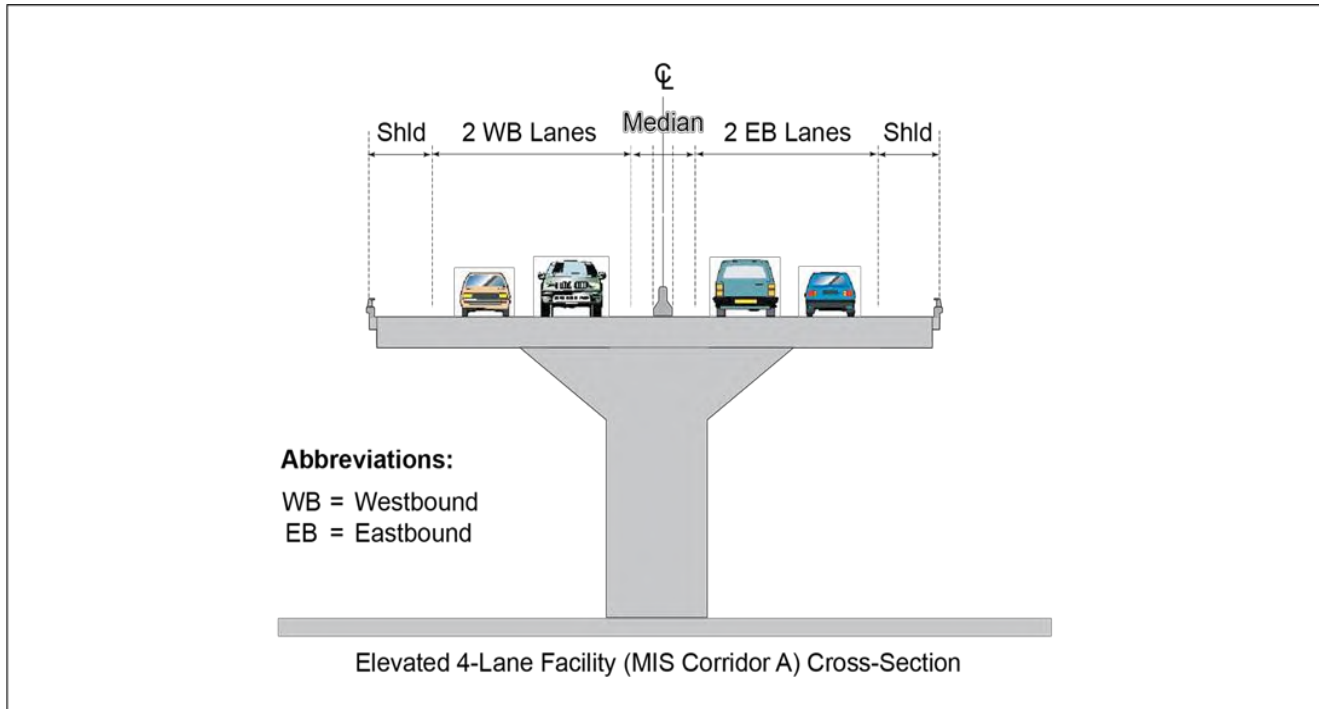
Agreements to document roles and responsibilities for F/ETCA funding, Caltrans construction, and OCTA/RCTC tolling operation of the project are under development by the multi-agency team. Final Design is expected to be completed in 2022. Construction is anticipated to last approximately 26 months beginning in 2023 with project opening in 2025. The total cost of the project will be approximately \$250,000,000.

APPENDIX A - POST-2035 AND CONCEPTUAL PROJECTS

Concepts for potential Post-2035 implementation (potentially earlier if funding becomes available) focus on longer-lead time projects. This multi-billion dollar program may include: an elevated 4-lane facility (MIS Corridor A) from SR-241 to I-15; the Anaheim to Ontario International Airport Maglev High Speed Rail; the Irvine-Corona Expressway (ICE) 4-lane facility from SR-241/SR-133 to I-15/Cajalco Road (formerly known as MIS Corridor B), Westbound SR-91 to Southbound SR-55 Connector Improvements, Eastbound SR-91 Fifth Lane Addition at SR-241 and Fairmont Boulevard Improvements. These potential concepts include significant environmental constraints and right of way requirements in addition to requiring a significant amount of planning, design, and future policy and public input.

Concept Summary	Cost (\$M)
Elevated 4-Lane Facility (MIS Corridor A) from SR-241 to I-15	2,720
Anaheim to Ontario International Airport Maglev High Speed Rail	2,770-3,200
Irvine-Corona Expressway (ICE) 4-Lane Facility from SR-241/SR-133 to I-15/Cajalco Road	8,855
Westbound SR-91 to Southbound SR-55 Connector Improvements	75-150
Eastbound SR-91 Fifth Lane Addition at SR-241	31
Fairmont Boulevard Improvements	76.8
SUBTOTAL	14,527.8– 15,032.8

Elevated 4-Lane Facility from SR-241 to I-15 (MIS Corridor A)



Concept Description

The improvements primarily consist of constructing a new 4-lane elevated expressway near or within the Santa Ana Canyon with freeway-to-freeway connectors at SR-241 and I-15. The facility may include managed lanes and potential reversible operations.

Key Considerations

Choice of alignment will be key to determining net capacity increase. Extensive right-of-way (R/W) will be required to implement the improvements if the alignment is not in the SR-91 corridor. When median connector projects or HOV/HOT projects are constructed and this 4-lane elevated facility is proposed within the median of SR-91 through Corona, then extensive managed lane closures would be required during construction (thus temporarily reducing SR-91 capacity during construction).

An alternative could be studied for the median Corridor A viaduct along with reduced SR-91 geometric standards to minimize R/W impacts. Also, direct connectors (such as for High Occupancy Vehicle (HOV) / High Occupancy Toll (HOT) at I-15/SR-91) to/from the median could be precluded by Maglev columns located within the same median area. Caltrans and Maglev highway R/W, maintenance, safety, and operations considerations would need to be analyzed if shared use with a Maglev facility were pursued. Additional mitigation costs may be

required for improvements to SR-241 and SR-133 as a result of additional Corridor traffic volumes. Corridor A as managed lanes, with the extension of 91 Express Lanes to I-15, this project concept may affect traffic distribution due to “parallel” tolled facilities.

Benefits

The concept would provide significant congestion relief by allowing vehicles to bypass the at-grade freeway lanes and local arterial interchanges between SR-241 and I-15. Connections are proposed directly between SR-91, SR-241, and I-15.

Current Status

This concept is identified in the Riverside County - Orange County Major Investment Study (MIS) as part of the Locally Preferred Strategy to improve mobility between Riverside County and Orange County. No project development work is planned at this time.

Schedule and Cost

Anticipated project completion is post-2035 and construction cost is estimated to be \$2,720,000,000 (2005 dollars).

Anaheim to Ontario International Airport Maglev High Speed Rail



LEGEND

- Existing Highway
- High Speed Rail Representative Alignment

REPRESENTATIVE ALIGNMENT SHOWN FOR ILLUSTRATIVE PURPOSES ONLY

Concept Description

Proposals for a new super-speed train corridor from Anaheim to Ontario are included in this concept. This concept includes an alternative that would use SR-91 right-of-way or would be aligned adjacent to SR-91 right-of-way or could potentially be co-located with the Major Investment Study (MIS) Corridor A alignment. Another alignment opportunity is being investigated along SR-57.

Key Considerations

Alternative alignment impacts to SR-91 right-of-way envelope and/or Santa Ana River are undetermined. The choice of alignment will potentially impact MIS Corridor A. Right-of-way (R/W) will be required to implement the improvements. Potential considerations for co-locating the Magnetic Levitation (Maglev) train adjacent to Corridor A (and also SR-91) include providing a two-column structure with a barrier between the trains and vehicles. Caltrans and Maglev highway R/W, maintenance, safety, and operations considerations would need to be analyzed if shared use with a Maglev facility were pursued. See the MIS Corridor A project for additional considerations. Coordination with Metrolink improvements will be required.

Benefits

The concept would provide congestion relief by providing a direct high-speed/high-capacity connection with Ontario International Airport for Orange County air passengers and business next-day deliveries. Maglev will make the trip in just 14.5 minutes. Relieves congestion on SR-91 by providing additional capacity in the corridor.

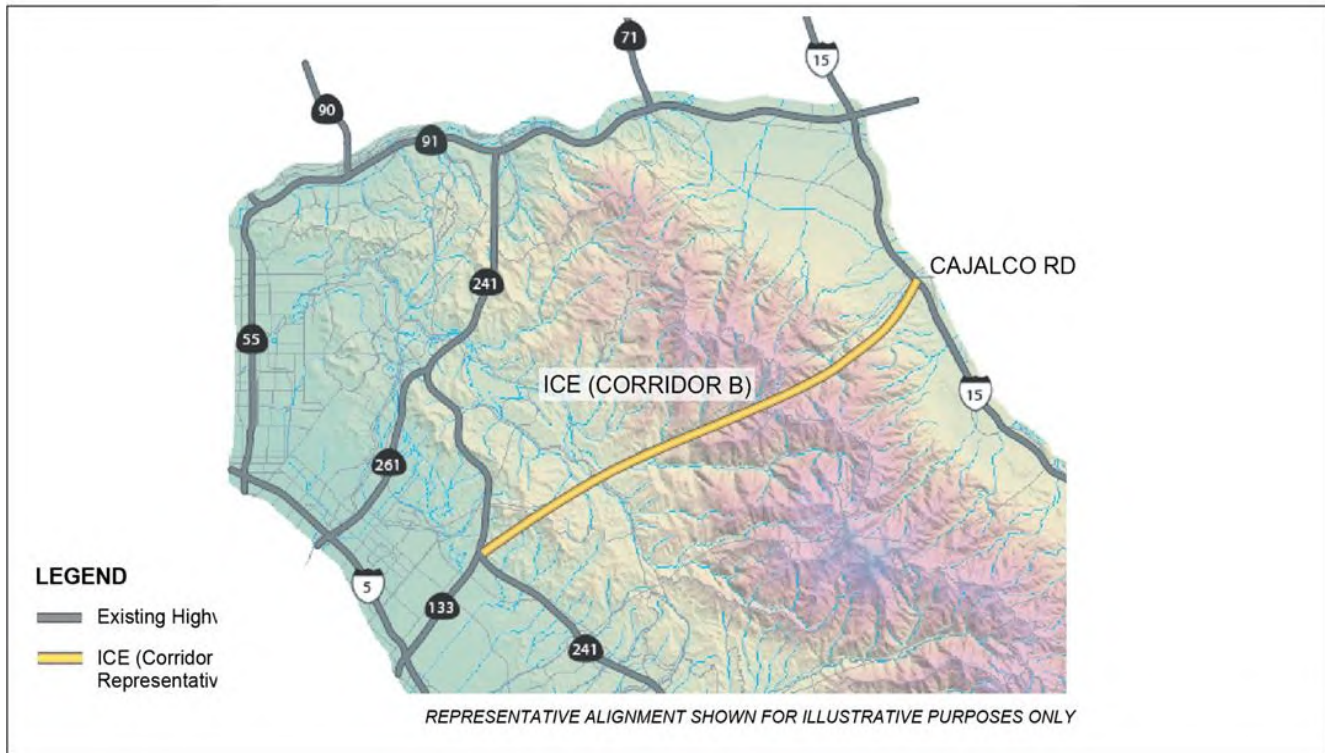
Current Status

Since 2012, no progress on this project has occurred. Preliminary design, engineering and Phases 1 and 2 of a Preliminary Environmental Impact Statement/Environmental Impact Statement (PEIS/EIS) are completed. Congress approved \$45M in SAFETEA-LU for the environmental phase of the project. Construction funding of up to \$7 billion was identified through a loan commitment from the China Export-Import Bank.

Schedule and Cost

Anticipated project completion is to be determined and construction cost is estimated to be from \$2,770,000,000 to \$3,200,000,000 (2012 dollars).

Irvine-Corona Expressway (ICE) from SR-241/SR-133 to I-15



Concept Description

The improvements primarily consist of constructing a highway and rail facility through the Cleveland National Forest with freeway-to-freeway connectors at SR-241/SR-133 and I-15/Cajalco Road. The facility would essentially be a continuation of SR-133 on the west end of the corridor, to I-15 on the east end.

Key Considerations

The tunnel concept is technically feasible based on the geotechnical investigation completed in December 2009. The initial project phase would be the construction of one 2-lane highway tunnel and one rail tunnel. The second project phase would include construction of a second 2-lane highway tunnel. Additional technical studies and geotechnical borings would be needed to refine the tunnel alignments and grades. Costs associated with the Irvine-Corona Expressway (ICE) tunnels are based on the Feasibility Evaluation Report completed in December 2009. A financial analysis will be needed for the construction, operations and toll requirements of the ICE tunnels.

Benefits

The concept would provide significant congestion relief by providing an alternative route between Orange and Riverside counties and would allow vehicles to bypass SR-91 between SR-241 and I-15. The concept would not disrupt SR-91 traffic during construction and would allow for additional route selection for incident management, emergency evacuation, and for continuity of the highway network by linking SR-133 to I-15.

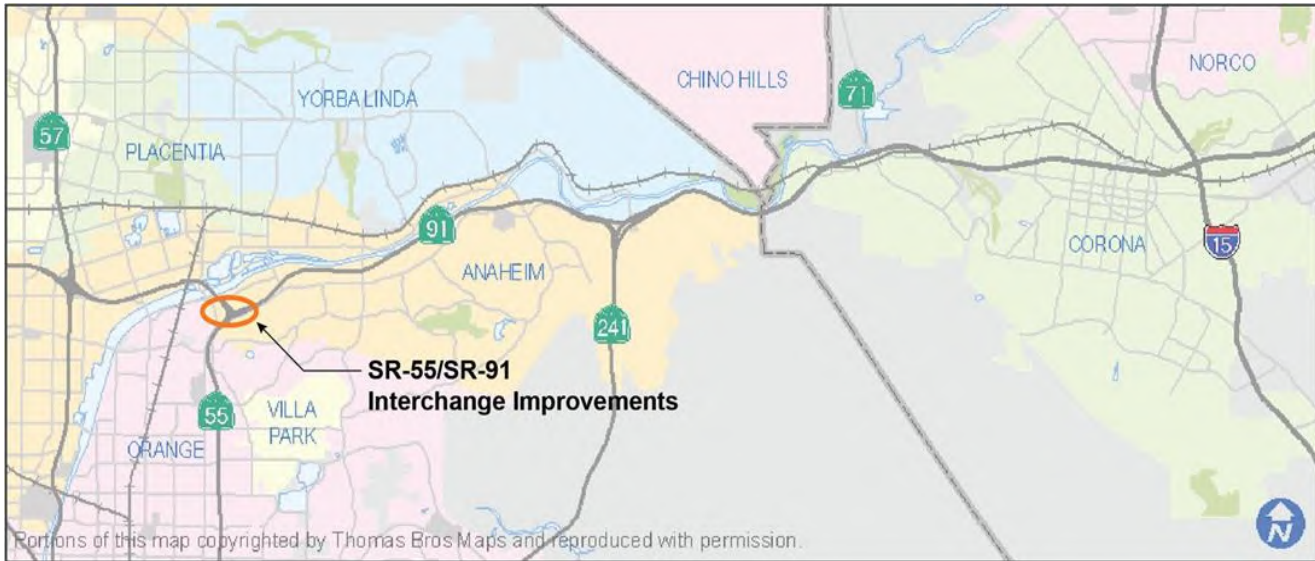
Current Status

On August 27, 2010 the Riverside Orange Corridor Authority Board took action to defer additional study of the ICE concept until such time as financial considerations improve and/or technological advancements warrant reexamination. Review of the concept shall be done annually through the SR-91 Implementation Plan update to determine if any of the major assumptions about financial considerations, private sector interest, or technological advancements have changed to make the tunnel financially viable. (See "ICE status summary" for further discussion).

