RIVERSIDE COUNTY TRANSPORTATION COMMISSION

SPECIAL MEETING AGENDA

Toll Policy and Operations Committee

Time: 10:00 a.m.

Date: August 18, 2025

Locations: MARCH FIELD CONFERENCE ROOM
County of Riverside Administrative Center
4080 Lemon Street, Third Floor, Riverside, CA 92501

COMMITTEE MEMBERS

Brian Berkson, **Chair** / Armando Carmona, City of Jurupa Valley
Toper Taylor, **Vice Chair** / Dana Reed, City of Indian Wells
Clint Lorimore / Todd Rigby, City of Eastvale
Jeremy Smith / Kasey Castillo, City of Canyon Lake
Linda Krupa / Joe Males, City of Hemet
Michael M. Vargas / Elizabeth Vallejo, City of Perris

STAFF

Aaron Hake, Executive Director
David Knudsen, Deputy Executive Director
Jennifer Crosson, Toll Operations Director

AREAS OF RESPONSIBILITY

Policies involving the Commission's Toll Facilities
Setting Tolls or Rates
Considering Contracts with Vendors Working on the Toll Program
Statewide and Federal Legislative Issues Regarding Tolling
Outreach and Marketing of the Toll Facilities
Interactions with Neighboring Jurisdictions Regarding Toll Matters
User-Based Funding Programs and Future Opportunities for Toll Facility Development in Riverside County

RIVERSIDE COUNTY TRANSPORTATION COMMISSION
TOLL POLICY AND OPERATIONS COMMITTEE

www.rctc.org

SPECIAL MEETING AGENDA*

10:00 a.m.
Monday, August 18, 2025

MARCH FIELD CONFERENCE ROOM
County of Riverside Administrative Center
4080 Lemon Street, Third Floor, Riverside, CA 92501

In compliance with the Brown Act and Government Code Section 54957.5, agenda materials distributed 72 hours prior to the meeting, which are public records relating to open session agenda items, will be available for inspection by members of the public prior to the meeting on the Commission's website, www.rctc.org.

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1. CALL TO ORDER

2. ROLL CALL

3. PLEDGE OF ALLEGIANCE

4. PUBLIC COMMENTS – *Under the Brown Act, the Board should not take action on or discuss matters raised during public comment portion of the agenda which are not listed on the agenda. Board members may refer such matters to staff for factual information or to be placed on the subsequent agenda for consideration. Each individual speaker is limited to speak three (3) continuous minutes or less.*

5. ADDITIONS/REVISIONS *(The Committee may add an item to the Agenda after making a finding that there is a need to take immediate action on the item and that the item came to the attention of the Committee subsequent to the posting of the agenda. An action adding an item to the agenda requires 2/3 vote of the Committee. If there are less than 2/3 of the Committee members present, adding an item to the agenda requires a unanimous vote. Added items will be placed for discussion at the end of the agenda.)*

6. ***CONSENT CALENDAR*** *- All matters on the Consent Calendar will be approved in a single motion unless a Commissioner(s) requests separate action on specific item(s). Items pulled from the Consent Calendar will be placed for discussion at the end of the agenda.*

6A. APPROVAL OF MINUTES – MAY 21, 2025, SPECIAL MEETING

Page 1

6B. EXPRESS LANES SPARE INTELLIGENT TRANSPORTATION SYSTEMS POLES

Page 17

Overview

This item is for the Committee to recommend the Commission take the following action(s):

1) Award a purchase order to American Right-of-Way, for the Express Lanes Intelligent Transportation Systems (ITS) Spare Poles Project (Project) in the amount of $75,918 plus a contingency amount of $7,600, for a total amount not to exceed $83,518;
2) Authorize the Executive Director or designee to approve contingency work as may be required for the Project; and
3) Authorize the Chair or Executive Director, pursuant to legal counsel review, to execute the purchase order on behalf of the Commission.

6C. KAPSCH TRAFFICCOM CHANGE ORDER 41 FOR BACK OFFICE SYSTEM UPDATES

Page 20

Overview

This item is for the Committee to recommend the Commission take the following action(s):

1) Authorize Change Order No. 041 to the Kapsch TrafficCom Agreement No. 16-31-043-00 for back-office system enhancements in the amount of $579,510; and
2) Authorize the Chair or Executive Director, pursuant to legal counsel review, to execute the agreement on behalf of the Commission.

7. 241/91 EXPRESS CONNECTOR MASTER AND OPERATING AGREEMENTS

Page 41

Overview

This item is for the Committee to:

1) Approve Agreement No. 26-31-006-00 (Master Agreement) with the Foothill/Eastern Transportation Corridor Agency (F/ETCA), California Department of Transportation (Caltrans), and Orange County Transportation Authority (OCTA) for the development and operation of the 241/91 Express Connector in substantially the form attached to this staff report;
2) Approve Agreement No. 26-31-007-00 (Operating Agreement) with the F/ETCA and OCTA for the operation of the 241/91 Express Connector in substantially the form attached to this staff report;
3) Authorize the Chair or Executive Director, pursuant to legal counsel review, to finalize and execute the agreements on behalf of the Commission;
4) Approve an appropriation adjustment authorizing the allocation of approximately $1,644,270 for construction of betterments; and
5) Approve the use of 91 Express Lanes surplus toll revenue funding the proposed betterments totaling $1,644,270.

8. ELIMINATION OF CLEAN AIR/ZERO EMISSION DISCOUNT FOR EXPRESS LANES

Page 329

Overview

This item is for the Committee to:

1) Conduct a public hearing to receive input on the proposed Amended RCTC 91 Express Lanes Toll Policy and Amended 15 Express Lanes Toll Policy Goals and Toll Policies;
2) Adopt Resolution No. 25-007, "*Resolution of the Riverside County Transportation Commission Adopting the Amended RCTC 91 Express Lane Toll Policy and Toll Schedule"*, to eliminate the Zero Emission Vehicle (ZEV) discount; and
3) Adopt Resolution No. 25-006, "*Resolution of the Riverside County Transportation Commission Adopting the Amended Interstate 15 Express Lanes Toll Policy Goals and Toll Policies"* to eliminate the Clean Air Vehicle (CAV)/ZEV discount.

9. AGREEMENT FOR EXPRESS LANES CONSULTING SERVICES

Page 386

Overview

This item is for the Committee to:

1) Award Agreement No. 25-31-101-00 to HNTB Corporation (HNTB) for express lanes consulting services for a five-year term, and two, two-year options to extend the agreement, in an amount not to exceed $15,000,000; and

2) Authorize the Chair or Executive Director, pursuant to legal counsel review, to execute the agreement, including option years, on behalf of the Commission.

10. ITEM(S) PULLED FROM CONSENT CALENDAR AGENDA

11. EXECUTIVE DIRECTOR REPORT

12. COMMISSIONER COMMENTS

Overview

This item provides the opportunity for brief announcements or comments on items or matters of general interest.

13. ADJOURNMENT

AGENDA ITEM 6A

MINUTES

RIVERSIDE COUNTY TRANSPORTATION COMMISSION

TOLL POLICY AND OPERATIONS COMMITTEE
SPECIAL MEETING MINUTES

Wednesday, May 21, 2025

1. CALL TO ORDER

The meeting of the Toll Policy and Operations Committee was called to order by Chair Brian Berkson at 12:35 p.m. at the Regional Operations Center Office, 291 Corporate Terrace Circle, Corona, CA 92879.

2. ROLL CALL

Members Present	Members Absent
Brian Berkson	Michael M. Vargas
Linda Krupa	
Clint Lorimore	
Jeremy Smith	
Toper Taylor	

3. PLEDGE OF ALLEGIANCE

Anthony Parada, Senior Management Analyst, led the Toll Policy and Operations Committee in a flag salute.

4. PUBLIC COMMENTS

There were no requests to speak from the public.

5. ADDITIONS/REVISIONS

There were no additions or revisions to the agenda.

6. CONSENT CALENDAR - *All matters on the Consent Calendar will be approved in a single motion unless a Commissioner(s) requests separate action on specific item(s). Items pulled from the Consent Calendar will be placed for discussion at the end of the agenda.*

M/S/C (Krupa/Smith) to approve the following Consent Calendar item(s):

6A. APPROVAL OF THE MINUTES – JANUARY 27, 2025, SPECIAL MEETING MINUTES

7. 91 EXPRESS LANES EXPANSION TO THREE LANES STUDY

David Thomas, Toll Project Delivery Director, presented the 91 Express Lanes expansion to three lanes study, highlighting the following areas:

- Background/Purpose for the study
  - Opened in 2017, 8-mile extension – 2 Express Lanes in each direction
  - Opened Express Lane Connector (ELC) and eastbound (EB) 2.0 in 2023
  - EB 91
    - ✓ 241/91 EC to open in 2029
    - ✓ 91 Eastbound Corridor Operations Project (ECOP) to open in 2030
  - Westbound (WB) 91
    - ✓ ELC impacts
- Concept/Feasibility
  - Existing 91 cross-section
  - Interstate 10 Express Lanes
  - Proposed cross-section
  - Median shoulder option
- Goals for study
  1. Establish desirable geometric configuration that minimizes reconstruction or widening;
  2. High-level traffic analysis to evaluate traffic benefits and operational impacts;
  3. Toll rate and revenue projections;
  4. Evaluate potential year of implementation;
  5. Estimate cost;
  6. Seek Caltrans input; and
  7. Determine next steps if needed.
- Recommendation
  - Provide direction to staff regarding a 91 Express Lanes Expansion to Three Lanes Study
    - ✓ $150,000 Parsons sole-source single-signature contract amendment
    - ✓ $150,000 Stantec sole-source single-signature contract amendment
    - ✓ 91 Surplus Toll Revenue

Vice Chair Toper Taylor asked what the data is around taking an existing sized freeway and then increasing lanes within the same size and decreasing enough space between the traffic lanes sometimes using shoulders or emergency lanes. He clarified in this case they are decreasing the amount of space between lanes.

David Thomas replied they are decreasing the lane widths in the inside shoulder for the most part.

Vice Chair Taylor clarified there has got to be some data available there about whether there is an impact on car accidents.

David Thomas stated to process this formally would not happen at this stage, if it did go to the next phase, the PDS would have to process a design decision document and that document basically justifies the nonstandard features. He stated that it looks at the accident data of the corridor also whether they are above statewide average or not will be a key determination on getting acceptability for nonstandard features. Typically, if it is above statewide average that would trigger a safety project to improve that condition. The projects they are doing in the corridor currently are below statewide average like the ECOP as mentioned so he does not anticipate that being an issue. He noted that they will have to discuss the impacts of these nonstandard features on safety.

Vice Chair Taylor stated that his question was not quite answered but appreciates that it went into a safety study before they proceed. He asked if the data is available right now on the shrinking of the width of the lanes and traffic accidents from the state of California.

David Thomas confirmed there was.

Vice Chair Taylor asked David Thomas if he could share that with them not necessarily now but in the future.

David Thomas replied he could get that data.

Commissioner Linda Krupa requested to go to the project location slide and asked for the exact location of the study area.

David Thomas replied that the overall project limits are at the county line and the I-15/91 interchange, the distance between those two points is about 8-miles.

Commissioner Krupa stated the hope is to alleviate some of the congestion coming from that interchange as she has been there in the morning, it is slamming on the brakes and weaving. She asked if they would study any further choke points down the road.

David Thomas replied it is just Riverside County, but they will evaluate how this project affects the current queueing for the WB entrance in the morning which is a significant issue. He expects this will significantly help with that issue and the EB direction they do not currently have a queuing issue but anticipate at some point in the future it will probably return to queuing within the express lanes and sort of address that.

Commissioner Krupa referred to the comment on the toll cost of $24.00 and asked how many miles that toll takes someone.

David Thomas replied 8 miles.

Commissioner Krupa stated she had a conversation this morning with someone that was on the toll roads and while they hate it, they love it.

David Thomas stated that includes about 20 minutes to get into the facility and then paying $24.00 something like that.

Andrew Hedy, Toll Systems Engineer, replied it is about 15-20 minutes it starts to back up near McKinley Avenue in the mornings.

David Thomas clarified that they are to get in plus they are paying $24.00.

In response to Vice Chair Taylor's question at the 91 after the 15 interchange if it has the same number of lanes, Aaron Hake replied east at I-15, yes.

Vice Chair Taylor clarified it will expand they are pushing the problem east.

David Thomas replied basically there are three movements when getting to I-15 in either direction. There is a connector that goes to the north, a connector lane that goes to the south and they can go straight through there so the three lanes would tie directly into those three lanes. He explained what happens today is that they expand the three lanes right before those connectors so they would stay the same, they would just be tying this third lane into the three lanes already there and vice versa for the other direction. Instead of that three to two merge he mentioned on the WB the three lanes would just continue so each connector would have its own lane then it would come in. He explained where that lane would disappear would be at the county line but there is a configuration out there today where it would go to three lanes at the county line for egress and this would tie directly into that as well.