Schedule and Cost

Anticipated project completion is post-2035 and construction cost is estimated to be \$8,855,000,000 (2009 dollars).

Westbound SR-91 to Southbound SR-55 Connector Improvements



Concept Description

The project consists of operational improvements by modifying the connector to SB SR-55 from WB SR-91. The improvements would extend to Lakeview Avenue to the east and would include a new connector from WB SR-91 to SB SR-55 as a potential right-hand exit.

Key Considerations

Right-of-way impacts, detailed SR-55/SR-91 interchange improvements, and downstream impacts to SR-55 require further evaluation in a subsequent phase of project development. Conceptual design of SR-55/SR-91 would be coordinated with completed improvements at SR-91 and Tustin Avenue, and with the SR-91 Environmental Study Improvements from SR-57 to SR-55. This study is currently being conducted.

Operational enhancements between SR-55 and Lakeview Avenue will provide some benefit for SR-55/SR-91 by addressing WB SR-91 weaving issues. In addition, the proposed WB drop-ramp from Lakeview AV has been designed to accommodate three WB through lanes on either side in order to reduce throwaway costs in the future should the SR-91 be shifted to accommodate a right-hand exit for SB SR-55.

Benefits

Interchange improvements are anticipated to provide congestion relief for WB SR-91 traffic and potentially improve the connection from WB SR-91 to SB SR-55.

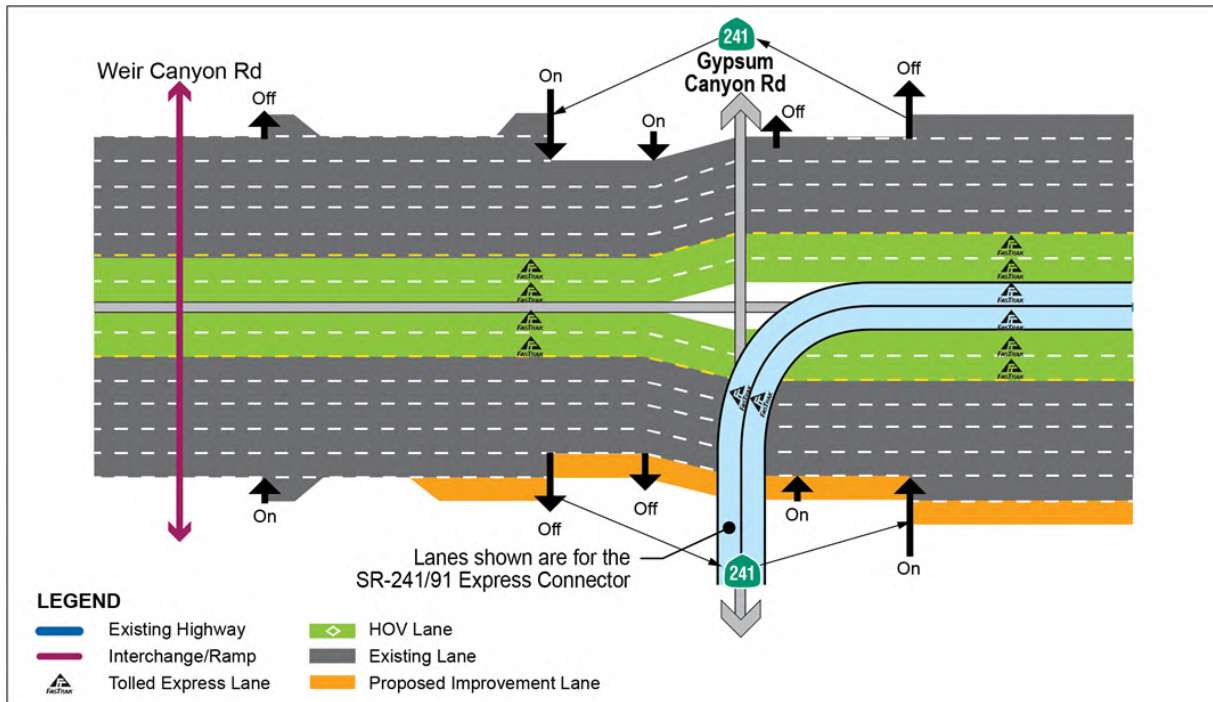
Current Status

SR-55/SR-91 project information was derived from the Final Alternatives Evaluation and Refinement Report, December 2005, by the Riverside County - Orange County Major Investment Study (MIS). Focused SR-91/SR-55 conceptual engineering needs to be scheduled. However, initial conceptual engineering was also studied as part of the SR-91 Feasibility Study Between State Route 57 and State Route 55 Interchange Areas in June 2009, and as part of the SR-91 Environmental Study Improvements from SR-57 to SR-55.

Schedule and Cost

Anticipated project completion is post-2035 and construction cost is estimated to be from \$75,000,000 to \$150,000,000 (2014 dollars).

Eastbound Fifth Lane Addition at SR-241



Concept Description

The location of the proposed EB SR-91 fifth general purpose (GP) lane addition (The Segment) is on EB SR-91 from Weir Canyon Road to the NB SR-241 Connector. The Segment consists of four GP lanes and two managed lanes (91 Express Lanes).

Upstream (westerly) from The Segment the EB SR-91 has 5 GP lanes and the 5th lane drops to the SB SR-241 Connector as some traffic volume exits to the SB SR-241. Downstream from The Segment the EB SR-91 gains the 5th lane back as the NB SR-241 Connector merges with SR-91 in a dedicated lane addition. This 5th lane continues beyond the Riverside County line providing enhanced mobility.

Key Considerations

This segment with four GP lanes might be creating a traffic choke point due to the decrease of capacity, potentially contributing to significant traffic delays passing through this segment along with other traffic issues such as queue jumping, weaving, merging and operational speed differential. However, additional traffic from NB SR-241 to EB SR-91 and Gypsum Canyon Rd on-ramp suggest balancing the number of lanes should be carefully examined. As such, additional capacity will enhance EB freeway operations along this Segment.

Benefits

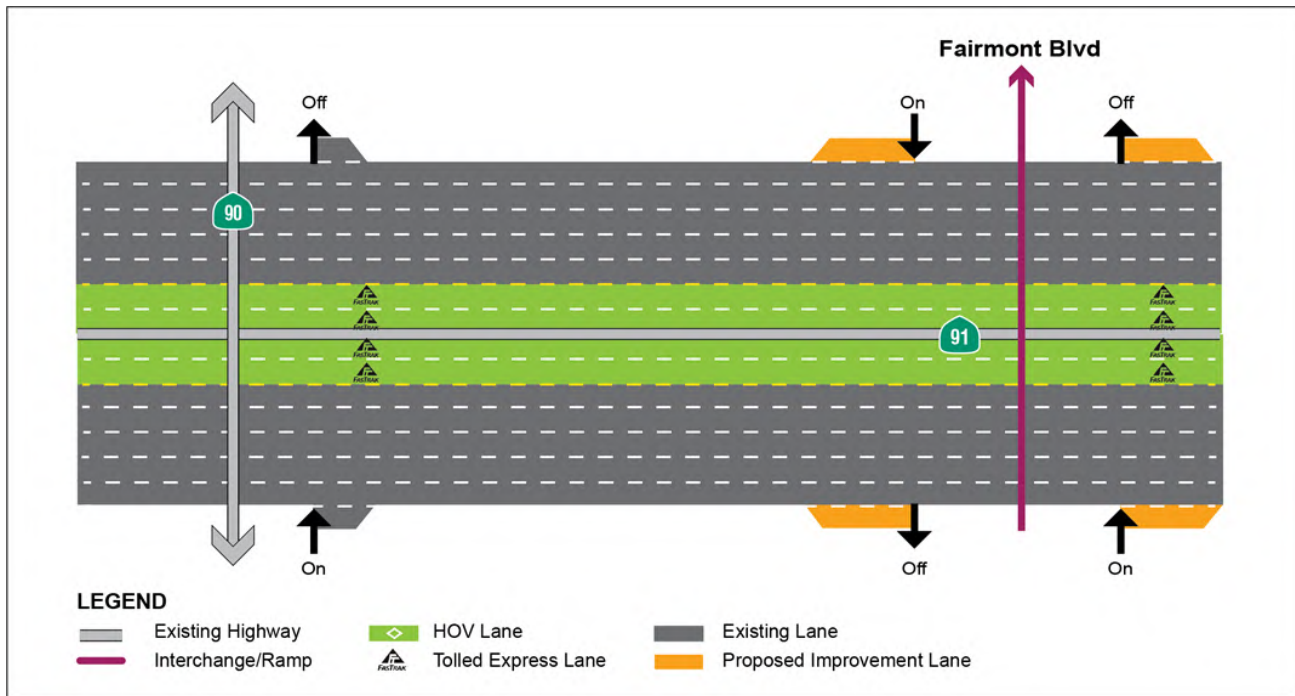
- 1) Extends the existing 5th EB GP lane easterly and ties it to the existing 5th lane downstream. This could provide capacity enhancement and may result in removing an existing choke point. Significant delay savings is anticipated.
- 2) Potentially eliminate queue jumping in this area from EB SR-91 as well as Weir Canyon Rd.
- 3) Potentially reduce speed differential between through lanes, thus creating a more balanced flow.
- 4) Potentially provide balanced lane utilization at high traffic demand area.

Current Status

Additional traffic analysis and study is required to confirm the benefits to EB SR-91 by the proposed improvements. This location was identified by Caltrans as a high congestion location in the County. The concept is intended to improve the choke point that exists due to the presence of a 4-lane segment between 5-lane freeway segments.

Schedule and Cost

Total project cost, based on Caltrans' estimate, is \$31.25 million. Project schedule has not been determined.



Project Description

The project would provide a new interchange with SR-91 at Fairmont Boulevard. On and off ramps will connect Fairmont Boulevard from the north to eastbound (EB) and westbound (WB) SR-91. The proposed interchange does not include a vehicular Fairmont Boulevard connection to Santa Ana Canyon Road to the south. A pedestrian/bicycle connection is also proposed between La Palma Avenue and Santa Ana Canyon Road. This bridge and pathway will allow for direct Santa Ana River Trail access from both Anaheim south of SR-91 and from Yorba Linda.

Key Considerations

Interchange spacing and weaving issues (to SR-55) need to be evaluated. Widening of SR-91 may be needed to accommodate interchange ramps. Proximity of the Santa Ana River may require that the WB ramp junction be located north of the river. New connection requirements and interchange spacing needs to be considered. Ramp and bridge placement needs to take pedestrian/bicycle bridge into account, or incorporate the pedestrian/bike path into the design beyond the vehicular access limits of the project.

Benefits

The interchange is expected to relieve congestion at Imperial Highway (SR-90), Lakeview Avenue, and Weir Canyon Road Interchanges. Preliminary traffic modeling shows a 10-15% decrease in volumes at Weir Canyon and SR-90 interchanges with the interchange alternative.

Current Status

The City of Anaheim completed a conceptual engineering study in December 2009 for the interchange. Multiple alternatives have been developed as part of the conceptual engineering study. Bicycle/pedestrian bridge is currently in initial planning stages. Project development is pending funding identification. On July 24, 2017, OCTA staff along with a senior staff member of WSP presented the findings of a 91 Express Lanes intermediate access study. The study provided various alternatives, traffic modeling, and financial impacts of the additional access. At the conclusion of the discussion, the OCTA Board of Directors did not authorize additional analysis for the intermediate access.

Schedule and Cost

Anticipated project completion is post 2035 and construction cost is estimated to be \$76,800,000 (costs from 2009 Feasibility Study). R/W cost is undetermined. Cost excludes any potential impact to Santa Ana River.

APPENDIX B- COMPLETED PROJECT EXHIBITS

The following exhibits represent completed projects from previous Plans since 2006 and are intended to be used as a reference to illustrate the progress made since the inception of the Plan. Note: some projects listed in the Plan as completed (see Section 1, Project Accomplishments) are not included herein since there was no exhibit created or necessary for use with prior Plans (such as for restriping projects, various safety enhancements, minor operational improvements, etc.).

Project Improvements	Constructed
Green River Road Overcrossing Replacement	March 2009
North Main Street Corona Metrolink Station Parking Structure	June 2009
Eastbound Lane Addition from SR-241 to SR-71	September 2010
Widen SR-91 between SR-55 and SR-241 by Adding a 5 th GP Lane in Each Direction	December 2012
SR-91 WB Lane at Tustin Avenue	April 2016
Metrolink Service Improvements	June 2016
Initial Phase CIP: Widen SR-91 by One GP Lane in Each Direction East of Green River Rd, CD Roads and I-15/SR-91 Direct South Connector, Extension of Express Lanes to I-15 and System/Local Interchange Improvements	July 2017
Express Bus Service	2019
La Sierra Metrolink Parking Improvements	February 2019

Green River Road Overcrossing Replacement

Appendix Project No: B-1

Actual Completion: March 2009

Project Costs

Capital Cost	\$ 21,000,000
Support Cost	\$ 3,000,000
R/W Cost	\$301,000
Total Project Cost	\$ 24,301,000

Project Schedule

Preliminary Engineering	Completed
Environmental	Completed
Design	Completed
Construction	Completed

Project Description

Improvements primarily consist of replacing the existing Green River Road overcrossing with a new six-lane wide, 4-span overcrossing to accommodate future widening of SR-91. The interior spans will accommodate up to eight mainline lanes in each direction including two HOV lanes. The exterior spans can accommodate two lanes, either for auxiliary lanes or collector distributor roads. Entrance and exit ramps will be realigned and widened to accommodate the new bridge, yet the interchange will retain its current configuration. New signals will be installed at the ramp intersections. Ramp and bridge improvements will be constructed within existing right of way.

Key Considerations

Design interface is required with the Eastbound Lane Addition from SR-241 to SR-71, SR-71/SR-91 Interchange Improvements, SR-91 Corridor Improvement Project, and SR-241/SR-91 HOV/HOT Connector.

Benefits

The project will improve the level of service at ramp and local street intersections at the interchange. Improvements will reduce ramp queues that extend into the freeway's general purpose lanes, thus contributing to congestion relief on SR-91.

Current Status

The project began construction in March 2007 and was completed in March 2009.

Project Schedule Caltrans Equivalents:

Preliminary Engineering = PID

Environmental = PA/ED

Design = PS&E

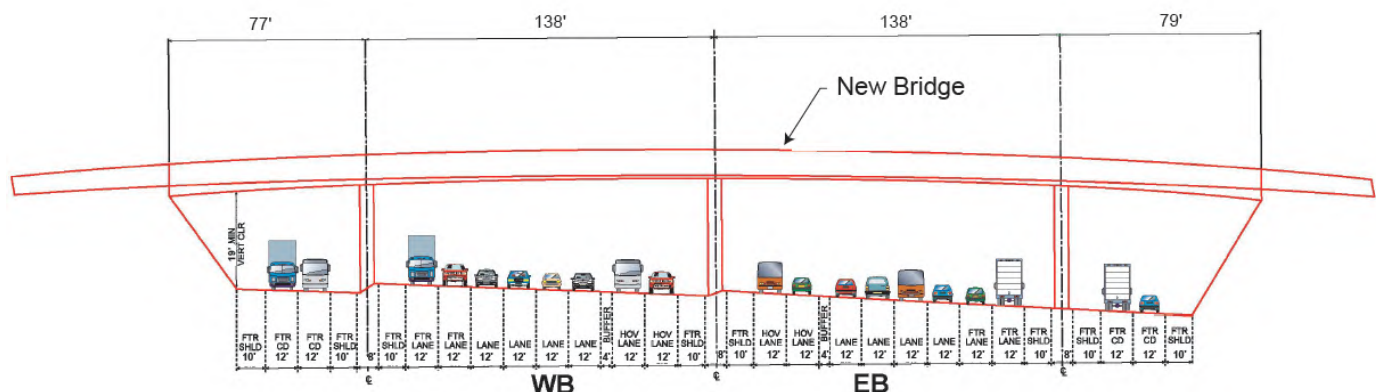
Abbreviations:

CD = Collector Distributor Lane

FTR = Future

HOV = High Occupancy Vehicle

SHLD = Shoulder



GREEN RIVER BRIDGE CROSS-SECTION

NOTE: All dimensions are approximate



North Main Street Corona Metrolink Station Parking Structure

Appendix Project No: B-2

Actual Completion: June 2009

Project Costs

Capital Cost	\$ 20,000,000
Support Cost	\$ 5,000,000
R/W Cost	\$0
Total Project Cost	\$ 25,000,000

Project Schedule

Preliminary Engineering	Completed
Environmental	Completed
Design	Completed
Construction	Completed

Project Description

The project provides a six level parking structure with 1,065 parking stalls. The construction is within the existing North Main Street Metrolink station property in Corona.

Key Considerations

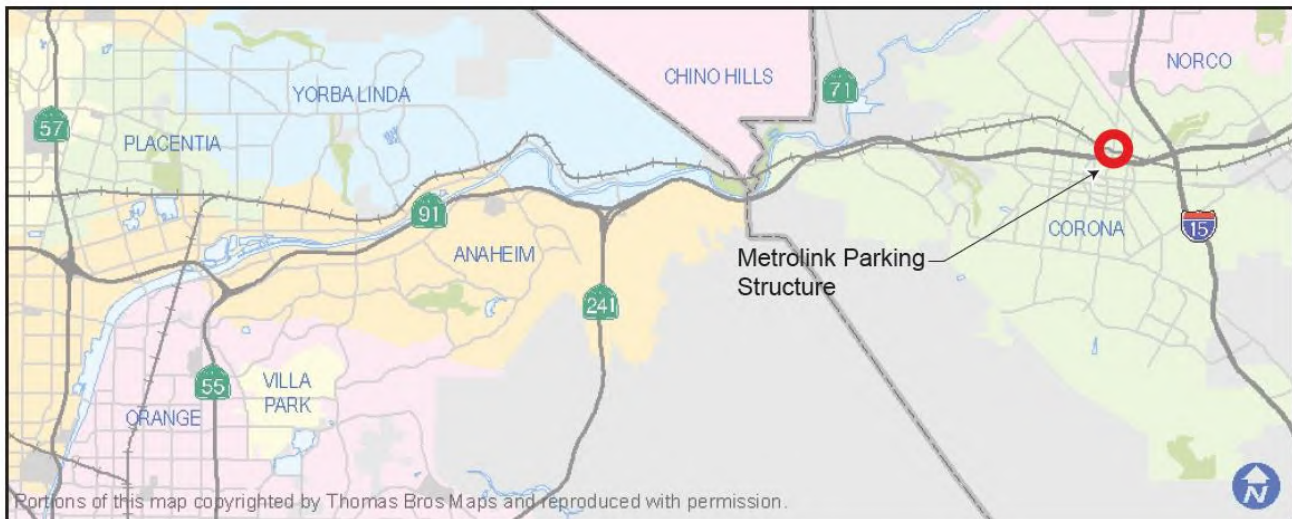
Proposed improvements were constructed within existing right of way. Currently there are 700 users of the facility, 200 more that were previously able to accommodate. Additionally RCTC has opened up the lot to park and ride carpools and vanpools and has issued over 120 permits for carpools to use the expanded station. This shows an added benefit of supporting carpooling as well as transit to offset congestion on SR-91.

Benefits

Demand for parking currently exceeds the capacity at the North Main Street Corona station. New parking capacity will allow Metrolink ridership to increase thereby diverting vehicle trips from SR-91.

Current Status

Construction was initiated in January 2008 and was completed in June 2009. The project was funded with Federal Congestion Management and Air Quality (CMAQ) funds.



Eastbound Lane Addition from SR-241 to SR-71

Appendix Project No: B-3

Actual Completion: September 2010

Project Cost Estimate

Capital Cost	\$ 41,000,000
Support Cost	\$ 8,000,000
R/W Cost	\$ 2,200,000
Total Project Cost	\$ 51,200,000

Project Schedule

Preliminary Engineering	Completed
Environmental	Completed
Design	Completed
Construction	Completed

Project Description

The project will provide an additional eastbound (EB) lane from the SR-91/SR-241 interchange to the SR-71/SR-91 interchange and will widen all EB lanes and shoulders to standard widths.

Key Considerations

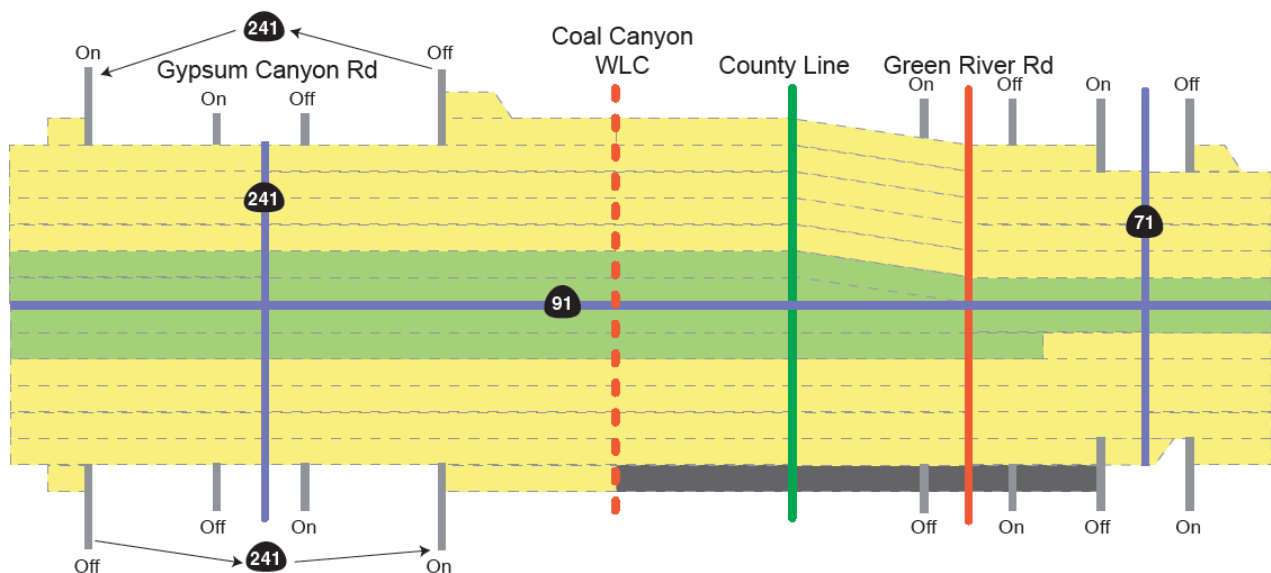
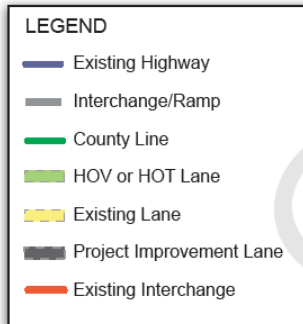
Coordination with the SR-91 Corridor Improvement Projects (Project #3 and #11) will be required. Staged construction would be required for all ramp reconstruction and freeway widening. Freeway operations would most likely be affected by this project, however, freeway lane closures are not anticipated. An EB concrete shoulder will be constructed with a 12 foot width to provide for future widening as contemplated by Project #3 and #11.

Benefits

The lane addition would help to alleviate the weaving condition between SR-241 and SR-71, as well as remove vehicles from the SR-91 mainline that would be exiting at Green River Road and SR-71.

Current Status

Funding is from the American Recovery and Reinvestment Act (ARRA) with \$71.44M approved, and the balance of project costs are from other sources. Construction began in late 2009 and was completed in September 2010.



Widen SR-91 between SR-55 and SR-241 by Adding a 5th GP Lane in Each Direction

Appendix Project No: B-4 Actual Completion: January 2013

Project Costs

Capital Cost	\$ 65,005,000
Support Cost	\$ 19,639,000
R/W Cost	\$ 573,000
Total Project Cost	\$ 85,217,000

Project Schedule

Preliminary Engineering	Completed
Environmental	Completed
Design	Completed
Construction	Completed

Project Description

This project proposes capacity and operational improvements by adding one general purpose (GP) lane on eastbound (EB) SR-91 from the SR-55/SR-91 connector to east of the Weir Canyon Road interchange and on westbound (WB) SR-91 from just east of Weir Canyon Road interchange to the Imperial Highway (SR-90) interchange. Additionally, this project would facilitate truck traffic approaching the truck scales in both directions.

Key Considerations

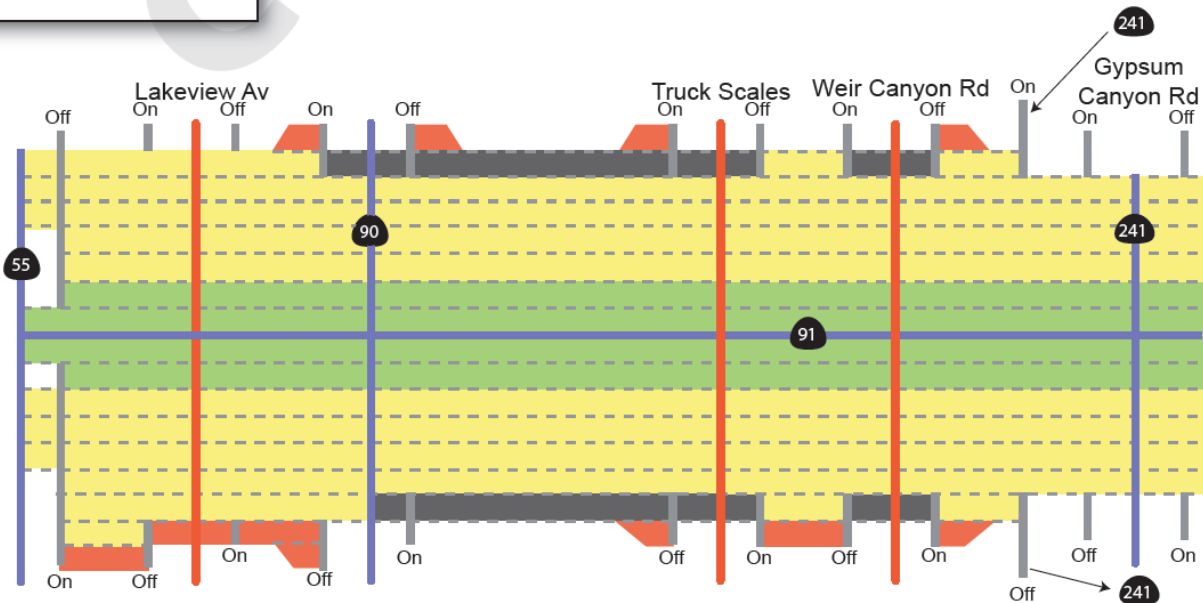
Caltrans is not considering relocation of the truck scales at this time.

Benefits

Alleviates congestion on WB SR-91 by eliminating the lane drop at the truck scales and providing a continuous GP lane to SR-90. Alleviates congestion on EB SR-91 by eliminating the lane drop for northbound (NB) SR-55 at SR-91 by providing an auxiliary lane to Lakeview Avenue, and at SR-90 by providing a continuous GP lane through Weir Canyon

LEGEND

- Existing Highway
- Interchange/Ramp
- Existing Interchange
- HOV or HOT Lane
- Existing Lane
- Project Improvement Lane
- Auxiliary Lane



NOTE: FAIRMONT BLVD IS CONTINGENT UPON IMPLEMENTATION OF THE PROJECT



SR-91 WB Lane at Tustin Avenue

Appendix Project No: B-5 Actual Completion: April 2016

Project Cost Estimate*

Capital Cost	\$ 22,218,000
Support Cost	\$ 16,382,000
R/W Cost	\$ 4,682,000
Total Project Cost	\$ 43,282,000

Project Schedule

Preliminary Engineering	Completed
Environmental	Completed
Design	Completed
Construction	Completed

Project Description

The project will add a westbound (WB) auxiliary lane on SR-91 beginning at the northbound (NB) SR-55 to WB SR-91 connector through the Tustin Avenue interchange. This project includes approximately 1.1 lane miles.

Key Considerations

Build Alternative 3 was selected from the Project Study Report (PSR), *On Westbound (WB) SR-91 Auxiliary Lane from the Northbound (NB) SR-55/WB SR-91 Connector to the Tustin Avenue Interchange*, and requires additional right-of-way. City of Anaheim utilities are within close proximity of the proposed widening section. Widening of the Santa Ana River bridge is required. Coordination with the City of Anaheim occurred for widening of Tustin Avenue and the WB SR-91 Off-Ramp that was completed in early 2011.


Benefits

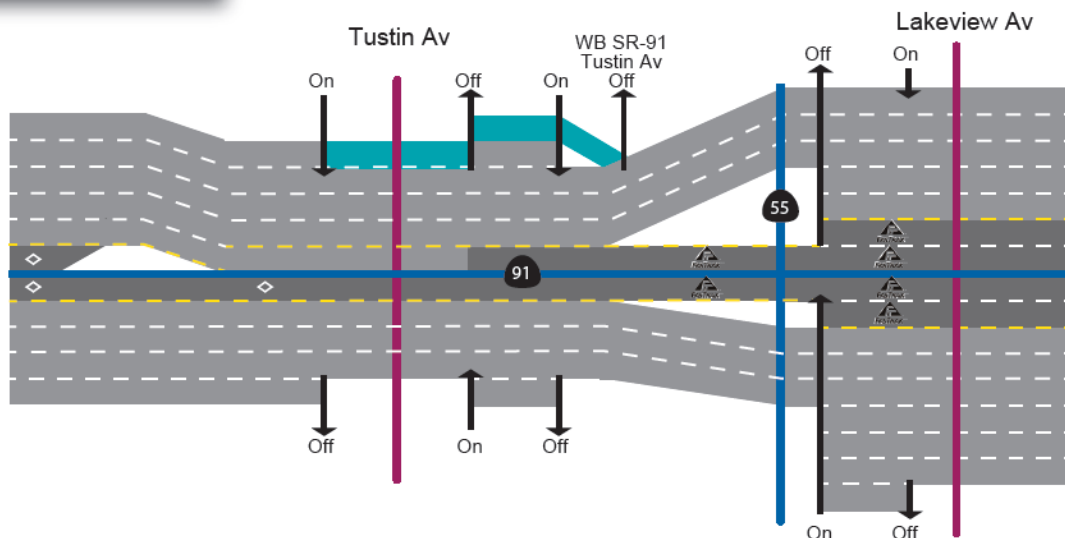
The project would reduce or eliminate operational problems and deficiencies on this section of WB SR-91 including weaving and merging maneuvers. This project would also address choke-point conditions, which are caused primarily by extensive weaving between the NB SR-55 to WB SR-91 connector and the WB SR-91 off-ramp to Tustin Avenue.