Vice Chair Taylor stated in theory the 91 east of the 15 would continue but the holdup is in that 8-mile area, so they are relieving the congestion there.

Aaron Hake replied that is correct, they have customers paying at the county line they go these 8 miles and at some point, again they used to have this before EB 2.0 they are going to have to start queuing inside the express lanes. He stated people who have paid money for an expressed trip will then get stuck while they are still in the lanes. The theory they want to test is can they make an improvement and keep a free flow condition as much as possible.

Chair Berkson asked if there was a possibility they would work with Orange County and tie it into the 241/91 flyover so in theory once that flyover happens there are going to be three lanes coming into two. If they could have three go into three and continue that all the way to the mile past the 15 where the express lane ends and asked if this study could look at that and see the feasibility. He stated it would make sense to not have a pinch point right at 241 as it would just be increasing that third lane at the county line.

Commissioner Lorimore thanked David Thomas for the presentation and stated like his colleague he really wants more information on existing data related to lane narrowing. He asked what is the anticipated reaching of elasticity that was mentioned.

David Thomas replied for EB they are currently doing studies looking at 2045. They had to pick a year for growth projections and then analyze that. It is probably before that point, but they would at least know that it is in a separate study RCTC is doing with ECOP that 2045 will be a date in the future where that would occur and it might be sooner.

Aaron Hake stated they are going to collect the data to get a prediction as to when they are going to get that.

Commissioner Lorimore stated there was talk in the presentation about shifting the median to create places of pockets and if they would be permanent.

David Thomas replied that is correct and part of the challenge is there are columns in the medians, sign structures, bridges that have columns, so they have to work around where those are to do that shift and find these stretches of usable length in the pockets.

Commissioner Lorimore stated that accidents happen, or cars break down and are they taking that into consideration this might jam things up by not having easily accessible.

David Thomas replied yes, that was the operations impact as part of the assessment they will be doing. The express lanes are monitored from this office 24 hours a day 7 days a week with cameras, 100 percent visibility and they send out their own tow truck service. This is a very high level contained and operated facility that will play into justification and they are monitoring it full-time. It is very different than just a standard Caltrans facility with these nonstandard features, not just San Bernardino County Transportation Authority but there are sections of the current 91 express lanes in Orange County that only have 2-foot left shoulders as well. In driving from downtown Riverside to get here there is no shoulder on the other side of the general-purpose lanes.

Commissioner Lorimore stated from personal experience when going through a lane narrowing within the city limits of Eastvale it feels uncomfortable going from widen lanes to less widened lanes. When it was proposed to the city of Eastvale there were arguments that it would slow traffic down by having narrower lanes, he is not sure if that is the case. Alternatively, have they considered adding another general-purpose lane and narrowing the toll lanes to provide more capacity on the 91.

David Thomas replied when it comes to adding capacity express lanes are considered a smart capacity improvement project and that is the only capacity improving projects moving forward in the state right now. Even with that they still have to do Vehicle Miles Traveled (VMT) Mitigation.

Commissioner Lorimore asked when going to 11 feet how far ahead in the third lane does it cut into existing lanes.

David Thomas replied 2 feet in two existing general-purpose lanes.

Vice Chair Taylor asked per lane.

David Thomas replied 1 foot per lane for the two inside lanes, the outer three lanes are not touched, that is where the trucks are.

Aaron Hake stated that David Thomas is leading the 91 ECOP that is adding a general-purpose lane from 241 to Green River Road off ramp. This project was part of the original CIP they are finishing so general-purpose capacity is still moving forward here.

Vice Chair Taylor referred to Commissioner Lorimore's request and stated that this model versus potentially other models do positively impact congestion and asked if they had looked at other ideas before they arrived at this.

David Thomas replied that they did not look at a general-purpose lane option because it is not a feasible option to consider. There are other operational improvements they are looking at for the WB direction to try to improve the entrance and shifting where the access points are. For one of the studies, they are looking at adding an access point east of McKinley Avenue so there would be a second point of access to kind of disburse the entrance so not everyone is entering at one entrance point. He stated it is currently on going and was part of another phase of the 91 CIP which is to extend the express lanes east of McKinley Avenue, so they are doing an updated study on that. There are other operational things they are looking at but those are kind of band aids to a bigger issue they might have small improvements, but they are not long-term improvements.

Chair Berkson stated that these are things they will have to look at as this gets discussed more. The first thing is they are going to hear from the city of Corona about how much more traffic is somehow going to end up on their streets so they need to have some information on how this would change their experience and how that comes together. He stated when talking about a general-purpose lane he is just going to presume that most if not all of this will end up coming out of toll lane surplus funds. He asked if all or part comes out of it and is there a law that says surplus toll revenue can only be used for toll facilities.

Aaron Hake stated the law says RCTC shall use 91 surplus toll revenue in the 91 corridor and that can include off the Caltrans right of way. They could put it into Metrolink, or a transit service, or an intersection or interchange, somewhere within that general 8-mile facility.

Chair Berkson stated the traffic and vehicles that get stuck even with rapid response tow trucks, it could create a very difficult situation. They have delineators on one side k-rail

on the other side or median and a car that is stuck is going to back everything up. He suggested seeing how often those pinch points happen and if that is enough. This would require a third set of toll gantry mechanisms that lead the cars also, they would have to widen.

Jennifer Crosson, Toll Operations Director, replied they have three lanes today at the front entrances.

In response to Chair Berkson's clarification that the gantries are capable of three lanes, Jennifer Crosson replied they are three lanes they have a high occupancy vehicle (HOV) lanes and two express lanes.

Aaron Hake stated then the declaration lane they can drive through if they are HOV3+.

Chair Berkson clarified those will not have to be modified as they already have the third lane so would that mean it is a fourth lane if the HOV3+ does not disappear.

David Thomas replied that the concept would be as part of this study is looking at any tolled equipment impacts this third lane may have. The concept for the declaration lane would be three lanes would still tie into those same three lanes, and they would require that anyone declaring would keep in that inside lane.

In response to Chair Berkson's question it would still be a 3+ lane for declaration, David Thomas replied that anyone in the other lanes would have to get into that inside lane.

Chair Berkson clarified if they want to get the credit.

David Thomas replied that is correct.

Vice Chair Taylor asked if staff is asking for a motion to approve the $150,000.

Aaron Hake replied the amounts are within his single signature authority and they could bring this to the Commission for a vote if the committee wants to, but he is willing to sign it. He stated he did not want to do that if there were concerns here and staff wanted to make sure what the committee considered was included in the study before they told the consultant.

Chair Berkson expressed concern that he did not ask all the questions although he is more than okay with moving forward with this, but there might be additional information, or points, or direction that others could share. He stated if they start the process with only the things the committee have said then something could be missed. He sees this as a big unique scenario that could change and places like Corona are going to ask how this will impact them, and they should give them the time to weigh in.

Commissioner Krupa stated especially after the meeting yesterday with the California Transportation Agency Secretary Toks Omishakin about coming up with solutions and thinking outside the box, but there probably are questions that some of the cities will be asking they have not heard yet. This is an option that really needs to be explored but probably with the consensus of the full Commission.

Chair Berkson stated he grew up in San Fernando Valley and US-101 was eventually a four-lane road through there. They ended up without widening it they took the shoulders, repaved, restriped it all and made five narrower lanes and they are still that way today. It is a little more difficult to drive through, but it changed the scope from the Calabasas area into the downtown area. It made things a lot easier, quicker, it did work, and this could potentially be the same type of thing if everybody is comfortable with the way it comes out.

Commissioner Krupa stated when she gets onto the road with narrower roads she slows down and maybe that will affect traffic, but anything to make traffic slowdown is an added benefit.

Chair Berkson stated throughout the state with freeway construction projects, there are always lanes that get narrowed through those areas and asked what the width is.

David Thomas replied that it is typically 11 feet.

Chair Berkson stated when going through construction zones everybody is already used to it and they do it all the time without realizing it, this would just be an 8-mile journey.

David Thomas stated the typical off set for k-rail is one foot in the construction zone that they try to achieve. When they built the 91, they had 10.5-foot lanes for six months to have that extra width to build it.

Commissioner Lorimore clarified it was mentioned that 2045 for reaching elasticity.

Aaron Hake replied they do not know so 2045 is the horizon year for studying it and somewhere between next year and 2045 they are anticipating the study to show they are getting to a point of elasticity.