Current Status

Preliminary engineering was completed and approved by Caltrans. The environmental phase was completed in November 2010, and design was completed in mid-2013. Construction was initiated in February 2014. The project received \$14M from the Proposition 1B State-Local Partnership Program (SLPP), \$14M from Measure M, with the balance from Regional Improvement Program (RIP) funds. Contract acceptance and open to traffic in May 2016.

LEGEND

- Existing Highway
- Interchange/Ramp
- County Line
- ◇ HOV Lane
-  Tolled Express Lane
- Existing Lane
- Proposed Improvement Lane



Metrolink Service Improvements

Appendix Project No: B-6

Actual Completion: 2016

Project Cost Estimate*

IEOC Service Cost	\$ 1,160,000
Perris Valley Line Cost	\$ 248,000,000
Total Metrolink Costs	\$ 249,160,000

Project Schedule

Complete 2016

* Costs from OCTA and RCTC
(in 2015 dollars)

Project Description

There are sixteen daily trains that run on the IEOC Line and nine trains running on the Los Angeles to Riverside portion of 91/Perris Valley (91/PV) Line for a total of 25 daily trains. The long-term service improvements will include 24 IEOC trains by 2030.

The Perris Valley portion of the 91 Line extends Metrolink service southeast by 25 miles, from Riverside to Perris. The project is located within the right of way of the existing San Jacinto Branch Line through Riverside, Moreno Valley and Perris. Construction began in October 2013, cost approximately \$248 million, and the extension opened to the public in June 2016. The inaugural schedule (December 2015) includes nine trains through to Los Angeles and 12 between Perris and Riverside.

Key Considerations

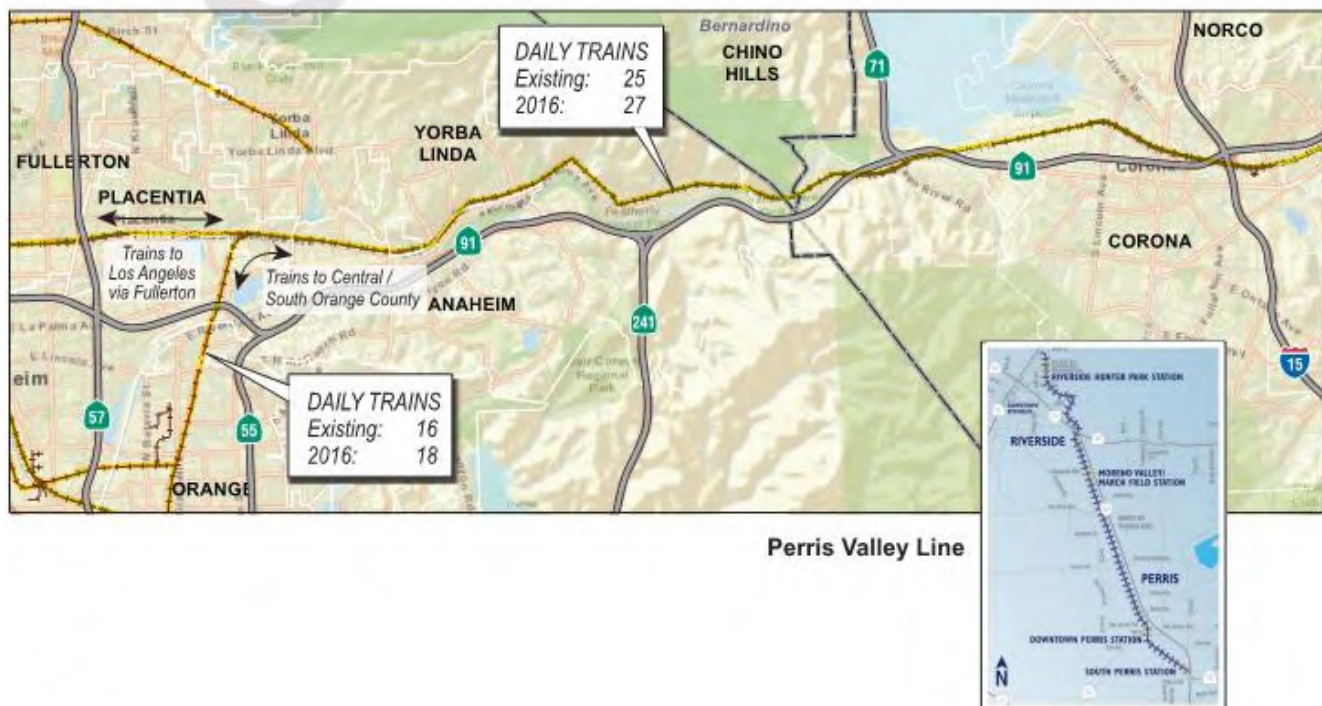
Construction of the new Placentia Metrolink station will improve passenger access to the 91/PV Line, by creating a station between Fullerton and Corona. Improvements at the Anaheim Canyon station are designed to account for future expansion of the IEOC rail service.

Benefits

Enables development of expanded Metrolink service, improved efficiency, and fosters train ridership growth in the region, which will contribute to congestion relief on SR-91.

Current Status

Two additional IEOC Line roundtrips were added in late 2015, and in mid-2016, nine trains began service on the Perris Valley extension to the 91/PV Line.



Initial Phase CIP: Widen SR-91 by One GP lane In Each Direction East of Green River Road, CD Roads and I-15/SR-91 Direct South Connector, Extension of Express Lanes to I-15 and System / Local Interchange Improvements

Project No: B-7

Actual Completion: 2017

Project Cost Estimate*

Total Capital Cost	\$ 1,161,000,000
Support Cost	\$ 246,000,000
Total Project Cost	\$ 1,407,000,000

Project Schedule**

Preliminary Engineering	Completed
Environmental	Completed
Design/Construction	2013-2017

* Cost obtained for Initial Phase is from RCTC (2014 dollars)

** Schedule for Initial Phase; subsequent phase for Ultimate Project anticipated in 2035

Project Description

The approved Project Study Report (PSR) for the SR-91 Corridor Improvement Project (CIP), from SR-241 to Pierce Street, includes the addition of a 5th general purpose lane in each direction, the addition of auxiliary lanes at various locations, additional lanes at the SR-71/SR-91 interchange (Project #5), and collector-distributor (CD) lanes at the I-15/SR-91 interchange. Subsequently, the Riverside County Transportation Commission's (RCTC) 10-Year Delivery Plan recommended the following in addition to the PSR recommended improvements: the extension of the 91 Express Lanes from the Orange County line to I-15, the construction of SR-91 (EB/WB)/I-15 (SB/NB) Express Lanes median direct connectors, and the construction of one Express Lane in each direction from the I-15/SR-91 interchange southerly to I-15/Cajalco Road, and northerly to I-15/Hidden Valley Parkway. An Express Lanes ingress/egress lane is also planned near the County Line. Due to economic conditions, a Project Phasing Plan was developed to allow an Initial Phase with reduced improvements to move forward as scheduled, with the remaining ultimate improvements to be completed later. The following is a summary of the deferred ultimate improvements: I-15/SR-91 median North Direct Connector, and I-15 Express Lanes North to Hidden Valley Parkway (Project #9); general purpose lanes and Express Lanes from I-15 to Pierce Street; and general purpose lanes from SR-241 to SR-71. The I-15 Express Lanes to be extended from Ontario Avenue to Cajalco Road are included in RCTC's I-15 Express Lane Project with an anticipated completion in 2020.

Key Considerations

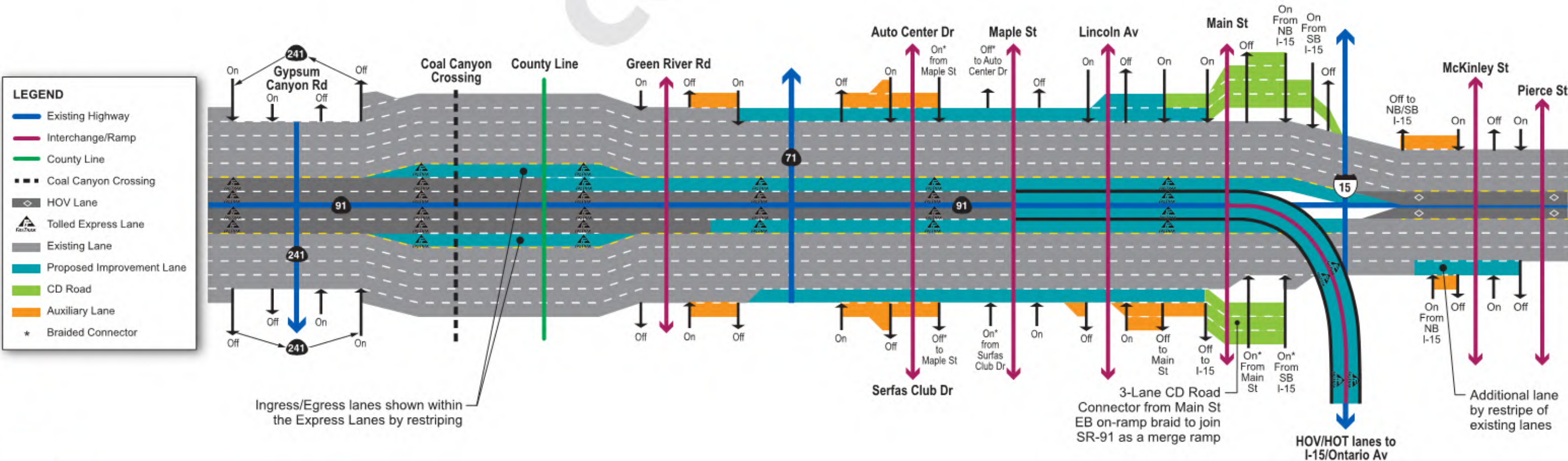
Coordination among many of the SR-91 freeway projects that overlap the project limits is critical to successfully delivering these projects on schedule and within budget. Designing to accommodate future projects is a recurring theme for each of these projects. Minimizing conflicts in scope between projects requires direct coordination between each project team. Additionally, future projects frequently have multiple alternatives under study, each with differing scope and construction footprints. Specifically, the project improvements need to continue to be coordinated with the SR-71/SR-91 Interchange, the SR-241/91 Express Connector, and RCTC's I-15 Express Lane Project.

Benefits

The Initial Phase and Ultimate CIP projects will reduce congestion and delays by providing additional SR-91 capacity from SR-241 to Pierce Street, along I-15 from SR-91 to Cajalco Road to the south, and to Hidden Valley Parkway to the north. Traffic operations will improve by eliminating or reducing weaving conflicts along SR-91 and I-15 by the use of CD roads and auxiliary lanes. The project will provide motorists a choice to use Express Lanes for a fee in exchange for time savings.

Current Status

The environmental phase was completed in Fall 2012. A Design-Build contractor was selected in May 2013 and construction activities began in early 2014 for the Initial Phase. The project is anticipated to open to traffic in Spring 2017 with final project acceptance anticipated at the end of 2017.



Express Bus Service Improvements



Project Description

Orange County Transportation Authority (OCTA), working with the Riverside County Transportation Commission (RCTC) and the Riverside Transit Agency (RTA), operate Express Bus service between Riverside and Orange counties. Commuters lack direct transit connections to some Orange County employment centers not served by Metrolink. The Express Bus service provides this connection.

Existing Service

OCTA has operated Route 794 since 2006 from Riverside County to Hutton Centre and South Coast Metro (shown in orange above). On Route 794, OCTA removed trips to Corona in February 2018 based on low ridership. OCTA currently operates six morning westbound trips and five afternoon eastbound trips to/from the La Sierra Metrolink Station. Two new Express Bus routes were implemented by RTA in January 2018 between Riverside County and Orange County including RTA Route 200 (shown in blue above) from San Bernardino/Riverside to the Anaheim Resort. The route provides hourly service on weekdays and 90-120 minute service on weekends with a fleet of six buses. RTA Route 205 (shown in green above) from Lake Elsinore/Temecula/ Corona to the Village at Orange includes three AM and three PM roundtrips with 3 buses.

New Service

The Express Bus Routes have been fully implemented as of FY19 and there are no planned service additions. Changes to routes may be made in the future based on available funding and ridership demand.

Key Considerations

Intercounty Express Bus service is effective between locations where transit travel times by Express Bus would be more competitive than Metrolink and connecting rail feeder buses.

Benefits

Express Bus services contribute to congestion relief on SR-91.

Current Status

Since completion of the 91 Express Lanes, RTA more than doubled its Express Bus service on SR-91. Currently, OCTA operates 11 bus trips per day on SR-91. RTA now operates 47 trips on weekdays (up from 18 trips that Route 216 provided weekdays) and 18 trips on weekends (up from 8 trips provided by Route 216) on SR-91 Express Lanes. Service hours for this expansion is an extra 21,445 hours per year and is being served by five new coaches added to the RTA fleet.

Schedule and Cost

The Express Bus Routes have been fully implemented as of FY19. Ongoing operating costs average \$4,892,000 per year and capital costs average \$1,174,000 per year (2019 dollars). The annual capital cost was increased in 2019 to reflect the future cost of complying with the new Innovative Clean Transit regulation.

La Sierra Metrolink Parking Improvements



*Image source:
Riverside Transit Agency, April 2019*

Project Description

There are currently 1,000 spaces available. RCTC is implementing a parking lot expansion to include an additional 496 spaces and six bus bays to accommodate RTA Express Lane Service 200 that originates at Metrolink San Bernardino Transit Center with stops along Riverside Downtown Metrolink Station, Metrolink La Sierra, the Village at Orange, ARTIC, Disneyland, and Anaheim Convention Center, as well as other potential bus routes in the future.

Benefits

The 496 parking spaces will provide for existing and future demand. The parking lot expansion will provide for ADA parking, RTA express service, commuter rail, and vanpool.

Current Status

Construction and project implementation has begun.

Schedule and Cost

Construction was completed in February 2019. The project cost is estimated to be \$6,260,000.

APPENDIX C - REFERENCES

The following documents and resources were used in the development of the 2021 Plan. Data was provided by OCTA, RCTC, Caltrans Districts 8 and 12, Transportation Corridor Agencies (TCA), other agencies, and online resources.