Commissioner Lorimore stated that Aaron Hake mentioned this was within his signature authority. Even though he does not like the idea of narrower lanes he wants to encourage towards future things like this more by saying yes to a study. It is giving the Commission more information to make a better-informed decision. He is not a fan of this idea but would not oppose moving forward with the study.

Aaron Hake stated that he encourages staff here to put forward outside the box ideas, especially in this corridor where there are so many cars. They are heading towards a future roadblock and very high toll prices it does not matter what they do. This is one

thing they can look at to see if it works, what the data shows, and if it has potential, they have the responsibility to vet it.

Chair Berkson stated they could ask Aaron Hake to sign the contract under his purview or bring it to the full Commission for approval and discussion to see if there are other things to include in the study. He asked for consensus from the Committee Members and what direction they should take.

Vice Chair Taylor asked Steve DeBaun, Legal Counsel, for clarification on Aaron Hake's signature authority.

Steve DeBaun replied RCTC has specific language in their procurement guidelines that authorize contracts or amendments under $250,000 to be executed under single signature authority based on the Executive Director. Those are reported back to the Commission quarterly in a single signature authority staff report. There are also annual limits and per contract limits and they cannot amend contracts by single signature, but it is meant to allow staff flexibility to pursue out of the box or emergency or other actions.

Vice Chair Taylor stated he was not present in the past few years of Aaron Hake signing amendments.

Steve DeBaun replied they use single signature authority for contracts and for amendments, it is not unusual at all and there is a long history.

Aaron Hake stated the reason he brought this forward was he anticipated a discussion like this may happen and he did not want to sign something of this significance without having this conversation.

Steve DeBaun clarified that it is not about the dollar amount.

Vice Chair Taylor asked Steve DeBaun in the past the kind of nods to proceed were on projects that have the same significance here for traffic and mileage.

Steve DeBaun replied that they are taking this step as there is a lot of significance here and trying to be open and get direction from the committee and their concerns that have been put forward which will allow the study to better address their concerns.

Vice Chair Taylor stated based on that he would move that this committee allow staff to proceed if the $150,000 comes with an amendment describing a history of accidents that have increased, decreased or the same in that area.

Aaron Hake replied that Vice Chair Taylor wants data on traffic accidents.

Steve DeBaun stated he is sure staff will be checking in periodically.

Vice Chair Taylor clarified this is different than a study on potential accidents in this corridor overall.

Aaron Hake concurred and stated generally what the data is.

Commissioner Lorimore stated he would be good with moving forward just to be able to get more information. They got the budget presentation last time, $150,000 is not a small amount of money but compared to the portion of their budget he is good.

Commissioner Smith thanked Steve DeBaun for his input. This is why Aaron Hake does such a good job because he allows the Commissioners to get into the weeds in a place where they think they need to be. He appreciated staff for bringing the agenda item to have a thorough discussion and he is good at moving this forward.

Commissioner Krupa stated the additional questions from the Commissioners would be valuable in the study going forward and having that transparency in saying they are still looking at viable options that are not going to cost lots of money to alleviate traffic possibly sooner than later on the 91.

Chair Berkson clarified staff will bring information on this back to the Commission or this committee over periods of time to ensure other Commissioners have adequate time to weigh in. He asked if there will be ample time to have that stuff addressed assuming this does not get to the Commission for a while.

Aaron Hake stated what he has been doing for SR-241 and some other issues on SR-91 is having individual meetings with the Commissioners that are along that corridor and making sure he is getting feedback from them since they will be directly impacted.

Chair Berkson clarified that Aaron Hake will reach out himself.

Aaron Hake replied yes.

Chair Berkson stated it is probably the most important thing, and this committee already has consensus to move this forward under Aaron Hake's signature authority.

In response to Commissioner Krupa's question, Aaron Hake replied that this committee is a standing committee equal to the Western Riverside County Programs and Projects Committee, and this committee has jurisdiction over anything dealing with express lanes.

Commissioner Krupa stated that she is fine with the consensus of this committee.

M/S/C for the Committee to recommend the Commission take the following action(s):

1) Direct staff to perform a 91 Express Lanes Expansion to Three Lanes Study.