-
- Measure M Next 10 Delivery Plan (Next 10 Plan), November 14, 2016
- Riverside Transit Agency, Ten-Year Transit Network Plan, January 22, 2015
- PSR-PDS on Route 91 Between SR-57 and SR-55, October 2014
- PS&E for “Westbound State Route 91 Auxiliary Lane from the NB SR-55/WB SR-91 Connector to the Tustin Avenue Interchange”, 2014
- PS&E for Initial SR-91 CIP Project, 2014
- California Transportation Commission, Corridor Mobility Improvement Account (CMIA), Amended December 2012
- M2020 Plan (Measure M), September 2012
- PSR-PDS for SR-241/SR-91 Tolloed Express Lanes Connector, January 2012
- Project Report and Environmental Document (EIR/EIS) for SR-91 CIP from SR-241 to Pierce Street Project, October 2012
- PS&E “On State Route 91 Between the SR-91/SR-55 Interchange and the SR-91/SR-241 Interchange in Orange County”, April 2011
- Corridor System Management Plan (CSMP) Orange County SR-91 Corridor Final Report, August 2010
- Project Study Report/Project Report “Right of Way Relinquishment on Westbound State Route 91 Between Weir Canyon Road and Coal Canyon”, May 2010
- SR-91/Fairmont Boulevard Feasibility Study, December 2009
- Feasibility Evaluation Report for Irvine-Corona Expressway Tunnels, December 2009
- Plans, Specifications and Estimates (PS&E) for Eastbound SR-91 lane addition from SR-241 to SR-71, May 2009
- PSR “On State Route 91 Between the SR-91/SR-55 Interchange and the SR-91/SR-241 Interchange in Orange County”, April 2009
- 91 Express Lanes Extension and State Route 241 Connector Feasibility Study, March 2009
- PSR/PR “On Gypsum Canyon Road Between the Gypsum Canyon Road/SR-91 Westbound Off-Ramp (PM 16.4) and the Gypsum Canyon Road/SR-91 Eastbound Direct On-Ramp (PM 16.4)”, June 2008
- Orange County Transportation Authority Renewed Measure M Transportation Investment Plan, November 2006
- Riverside County-Orange County Major Investment Study (MIS) – Final Project Report: Locally Preferred Strategy Report, January 2006
- California – Nevada Interstate Maglev Project Report, Anaheim-Ontario Segment; California-Nevada Super Speed Train Commission, American Magline Group, August 2003
- Route Concept Reports for SR-91, Caltrans Districts 8 and 12
- Various Preliminary Drawings and Cross Sections, Caltrans Districts 8 and 12



Draft 2021 State Route 91 Implementation Plan



SR-91 Implementation Plan

- Required by SB 1316 (Chapter 714, Statutes of 2008)
- Updated annually to capture past, present, and future projects along SR-91 (between I-15 and SR-57)
- Not financially constrained
- Bi-county collaborative effort

SR-91 – State Route 91
I-15 – Interstate 15
SR-57 – State Route 57

Culmination of Efforts

- Nine projects completed



- \$1.9 billion invested

Culmination of Efforts (continued)

- 66.5 lane miles added



- 15 percent increase in throughput

Culmination of Efforts (continued)

Benefits of Coordinated Efforts

- Addresses population/traffic growth
- Provides seamless connectivity between the counties
- Increases travel options
- Improves quality of life



Orange County Projects

- SR-91 improvements between SR-57 and SR-55
- Anaheim Canyon Metrolink Station improvements
- Placentia Metrolink Rail Station



SR-55 - State Route 55

Riverside County Projects

- 15/91 Express Lanes Connector
- SR-71/SR-91 interchange
- Improvements east of I-15



SR-71 - State Route 71

Bi-County Projects

- SR-91 Corridor Operations Project
- General-purpose lane addition (SR-241 to SR-71)
- SR-241/SR-91 Tolloed Express Lanes Connector



SR-241 – State Route 241

Project Sequencing

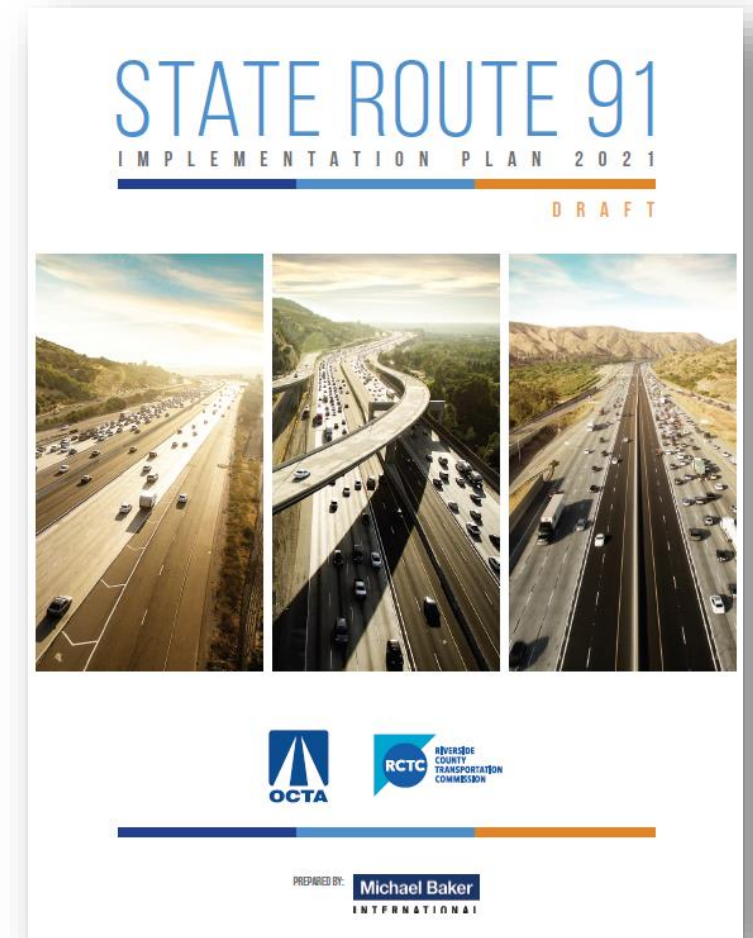
- Allows for streamlining of the SR-241/SR-91 Tolloed Express Lanes Connector while minimizing impacts to the 91 corridor
- Proposes the following sequence of project implementation:
 1. 15/91 Express Lanes Connector
 2. SR-91 Corridor Operations Project
 3. SR-71/SR-91 Interchange Improvements*
 4. SR-241/SR-91 Tolloed Express Lanes Connector



*SR-241/SR-91 Tolloed Express Lanes Connector is not dependent upon completion of SR- 71/SR-91 interchange improvements

Recommendation/Next Steps

- Receive and file as an information item
- Continue project implementation efforts
- Continue seeking external funding opportunities





June 7, 2021

To: Regional Planning and Highways Committee
From: Darrell E. Johnson, Chief Executive Officer
Subject: Active Transportation Program Biannual Update

Overview

The Orange County Transportation Authority coordinates regional active transportation efforts in Orange County. An update on recent and upcoming activities is provided for review.

Recommendation

Receive and file as an information item.

Background

The Orange County Transportation Authority (OCTA) Board of Directors receives biannual updates on regional active transportation (bicycling and walking) projects and programs. These efforts support OCTA's vision for a multimodal transportation system.

Discussion

This report provides an update on active transportation education, safety, and evaluation programs and projects. In response to the coronavirus (COVID-19), OCTA has been adapting project and program deliverables to fit the current situation, creatively undertaking public involvement, and evaluating the effects COVID-19 is having on active transportation in Orange County.

Safety

OCTA received two grants related to Safe Routes to School (SRTS) and pedestrian safety efforts. These included the SRTS Action Plan (Action Plan) and the Safe Travels Education Program (STEP) Campaign. These two efforts deliver SRTS activities to schools and increase the reach of SRTS programs countywide.

Both projects foster continued collaboration and partnership between OCTA, school districts, the Orange County Health Care Agency, cities, law enforcement agencies, and the California Department of Transportation (Caltrans).

SRTS Action Plan

The Action Plan evaluated SRTS efforts countywide, delivered SRTS activities to schools, developed a list of action items, and identified potential agencies and organizations to lead future SRTS efforts. The final report (completed in February 2021) includes a summary of engagement activities, a needs assessment for Orange County schools, and recommendations for developing a countywide SRTS Program. The recommendations are categorized into four goals, nine supporting strategies, and 32 implementation actions (Attachment A). The four goals are: establish a countywide SRTS Program, create and sustain lasting partnerships, develop a culture of safety, and fund and implement infrastructure improvements. OCTA is currently working with stakeholders to determine lead agencies for the study recommendations. Staff will return with specific implementation recommendations by the end of the calendar year.

STEP Campaign

The STEP Campaign develops educational and encouragement activities for walking and bicycling at 25 public elementary schools serving disadvantaged communities. A range of activities will be offered based on school interest and time availability for assemblies, walk or bicycle-to-school day events, and training activities. In response to the COVID-19 pandemic, the project team adapted activities to be compatible with virtual and hybrid schooling. This included developing online modules and educational videos for various age groups focusing on safe walking and bicycling. The project is on partial hold until the end of this school year to accommodate COVID-19 restrictions but will resume outreach and engagement with schools in the upcoming fall 2021 school year. The campaign will continue through November 2022.

System Evaluation

OCTA is undertaking several initiatives to better understand how active transportation users experience Orange County's transportation system. These projects include the Bike Gap Closure Feasibility Study and the Cyclic Counts Program.

Bike Gap Closure Feasibility Study

A comprehensive assessment will evaluate three key bikeway gaps in Orange County. Regional bikeway trails in central and south Orange County, as well as the Cross County Connector bikeway (Attachment B) will be studied. The study will recommend a backbone network that links to other regional and local bikeways. It will also provide grant-ready cost estimates and trail alignments, which can be used by cities to pursue funding opportunities for implementation. The project is funded by \$160,000 in Caltrans Sustainable Community Grant funds and \$40,000 in State Transportation Improvement Program planning, programming, and monitoring funds. The project was initiated in April 2021 and will be completed by spring 2023.

Cyclic Counts Program

This program kicked off in April 2020, and collected bicycle counts at 120 locations throughout Orange County between May 1 and June 6, 2020 (not including Memorial Day weekend). Assessing changes in active transportation travel behavior during the pandemic presented a unique opportunity for data collection. When using this data in the future, it will be noted that it was collected during the pandemic. This data will provide critical information for local agencies for grant applications, evaluation of existing facilities, and assist with decision making about where to locate facilities in the future. Additional counts (approximately 100 locations) will take place during May and June of 2021 to complete the project.

Grant Applications

OCTA submitted an Active Transportation Program Cycle 5 grant application to fund the environmental clearance phase of the Garden Grove-Santa Ana Rails-to-Trails Gap Closure Study (Attachment C). The grant application is to study a potential bikeway on a four-mile section of the Pacific Electric Right-of-Way between Raitt Street and Euclid Street. This project has been consistently identified in planning documents as an important gap closure. The trail would provide direct bicycle and pedestrian access to downtown Garden Grove and Santa Ana, as well as several regional trails in central Orange County. The funding request is for \$3 million and awards will be announced in June 2021.

OCTA also submitted a Southern California Association of Governments (SCAG) Sustainable Communities grant application to fund a Bus Stop Safety and Accessibility Study for OCTA's 13 busiest bus stops (Attachment D).

In coordination with the surrounding communities and local stakeholders, this project will identify first/last mile improvements in the areas directly surrounding OCTA bus stops to facilitate better connections between the adjacent communities and OCTA bus stops. The funding request is for \$300,000 and awards will be announced in June 2021.

Summary

OCTA has advanced planning, education, encouragement, and enforcement efforts to improve active transportation throughout Orange County. Coordination and collaboration will continue between SCAG, Caltrans, and stakeholders to encourage and support walking and bicycling within Orange County.

Attachments

- A. Orange County Bike Connectors
- B. Safe Routes to School Action Plan Executive Summary
- C. Project Fact Sheet, Garden Grove-Santa Ana Rails-to-Trails Gap Closure Project
- D. Orange County Transportation Authority, OCTA Bus Stop Safety and Accessibility Study Caltrans Sustainable Transportation Planning Grant/SCAG Sustainable Community Grant 2021/2022 Project Summary

Prepared by:

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Approved by:

Kia Mortazavi
Executive Director, Planning
(714) 560-5741



Safe Routes to School Action Plan Executive Summary

This Safe Routes to School (SRTS) Action Plan (Action Plan) summarizes findings and recommendations for Safe Routes to School support throughout Orange County. The Action Plan recommends that the critical first step in improving SRTS in Orange County is to establish a countywide SRTS Program.

The project team assessed existing SRTS efforts already underway in the County and engaged with stakeholders and those impacted by or interested in supporting safe school travel to learn about opportunities and challenges for SRTS efforts countywide. Results of this engagement and research found that although schools, school districts and cities across Orange County are already conducting a wide range of SRTS activities and improving active transportation infrastructure, they are experiencing challenges with competing priorities as well as a lack of staff resources to dedicate to ongoing SRTS programs. Seventy percent of the County's schools fall into the top two of the three tiers of the Action Plan's needs analysis, demonstrating the opportunity and need for more support for SRTS.

The Action Plan's main recommendations include:

- 1) Establish a countywide SRTS Program,
- 2) Create and sustain lasting partnerships,
- 3) Develop a culture of safety,
- 4) Fund and build safe streets.

This Action Plan includes specific actions and strategies to achieve its four main recommendations, as well as appendices of further resources to support implementation of SRTS activities across the County.

Project Fact Sheet

GARDEN GROVE - SANTA ANA RAILS-TO-TRAILS GAP CLOSURE PROJECT

LENGTH
4 miles

AFFECTED CITIES
Garden Grove and Santa Ana

AT A GLANCE

PROJECT COST:

Approximately \$42,327,000

FUNDING:

Requesting funds for Project Approval & Environmental Document (PA&ED):
\$3,000,000

Plans, Specifications, and Estimate (PS&E): \$3,871,000

Right-of-Way Acquisition: \$8,571,000

Construction: \$26,885,000

Fact Sheet Updated 7/2020

For questions, please contact
Peter Sotherland,
Active Transportation Coordinator
at (714) 560-5386 or
psotherland@octa.net



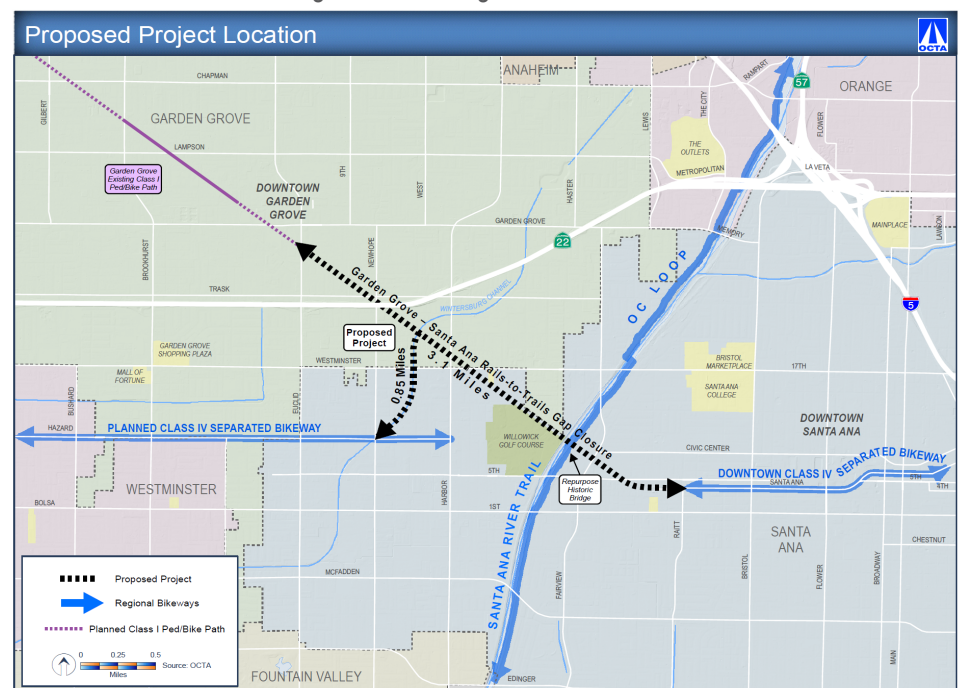
Overview

The Garden Grove - Santa Ana Rails-to-Trails Gap Closure is a four-mile Class I multi-use path which will transform 3.1 miles of OCTA-owned former Pacific Electric corridor and 0.85-mile of the Wintersburg Channel. The project is located between the two cities' downtown areas and is surrounded by high-traffic streets and disadvantaged neighborhoods providing a critical connection with public access the trail from 15 different entry points.

Active Transportation Program funds are being sought for the Project Approval and Environmental Document (PA&ED) phase to support advancing subsequent project phases to be led by the cities of Garden Grove and Santa Ana.

Benefits

The Garden Grove - Santa Ana Rails-to-Trails Gap Closure will increase the use of active transportation travel modes, provide a no-cost, zero-emission transportation alternative, enhance safety and mobility for non-motorized users, facilitating travel away from high-speed and high-volume traffic in several disadvantaged communities. This trail project will link two downtown cities and connect to the Santa Ana River Trail, part of 66-mile Class I OC Loop bikeway, which is 88% complete. The OC Loop connects to beaches, 200 parks, 180 schools, three Metrolink stations and 17 cities. Additionally, the project will result in greenhouse gas emissions reduction, improved air quality and public health in communities with higher than average rates of asthma and cardiovascular disease.





ORANGE COUNTY TRANSPORTATION AUTHORITY
OCTA BUS STOP SAFETY AND ACCESSIBILITY STUDY
CALTRANS SUSTAINABLE TRANSPORTATION PLANNING GRANT/
SCAG SUSTAINABLE COMMUNITY GRANT
2021/2022 PROJECT SUMMARY

PROJECT SUMMARY AND FACTS

PROJECT SCOPE

The Orange County Transportation Authority (OCTA) submitted the OCTA Bus Stop Safety and Accessibility Study for Caltrans Sustainable Transportation Planning Grants 2021/2022 funding and Southern California Association of Governments (SCAG) Sustainable Community Grant 2021/2022. OCTA will hire a consultant to lead walk audits and preparation of a report detailing pedestrian accessibility and safety improvements in the areas surrounding the OCTA bus stops with highest ridership in Orange County. The evaluation and recommendations will focus on pedestrian-specific improvements within one fourth mile of these bus stops. The evaluation would position cities for future implementation of infrastructure improvements at the highest ridership locations. The walk audits and recommendations will include public input and be coordination with local jurisdictional staff. The study will include approximately 12 locations that include 41 of the busiest bus stops (300+ riders per day) and serve over 12,500 daily riders in four jurisdictions (Anaheim, Costa Mesa, Garden Grove, and Santa Ana).

PROJECT COST ESTIMATES

Fund Source (Caltrans)	Total
Planning Grant Request	\$265,500
Matching Funds	\$34,500
Total	\$300,000

Fund Source (SCAG)	Total
Planning Grant Request	\$300,000
Matching Funds	\$0
Total	\$300,000



ORANGE COUNTY TRANSPORTATION AUTHORITY
OCTA BUS STOP SAFETY AND ACCESSIBILITY STUDY
CALTRANS SUSTAINABLE TRANSPORTATION PLANNING GRANT/
SCAG SUSTAINABLE COMMUNITY GRANT
2021/2022 PROJECT SUMMARY

PROJECT SUMMARY AND FACTS

SUMMARY OF BENEFITS

The evaluation will focus on strengthening pedestrian access for transit users and the public near OCTA bus stops. Recommendations will use industry standardized best practices and will build on recommendations included in the OC Active report and the Systemic Safety Plan. Recommendations will include cost estimates such that they can be used by local jurisdictions to secure grants or allocate funding for implementation.

The study will provide the following benefits.

- Identify deficiencies in the pedestrian system and develop recommendations to improve safety.
- Address the needs of disadvantaged communities - All but one of the bus stops directly serve state-identified disadvantaged communities. In addition, 36 of the 41 bus stops are located within the City of Santa Ana, a community where 55 percent of the residents do not have access to an automobile and up to 50 percent of residents are transit dependent.
- Engage the public and stakeholders with focused attention on disadvantaged communities. Additionally, the project development team consisting of agency staff from project jurisdictions will be asked for the best methods to engage disadvantaged community members within their agency. This customized approach will allow for varying outreach depending on local demographics and cultural norms.
- Encourage increased travel by walking and riding the bus to reduce vehicle miles traveled and greenhouse gas emissions (GHG).
- Position cities to secure funding for grant-ready projects.
- Promote the region's sustainable transportation choices.



ORANGE COUNTY TRANSPORTATION AUTHORITY

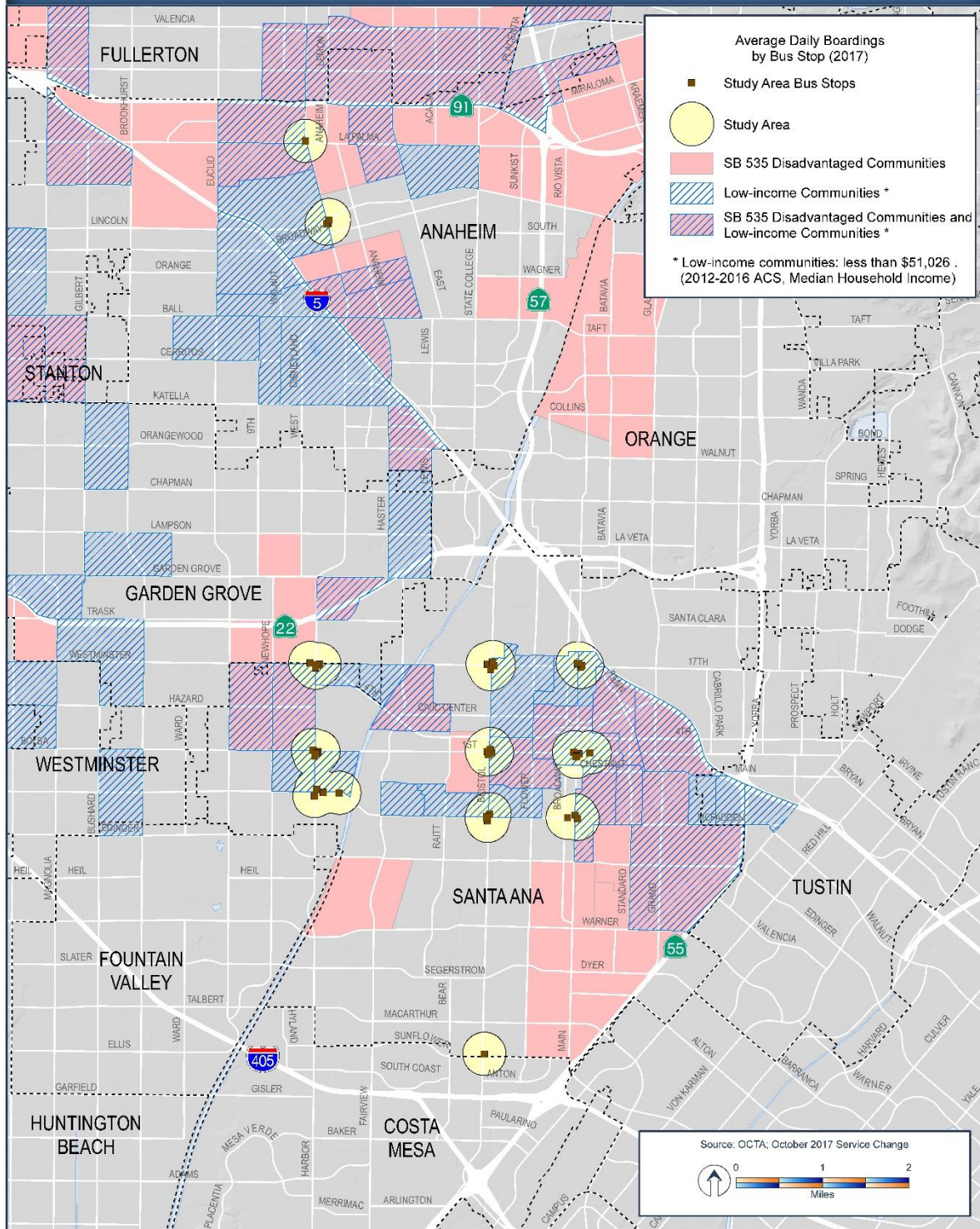
OCTA BUS STOP SAFETY AND ACCESSIBILITY STUDY
CALTRANS SUSTAINABLE TRANSPORTATION PLANNING GRANT/
SCAG SUSTAINABLE COMMUNITY GRANT
2021/2022 PROJECT SUMMARY

PROJECT SUMMARY AND FACTS

The study will address the grant program objectives as follows.

- Sustainability - Promotes reliable and efficient mobility for all residents of Orange County, while helping to meet the State's GHG reduction goals through the promotion of sustainable transportation modes.
- Preservation - Preserves the transportation system through promoting energy conservation, improving the quality of life, and promoting consistency between transportation improvements and local planning growth and economic development patterns.
- Mobility - Increases the access to non-single occupancy vehicle (SOV) travel options.
- Safety - Increases the safety and/or security of the transportation system for all users.
- Innovation - Promotes innovative designs to improve the accessibility and social equity of the transportation system and provides sustainable transportation options.
- Economy - Supports the economic vitality of Orange County through increased activity and reduced barriers to employment.
- Health - Decreases exposure to local pollution sources through the promotion of non-SOV trips, reduces serious injuries and fatalities on the transportation system by reducing congestion, promotes strategies to support pedestrian and bicycle travel options, and promotes physical activity.
- Social Equity - Promotes transportation solutions that focus on and prioritize the needs of communities most affected by poverty, air pollution, and climate change. Promotes solutions that integrate community values with transportation safety and accessibility while encouraging greater than average public involvement in the transportation decision-making process.

OCTA Bus Stop Safety and Accessibility Study



10/6/2020

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Active Transportation Program Biannual Update



Safety

Key Efforts with the Orange County Health Care Agency

- SRTS Action Plan
 - Strategic plan for a countywide SRTS Program
 - Evaluates countywide efforts and recommends actions to increase reach
- Safe Travels Education Program (STEP) Campaign
 - Education and encouragement activities at 25 disadvantaged area schools countywide

SRTS - Safe Routes to School



Virtual Walk to School Day Calendar

SRTS Action Plan

Action Plan

- Evaluate ongoing SRTS efforts
- Deliver SRTS activities to schools
- Develop framework for countywide SRTS Program

Plan Framework

- Four Goals
- Nine supporting strategies
- 32 recommended actions



SRTS Action Plan

Next Steps:

- Final SRTS Action Plan Working Group meeting June 9
 - Feedback focused on next steps and implementation
- Plan for future programming for Orange County schools, as well as establishing Countywide SRTS Program



Safe Travels Education Program (STEP)

Project Progress

- School recruitment for STEP Campaign activities
 - 12 schools currently enrolled in the program
 - Ramping up recruitment activities as schools return in fall 2021
- Developing fall activities
 - Working group sub-committee to focus on school outreach
 - Virtual walking and bicycling education modules
- Project completion in November 2022

System Evaluation

Cyclic Counts

- May/June 2021 (weekday/Saturday)
- Bidirectional counts at 100 additional locations
- Continues the development of countywide bicycle flow map



Example of count camera, counts unlimited

Bicycle Gap Closure Study

- Bikeway gap assessment for central and southern loops and a cross county bikeway
- Recommend cost-effective solutions
- Develop cost estimates
 - Position local agencies to advance bikeways projects
- Project kicked-off in May 2021, to be completed by summer 2022



Grant Applications

- Garden Grove – Santa Ana Gap Closure Study
 - Applied for \$3 million in ATP Cycle 5 funding
 - PA/ED phase of project
- Bus Stop Safety and Accessibility Study
 - Applied for \$300,000 in SCAG Sustainable Communities Funding
 - Study focusing on safety and accessibility improvements within ¼ mile of OCTA's 13 busiest bus stops



Rendering of proposed Class I facility on PE ROW

ATP - Active Transportation Program
OCTA - Orange County Transportation Authority
PA/ED - Project Approval and Environmental Document

PE ROW - Pacific Electric Right-of-Way
SCAG - Southern California Association of Governments

Next Steps

- Return with updates on active transportation efforts including:
 - Bicycle gap closure study and STEP Campaign
 - Bicycle count data
 - Partnering with stakeholders
 - Recommendations related to a countywide SRTS Program
- Seek funding opportunities to support active transportation activities
 - Continue working with local agencies and community groups to advance active transportation measures for all Orange County residents
 - Continue to monitor the coronavirus pandemic and adapt activities to accommodate safe protocols



June 7, 2021

To: Regional Planning and Highways Committee

From: Darrell E. Johnson, Chief Executive Officer

Subject: Transportation Control Measures - Substitute Program of Projects

Overview

The Orange County Transportation Authority, the Transportation Corridor Agencies, and the County of Orange have made project delivery commitments to specific projects that fulfill short-term air quality conformity requirements. Based on air quality regulations, these previously planned projects, known as transportation control measures, must be implemented by December 2022 and December 2023. If not, substitute projects with an equivalent air quality benefit must be delivered in a similar timeframe. Due to project delays, a substitute program of projects is recommended to move forward for implementation. Recommendations are presented to initiate the substitution process with the Southern California Association of Governments, and authorization to negotiate and execute a cooperative agreement with the Transportation Corridor Agencies for toll road improvements within the existing toll facility rights-of-way.

Recommendations

- A. Direct staff to work with the Southern California Association of Governments to replace the previously planned projects in the Federal Transportation Improvement Program with the substitute program of projects included in this report.
- B. Authorize the Chief Executive Officer, or his designee, to negotiate and execute a cooperative agreement with the Transportation Corridor Agencies for improvements on existing toll facilities.

Background

Transportation control measures (TCM) are specific transportation projects and programs committed to help improve air quality. TCMs are required by the federal Clean Air Act (CAA) in areas that do not meet the National Ambient Air Quality Standards. The South Coast Air Basin, including Orange County, is one

of those areas in the Southern California Association of Governments (SCAG) region. TCMs are considered committed for timely implementation when funds have been programmed for implementation within the first two years of a Federal Transportation Improvement Program (FTIP). When a committed TCM cannot be delivered or will be significantly delayed, the substitution of the TCM follows a process specified in the federal CAA §176(c). In that event, the implementing agencies, the county transportation planning agency, and SCAG work together to overcome the delay or identify a substitute set of projects with similar air quality benefits, serving the same county, and with a demonstrated financial commitment.

The County of Orange, the Orange County Transportation Authority (OCTA), and Transportation Corridor Agencies (TCA) have previously committed TCM projects in the current FTIP for which completion is delayed or deferred beyond December 2022 and December 2023. These committed TCM projects are described below.

Hazard Avenue Bikeway

The County of Orange previously committed to complete the Hazard Avenue Bikeway project (FTIP Project ID: ORA170205) by December 2023. This project would have added approximately four miles of Class IV bikeway on Hazard Avenue between Goldenwest Street and Euclid Avenue. As part of this project, the number of lanes on Hazard Avenue would have been modified from four lanes to two lanes with a two-way left-turn lane median. The County of Orange has put this project on hold due to a lack of community support, and the December 2023 implementation date cannot be met.

15 Expansion Paratransit Vans

OCTA previously committed to purchase 15 Expansion Paratransit Vans (FTIP Project ID: ORA130099) by December 2022. These vans would have expanded OCTA's existing paratransit fleet. However, consistent with the OCTA Bus Fleet Plan, these expansion vehicles are no longer needed in the near term. This is particularly true following the impacts of the coronavirus pandemic, which has resulted in a reduction in the use of paratransit service.

Placentia Metrolink Station

OCTA previously committed to complete the Placentia Metrolink Station (FTIP Project ID: ORA030612) by December 2022. This project is planned to add a new Metrolink station in the City of Placentia near the intersection of Crowther Avenue and Melrose Street, to be served by Metrolink's 91 Line.

The project will include the construction of a parking facility to serve the station. Completion of this TCM project has been delayed beyond the committed completion date due to protracted negotiations with BNSF Railway, which owns the tracks that will serve the station.

TCA Capital Projects

TCA previously committed to deliver three capital improvement projects along portions of TCA facilities within Orange County by December 2022 that are further described below.