8. REGIONAL OPERATIONS CENTER

Jennifer Crosson stated she is joined by her staff that will also be presenting. She presented an overview of the Regional Operations Center or the (ROC), highlighting the following:

- ROC purchase 2017
  - Long-term location for 15 EL operation and 91 Express Lanes call center
  - Desire for a joint 15 EL and 91 EL walk-in center
  - Removed cost risk from Toll Services Provider
  - Short return on investment
  - Ability to install generator and solar power
  - Co-location of Toll Operations staff
  - Provided for expansion to include 15 South Extension
- Two toll service providers – Via Plus and Kapsch for the 91 and 15 Express Lanes at the ROC located at 291 Corporate Terrace and 301 Corporate Terrace and the major categories of the work performed are:
  - Walk-in customer service center
  - Customer service call centers
  - Transponder fulfillment
  - Payment processing
  - Mail processing
  - Case management
  - Financial administration
  - Traffic Operations Center
- Responsibilities of the Toll Operations Department includes:
  - Administrative and financial
  - Roadway operation
  - Customer service operation
  - Facility and roadway maintenance, repair, and rehabilitation
  - Project delivery support

Jennifer Crosson turned it over to the toll staff to provide more details in each of the categories they are responsible for starting with Megan Kavand, Toll Finance Manager.

Megan Kavand stated she is joined by Sharon Wu, Toll Accountant, together they support toll operations. Megan Kavand presented the following:

- Administrative and financial

- Financial reconciliations, reporting and audits
- Trustee account management
- Debt management ($678 million)
- Data management, analysis and reporting
- Long-term financial planning

Megan Kavand turned it over to Anthony Parada to cover the remaining items on the slide. Anthony Parada presented the following:

- Contract administration and compliancy
- Legislative analysis and development
- Policy and business rule development and adherence
- Industry participation
- Disaster recovery

At this time, Commissioner Smith left the meeting.

Anthony Parada turned it over to Mireya Jarquin, Senior Management Analyst, to present. Mireya Jarquin stated as Anthony Parada mentioned she works with the data and reporting and supports the roadway operation with Reinland Jones, Toll Technology Manager. Mireya Jarquin presented the following:

- 24/7 Roadway operation
  - 55 million annual transactions
  - Toll collection system
  - CCTV cameras
  - Traffic detection devices
  - Price and message signs
  - Occupancy detection
  - Dynamic pricing
  - Transaction Processes
  - Traffic operations
  - Freeway Service Patrol
  - CHP enforcement
  - Road closures
  - Transponder technology
  - System standards
  - Adjacent project coordination

Mireya Jarquin turned it over to Andrew Hedy, Toll Systems Engineer, who stated as Mireya Jarquin mentioned, he works closely with Reinland Jones and Mireya Jarquin to manage the toll systems on road activities and overall maintenance of the express lanes. Andrew Hedy presented the following areas:

- 15/91 Express Lanes map that shows several technologies installed across both the I-15 and SR-91 corridors to support operations, tolling, and traffic monitoring
- Maintenance, repair and rehabilitation
    - Pavement, striping and channelizers
    - Pole, cabinet, barriers, and crash cushions
    - Power and fiber
    - ROC and facility and maintenance building
    - Toll utility buildings
    - Generator

Andrew Hedy turned it over to Silva Mardrussian, Toll Customer Service Manager, who stated that she along with Anthony Parada are responsible for the customer service and violation collection processes. Silva Mardrussian presented the following:

- Customer Service Operation
    - Customer call centers
    - Walk in center
    - Website
    - Violation processing and collection
    - Account agreements and privacy policy
    - Interoperability
    - Telephones
    - Operational audits
    - Branding and customer education
    - Correspondence development
    - Third party payment and credit card processors

Jennifer Crosson stated that she, Reinland Jones, and Megan Kavand spend a considerable amount of their time supporting project delivery both future express lanes and other construction projects that affect express lanes. Jennifer Crosson presented the following:

- Project delivery
    - Operational financial modeling
    - Toll policy design
    - TSP contracting, design, implementation and testing
    - Roadway operation planning
    - Existing express lanes integration and impact analysis
    - Sign development
    - Public education and marketing
- Project activity
    - 71/91 Connector
    - 241/91 Express Connector
    - 15 South Express Lane
    - 15 North Express Lane
    - Express Transit Connector