- The San Joaquin Hills Transportation Corridor (State Route 73) would have added an additional mixed-flow lane in each direction, plus climbing and auxiliary lanes for 15 miles between Interstate 5 (I-5) in San Juan Capistrano and Irvine (FTIP Project ID: 10254).
- The Eastern Transportation Corridor (State Route 261) would have added an additional two mixed-flow lanes in each direction, plus climbing and auxiliary lanes for the length of the facility (26.4 miles) between I-5 via State Route 261 and State Route 133 to State Route 91 (FTIP Project ID: ORA050).
- The Foothill Transportation Corridor (State Route 241) would have added an additional two mixed-flow lanes in each direction, plus climbing and auxiliary lanes for 12.7 miles between Oso Parkway and State Route 261 (FTIP Project ID: ORA051).

These designated TCM projects have been deferred by TCA, and TCA has indicated that the agency is committed to delivering these projects post-2035. Further, the agency has committed to pursue key, strategic widening projects that will address congestion on TCA facilities prior to 2035 (Attachment A). To memorialize these commitments, an OCTA/TCA cooperative agreement is recommended that would require TCA to:

- Implement key strategic widening projects by 2035 that achieve the same air quality benefit as the prior projects; and
- Continue to provide updates of its annual Capital Improvement Program and promptly notify OCTA of any delays to the strategic widening projects; and
- Provide full funding to OCTA to implement an alternative program of projects (that provide an equivalent air quality benefit as the prior projects) should TCA not implement the strategic widening projects by 2035.

With Board of Directors' (Board) authorization, staff will work with TCA to negotiate and execute a cooperative agreement consistent with these terms.

Discussion

For air quality conformity purposes, OCTA is proposing a substitute program of projects as a replacement to these previously planned TCMs. The recommended substitute program of projects consists of three signal synchronization projects spanning approximately 33 miles of roadway. The substitute program of projects will be implemented by December 2022, and have equivalent air quality benefits to the region as the previously planned TCMs described above. Current funding, as part of Measure M2, will be used for these three signal synchronization projects. Project descriptions and air quality modeling results are discussed below.

Portola Parkway Signal Synchronization Project (SSP)

The Portola Parkway SSP implements optimized signal timing between Paloma Parkway to Plano Trabuco Road. The project includes select upgrades to key equipment including Advanced Traffic Controllers (ATC), communications, and detection. The project is being implemented by OCTA and is anticipated to cost approximately \$2,200,000, is 7.1 miles long, and will be completed by December 2022.

1st Street/Bolsa Chica Street SSP

The 1st Street/Bolsa Chica Street SSP implements optimized signal timing between Bolsa Chica Street to Newport Avenue. The project includes select upgrades to key equipment including ATC, communications, and detection. The project is being implemented by OCTA and is anticipated to cost approximately \$3,800,000, is 13.1 miles long, and will be completed by December 2022.

Alton Parkway SSP

The Alton Parkway SSP implements optimized signal timing between Red Hill Street to Portola Parkway. The project includes select upgrades to key equipment including ATC, communications, and detection. The project is 12.8 miles. The project is being implemented by OCTA and is anticipated to cost approximately \$3,900,000, is 12.8 miles long, and will be completed by December 2022.

Air Quality Analysis Findings

The air quality forecasts with the previously planned TCM projects were compared with those of the substitute program of projects using a stepwise method built on SCAG's emissions methodology, the Orange County Transportation Analysis Model, and the California Air Resources Board Emission Factors (EMFAC) model. The EMFAC is used throughout California to calculate emission rates from motor vehicles, such as passenger cars and heavy-duty trucks operating on freeways and local roads. Outputs are measured in daily tons of emissions for three forecast years (2022, 2037, and 2045). OCTA compared the results of all the projects in the approved FTIP both with the previously planned projects and with the substitute program of projects. The results are included in Attachment B and indicate that the substitute program of projects will have generally equivalent air quality benefits in Orange County and the region.

Next Steps

With Board approval, staff will initiate the TCM replacement process with SCAG and negotiate and execute a cooperative agreement with TCA, consistent with the terms outlined in this report. This process includes obtaining formal approval of SCAG's Transportation Conformity Working Group and related committees. This process also includes concurrence with the federal Environmental Protection Agency to replace the previously planned projects with the substitute program of projects to provide equivalent air quality benefits. Finally, the three SSPs will be programmed into the FTIP and will replace the previously planned projects, which will be removed from the FTIP.

Summary

A substitute program of TCM projects is recommended for Board approval to meet federal air quality regulations. The substitute program of projects offers equivalent emissions reduction, serves a similar geographic area, and meets other criteria required by the SCAG.

Attachments

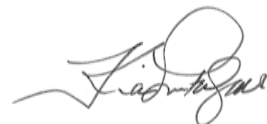
- A. Letter from Valarie McFall, Deputy Chief Executive Officer, Transportation Corridor Agencies, to Kurt Brotcke, Orange County Transportation Authority, Subject: Request to Substitute Transportation Control Measures, dated May 18, 2021
- B. Air Quality Analysis

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San Joaquin Hills
Transportation
Corridor Agency
Chair: Patricia Kelley
Mission Viejo



Foothill/Eastern
Transportation
Corridor Agency
Chair: Peggy Huang
Yorba Linda

May 18, 2021

Kurt Brotcke
Orange County Transportation Authority
550 South Main Street
Orange, CA 92863

Subject: Request to Substitute Transportation Control Measures

Dear Mr. Brotcke:

The Transportation Corridor Agencies (TCA) appreciates the Orange County Transportation Authority's (OCTA) assistance with transferring the Transportation Control Measure (TCM) designation from the San Joaquin Hills (FTIP Project ID: ORA10254) and the Foothill/Eastern Transportation Corridors (FTIP Project IDs: ORA050 and ORA051) to an OCTA program of projects that achieves an equivalent air quality benefit by December 2022.

As we have discussed, to complete the needed TCM substitution OCTA and TCA will enter into a cooperative agreement that will clarify the roles and responsibilities of our agencies in the TCM transfer process. It will also provide that the current TCA TCM's will be deferred until 2035, providing all agencies sufficient time to assess congestion levels post the COVID-19 pandemic and advance projects accordingly. As part of the cooperative agreement, TCA will agree to pursue key, strategic widening projects to address congestion on The Toll Roads prior to 2035. To memorialize these commitments, the cooperative agreement between our agencies would require TCA to:

- Implement key strategic widening projects by 2035 that achieve the same air quality benefit as the prior projects; and
- Continue to provide updates of its annual Capital Improvement Program and promptly notify OCTA of any delays to the strategic widening projects; and
- Provide full funding to OCTA to implement an alternative program of projects (that provide an equivalent air quality benefit as the prior projects) should TCA not implement the strategic widening projects by 2035.

TCA remains committed to delivering its Board approved projects and the transportation benefit The Toll Roads provide. Again, I appreciate your assistance and look forward to working with your agency to complete the needed TCM substitution. Should you have any questions, please do not hesitate to contact me.

Sincerely,

Valarie McFall
Deputy Chief Executive Officer

Air Quality Analysis

Year 2022

Summer Emissions - Ozone (Tons/Day)

	With Previously Committed	With Proposed Substitute
ROG	14.1	14.1
NOx	25.5	25.5

CO, NO_x - Winter Emissions (Tons/Day)

	With Previously Committed	With Proposed Substitute
NOx	27.1	27.1
CO	126.6	126.6

PM₁₀, PM_{2.5} - Annual Emissions (Tons/Day)

	With Previously Committed	With Proposed Substitute
ROG	13.9	13.9
NOx	27.5	27.5
PM10	4.4	4.4
PM2.5	2.0	2.0

Air Quality Analysis

Year 2037

Summer Emissions - Ozone (Tons/Day)

	With Previously Committed	With Proposed Substitute
ROG	8.9	8.9
NOx	15.8	15.8

CO, NO_x - Winter Emissions (Tons/Day)

	With Previously Committed	With Proposed Substitute
NOx	16.7	16.7
CO	87.1	87.1

PM₁₀, PM_{2.5} - Annual Emissions (Tons/Day)

	With Previously Committed	With Proposed Substitute
ROG	8.8	8.8
NOx	16.9	17.0
PM10	4.5	4.5
PM2.5	1.9	1.9

Air Quality Analysis

Year 2045

Summer Emissions - Ozone (Tons/Day)

	With Previously Committed	With Proposed Substitute
ROG	6.2	6.2
NOx	10.7	10.7

CO, NO_x - Winter Emissions (Tons/Day)

	With Previously Committed	With Proposed Substitute
NOx	11.2	11.2
CO	66.0	66.1

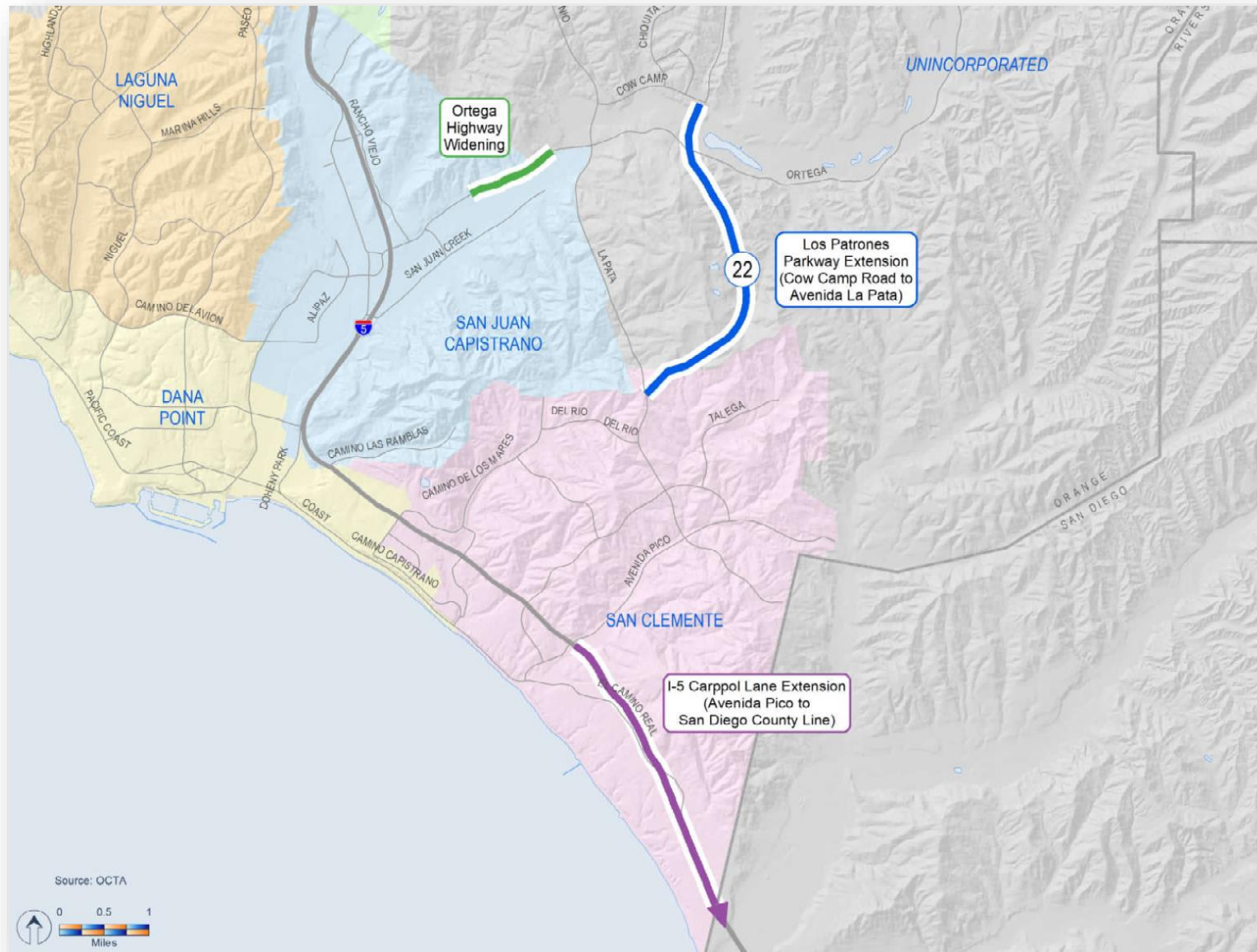
PM₁₀, PM_{2.5} - Annual Emissions (Tons/Day)

	With Previously Committed	With Proposed Substitute
ROG	6.1	6.1
NOx	11.3	11.3
PM10	4.5	4.5
PM2.5	1.8	1.8

CO – Carbon Monoxide
NOx – Oxides of Nitrogen
PM – Particulate Matter
ROG – Reactive Organic Gas

Update on Interstate 5 Improvement Project from San Diego County Line to Avenida Pico

Interstate 5 (San Diego County to Avenida Pico)



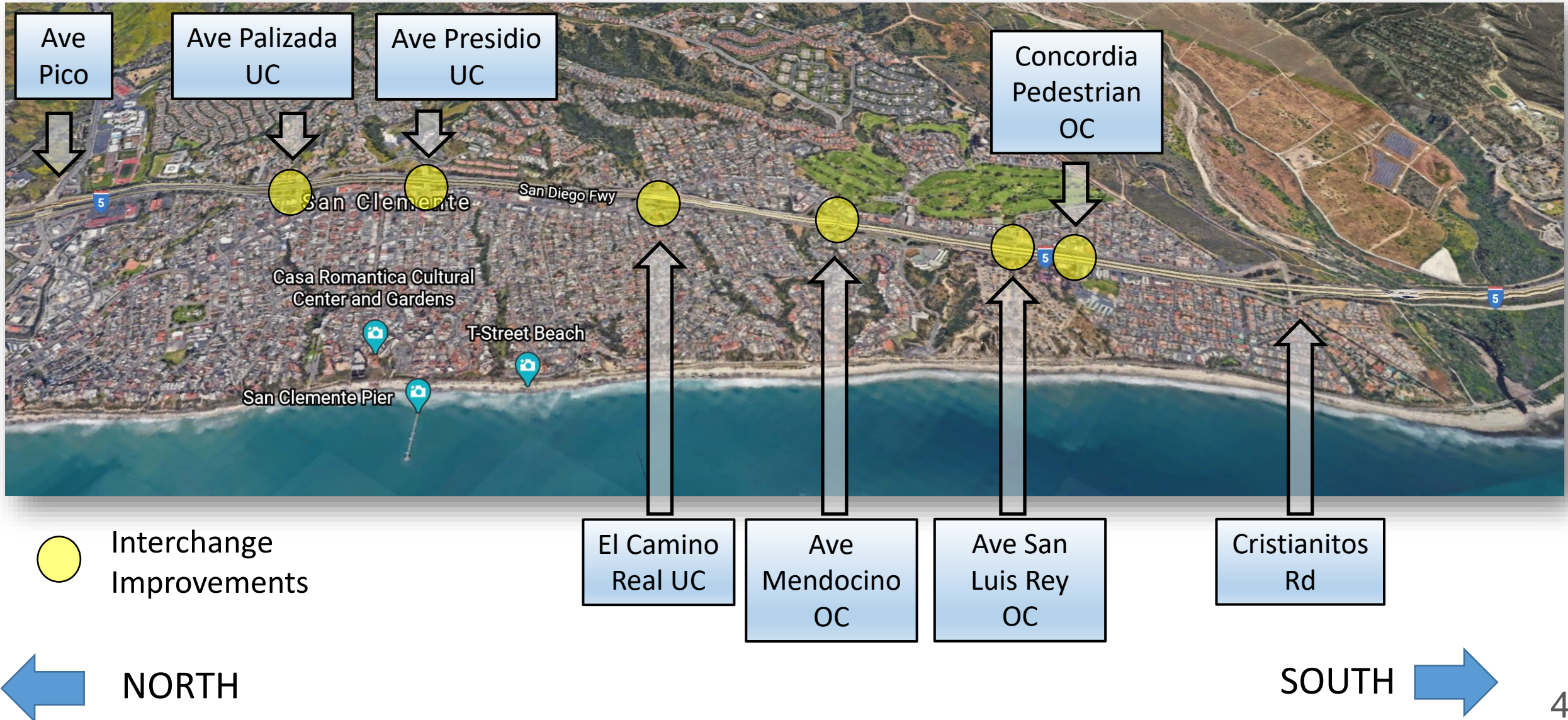
Interstate 5 (San Diego County to Avenida Pico)



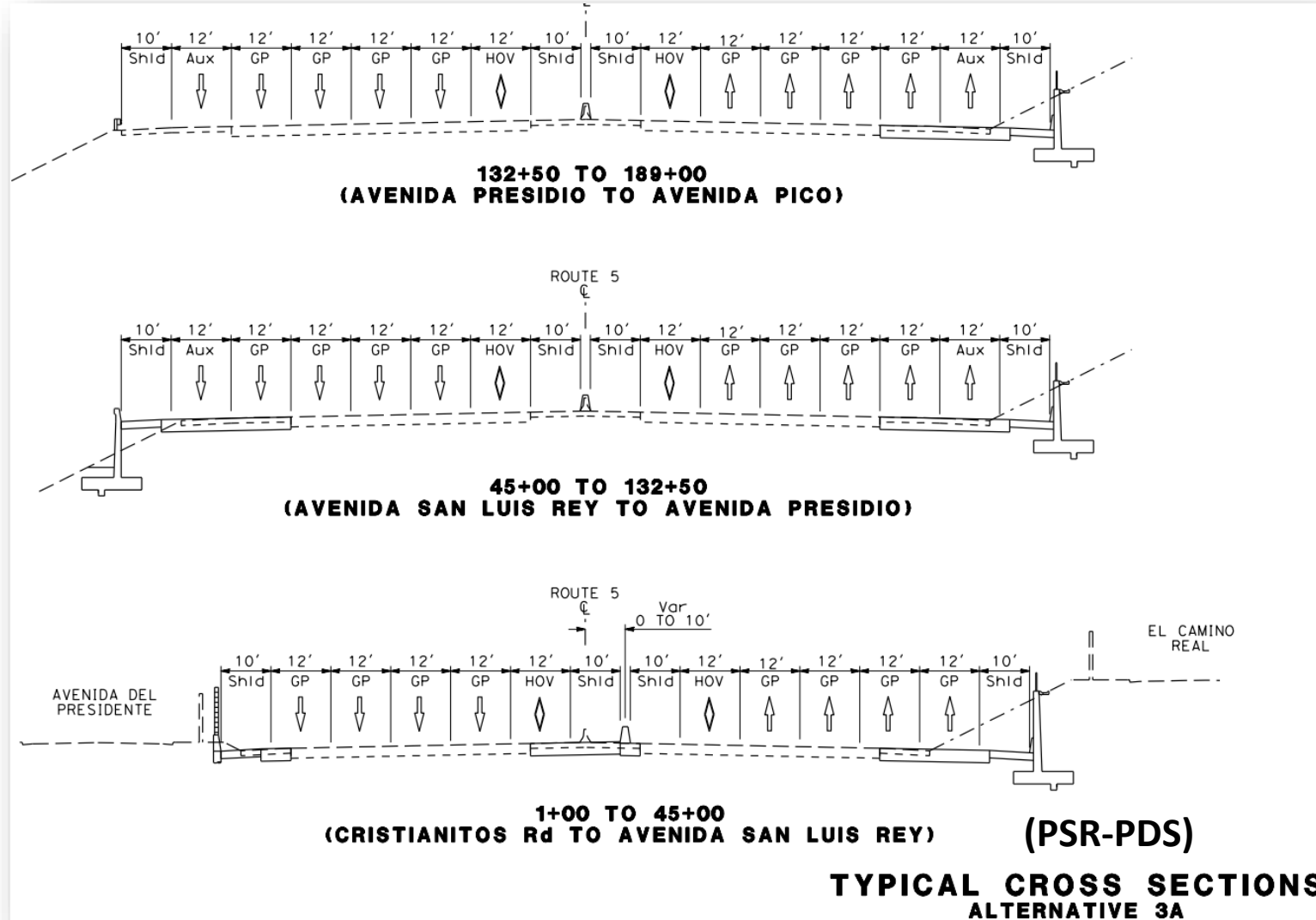
- Project length is 4.8 miles
- Environmental consultant work began on March 1, 2021
- OCTA – implementing agency
- Caltrans – NEPA/CEQA lead agency
- City of San Clemente – active member of the PDT

OCTA – Orange County Transportation Authority
Caltrans – California Department of Transportation
NEPA – National Environmental Policy Act
CEQA – California Environmental Quality Act
PDT – Project Development Team

Interstate 5 (San Diego County to Avenida Pico)

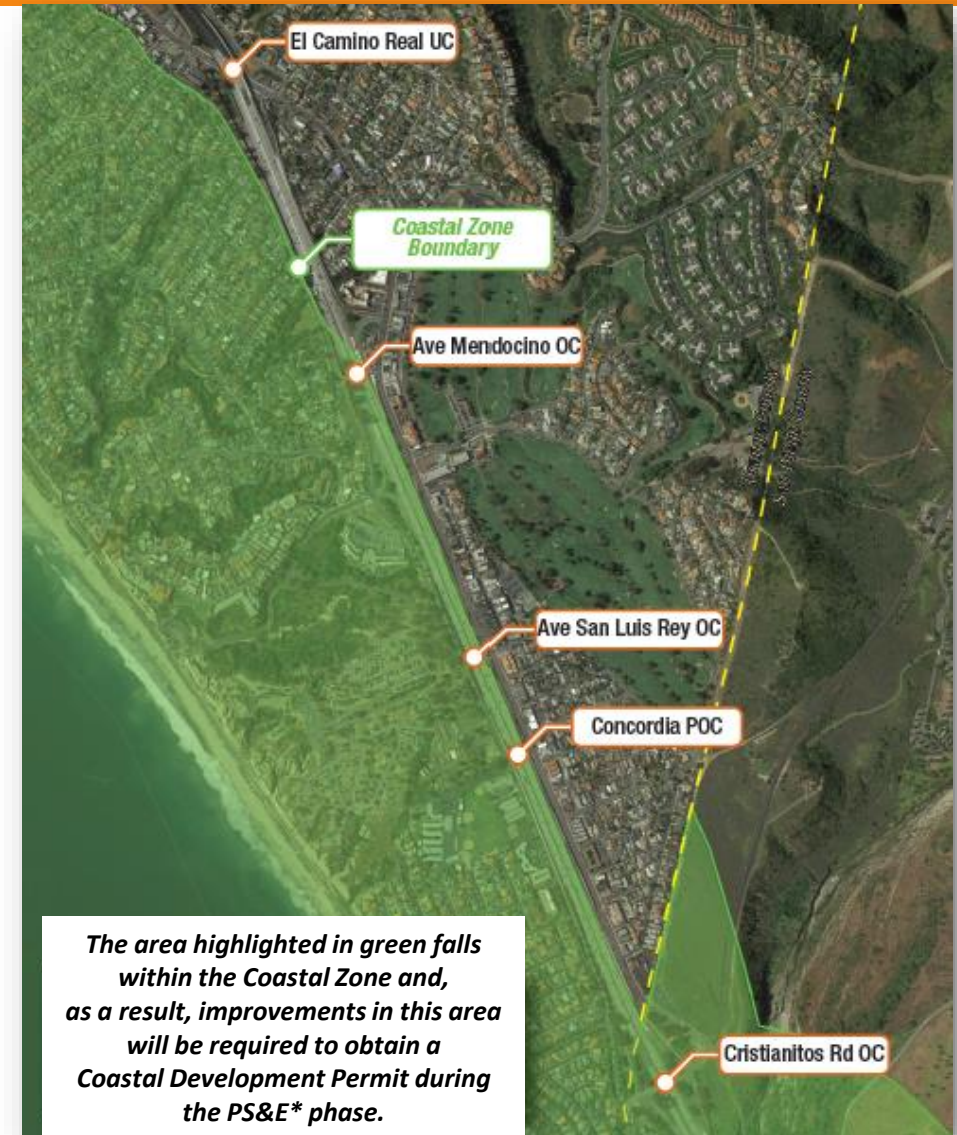


Interstate 5 (San Diego County to Avenida Pico)



Special Environmental Considerations

- Project limits within the coastal zone boundary
- CEQA/NEPA documentation anticipated to be an Environmental Impact Report/Environmental Assessment
- Incorporating SB 743 guidance related to vehicle miles traveled on the State Highway System from Caltrans



*PS&E = plans, specifications, and estimates

Current and Near-Term Activities

- Compilation of aerial mapping and topography
- Developing mapping for environmental studies
- Initiating geometric development
- Preliminary traffic analysis



Milestone Schedule

Milestone	Anticipated Timeframe
Contract Execution/Notice to Proceed	March 1, 2021
Public Scoping Meeting	July 2022
Completion of Environmental Technical Studies	Fall 2022
Completion of Draft Environmental Document	Spring 2023
Completion of Draft Project Report	Spring 2023
Public Circulation of Environmental Document	Spring 2023
Public Hearing	Spring 2023
Final Environmental Document/Project Report	Fall 2023

Public Outreach



- Outreach support consultant on board by fall 2021
- Public scoping meeting anticipated in July 2022
- Continuing coordination with City of San Clemente and Caltrans



Questions?





Orange County Transportation Authority

Fiscal Year 2021-22 Budget Workshop Questions & Answers

1. Question: What compensation categories are available for administrative employees?

Answer: There are two compensation pools under which an administrative employee can be recognized, which are the merit pool and the special award pool. The merit pool is available for management to provide base building increases for employees based solely on the employee's annual performance. A merit increase is not guaranteed, and it is the only form of base building increase available for an administrative employee. Administrative employees do not receive any cost-of-living or step increase adjustments.

The special award pool provides management the opportunity to reward an employee based on individual outstanding achievements throughout the year. This award is a lump sum award and is non-base building.

2. Question: How did OCTA handle the merit and special award pools in the current fiscal year (FY) budget?

Answer: Due to the economic uncertainty surrounding the onset of coronavirus (COVID-19), management suspended the merit and special award programs for FY 2020-21.

3. Question: What are the two different categories of coach operators at OCTA?

Answer: OCTA directly operates 60 percent of fixed-route bus service and utilizes a contractor to operate 40 percent of the service. Both OCTA employed coach operators and the contracted coach operators are represented employees and subject to separate collective bargaining agreements. OCTA is only party to the collective bargaining agreement for OCTA employed coach operators. The collective bargaining agreement for the contracted coach operators is handled by the contractor, currently First Transit.

Question: Why are Los Angeles – San Diego – San Luis Obispo (LOSSAN) salaries and benefits are increasing by 18 percent and OCTA salaries and benefits only increasing by three percent?

Answer: The increase in LOSSAN salaries and benefits are comprised of the net effect of various factors including proposed merit, special awards, benefit costs, and changes in proposed staffing levels. In addition, unlike the amended budget, the proposed budget includes a full year's cost impact of changes in the LOSSAN programs staffing structure. OCTA is fully reimbursed by the State for LOSSAN salaries and benefits costs.



Orange County Transportation Authority

Fiscal Year 2021-22 Budget Workshop Questions & Answers

4. Question: Why is interest expense lower in the FY 2021-22 proposed budget when compared to the current FY 2020-21 budget?

Answer: OCTA's budget includes debt service from three programs, which are the Measure M2 (M2) Program, 91 Express Lanes Program, and the 405 Express Lanes Program. Both the M2 and 91 Express Lanes Programs have fixed-rate, level debt structures. However, the budget for the 405 Express Lanes debt is currently based on estimated drawdowns from a Transportation Infrastructure Finance and Innovation Act (TIFIA) loan. OCTA did not need to make the anticipated drawdown in FY 2020-21, which lowered the actual interest expense in FY 2020-21 and FY 2021-22. As a result, the budget in FY 2021-22 reflects an anticipated lower interest expense given the lack of a drawdown in FY 2020-21.

5. Question: Explain the use of prior year's designations to fund capital expenditures?

Answer: OCTA's major operating programs such as the Bus, Rail and 91 Express Lanes programs typically do not issue debt to fund their capital expenditures. Each year these programs save (designate) funds as part of the budget process to fund future capital expenditures. In any given year, each of these programs saves (designates) funds for future capital expenditure, as well as spends funds that were saved in prior years (use of prior year's designations) to fund capital expenditures in the budget year. For example, in the FY 2021-22 budget it is anticipated that the bus program will save \$47.8 million for future capital expenditures, but also spend \$19.1 million in prior year's designations to fund capital expenditures in the budget year.

6. Question: Is the proposed budget balanced without any unplanned use of reserves?

Answer: Yes, the proposed budget is balanced without any unplanned use of reserves.

7. Question: Does approval of the proposed budget authorize the approval of any specific project?

Answer: The budget does not approve specific projects but rather implements OCTA's programs and projects based on prior Board of Directors (Board) direction. Approval of the budget appropriates funds for the FY and is only one step in expending funds, because procurement guidelines must also be met. For example, even though an item is included in the budget, procurement policy requires that all procurements greater than \$250,000 must be approved by the Board. As a result, almost all items included within the budget will come back to the Board through the procurement process.



Orange County Transportation Authority

Fiscal Year 2021-22 Budget Workshop Questions & Answers

8. Question: Does the proposed budget allow OCTA to continue to deliver on the promises made under M2?

Answer: Yes. The budget is consistent with both the Next 10 Plan and Comprehensive Business Plan, both of which have been recently approved by the Board. These plans both demonstrate OCTA's ability to deliver the M2 Program as promised.

9. Question: Does the proposed budget advance any new debt?

Answer: The budget does not include any new debt issuances.

10. Question: What is the current debt coverage ratio for OCTA's debt?

Answer: Debt coverage ratios for the M2 and 91 Express Lanes Programs are included in the table below:

Program	FY 2019-20 Actual	FY 2020-21 Estimate	FY 2021-22 Budget
M2	5.6x	5.4x	5.6x
91 Express Lanes	3.5x	3.1x	2.4x

11. Question: OCTA's budget is balanced with no unplanned use of reserves, please explain what is meant by no unplanned use of reserves?

Answer: OCTA has a board-approved reserve policy which outlines the reserve requirements for each of its operating programs, which include the Bus, 91 Express Lanes and Motorist Services programs. The policy provides the operating, capital and debt service (if applicable) reserve requirements for each program. OCTA has fully funded the operating, capital and debt service reserve requirements for each of these programs. The FY 2021-22 budget was developed and balanced without any draws from the operating and debt service reserve funds for these programs. In addition, each year OCTA designates (saves) funds to pay for future capital expenditures. In future budgets, when the capital projects need to be funded, OCTA draws from the capital reserves to pay for the planned expense. This draw on reserves is considered a planned use of reserves. The FY 2021-22 budget anticipates drawing \$296 million from reserves (prior year savings) to pay for planned capital expenditures included in the budget. Though this is a draw on reserves, the funds were saved in prior years in anticipation of the expense in the current budget year and is therefore a planned use of reserves. As a result, OCTA's budget does not have any unplanned use on reserves included in the budget.