  - 10 Express Lane
- Staff working from the ROC
  - Toll Operations Staff (6)
  - Finance Direct Support Staff (2)
  - Full-time Consultant Support Staff (2)
  - Visiting Commission Staff and Consultant Support (2)
  - Non-toll staff when needed
- 371 Corporate Terrace Lease
  - Funded with toll revenue
  - Adjacent to 301 Corporate Terrace
  - 4,000 square feet
  - 5 Offices, 8 cubes, break area, restroom, conference room
  - Long-term lease with first right to purchase
  - Estimated annual cost $120,000
- Goal of 371 expansion
  - Provides staff with sufficient assigned work-space
  - Provides conference room to conduct TPOC and toll project delivery meetings
  - Provides access to break area and restrooms
  - Retain close proximity to current operation
  - Provides space for Kapsch to service additional commission Express Lanes

Jennifer Crosson stated that Silva Mardrussian will take the Commissioners on a quick tour of the current operation of the 371 suite and are here to answer any questions.

Vice Chair Taylor clarified 55 million transactions occur on I-15, SR-91 and I-10 annually.

Aaron Hake clarified SR-91 and I-15.

In response to Vice Chair Taylor clarification also I-10 is in there, Aaron Hake replied they do not have I-10.

In response to Vice Chair Taylor's question how many violations occur in any given day, Jennifer Crosson replied 3 percent of the total.

In response to Vice Chair Taylor's question about what a typical violation is, Jennifer Crosson clarified dollar wise.

Vice Chair Taylor replied what occurs that is a violation.

Jennifer Crosson replied that the customer drives through without an account, either a transponder, or a plate and has not made payment.

Vice Chair Taylor asked if it is the most common versus one person in the car.

Jennifer Crosson replied yes, they do not issue violation notices for carpool violations that is a separate project underway as it was mentioned the Occupancy Detection System (ODS) that this committee approved. The ODS has been installed, it is under testing and should go live in July or August. It will just be on the 91 Express Lanes and if a customer is viewed as not having three people in the HOV3+ it will adjust their toll to the real toll, not the carpool discount and add a $5.00 processing fee. It will not issue a notice, it will not be a civil process, it will just be a charge to their account.

Vice Chair Taylor clarified the violations are just people in the lane without paying and that is three percent.

Jennifer Crosson concurred, they are charged the toll and then a $5.00 processing fee.

In response to Vice Chair Taylor question that they have their license plate, so they get a letter, Jennifer Crosson concurred.

In response to Vice Chair Taylor's question, Jennifer Crosson replied it goes on the vehicle registration if they do not pay with a California Vehicle Code process RCTC follows.

Chair Berkson asked in the prior item if they were to move forward with a third lane in the express lanes would that be a trigger that could extend their lease with Caltrans as RCTC has only a certain number of years before it expires.

Aaron Hake replied no.

M/S/C for the Committee to recommend the Commission take the following action(s):

1) Receive an overview of the Toll Regional Operation Center Office.

9. ITEM(S) PULLED FROM THE CONSENT CALENDAR

There were no items pulled from the Consent Calendar.

10. EXECUTIVE DIRECTOR REPORT

There are no reports from the Executive Director.

11. COMMISSIONER COMMENTS

There were no comments from the Commissioners.

At this time, the Commissioners went on their tour of the ROC.

12. ADJOURNMENT

There being no further business for consideration, Chair Berkson adjourned the meeting at 2:20 p.m. to the next Toll Policy and Operations Committee meeting.

Respectfully Submitted,

Lisa Mobley
Administrative Services Director/
Clerk of the Board

AGENDA ITEM 6B

RIVERSIDE COUNTY TRANSPORTATION COMMISSION	
DATE:	August 18, 2025
TO:	Toll Policy and Operations Committee
FROM:	Andrew Hedy, Toll Systems Engineer Reinland Jones, Toll Technology Manager
THROUGH:	Jennifer Crosson, Toll Operations Director
SUBJECT:	Express Lanes Spare Intelligent Transportation Systems Poles

STAFF RECOMMENDATION:

This item is for the Committee to recommend the Commission take the following action(s):

1) Award a purchase order to American Right-of-Way, for the Express Lanes Intelligent Transportation Systems (ITS) Spare Poles Project (Project) in the amount of $75,918 plus a contingency amount of $7,600, for a total amount not to exceed $83,518;
2) Authorize the Executive Director or designee to approve contingency work as may be required for the Project; and
3) Authorize the Chair or Executive Director, pursuant to legal counsel review, to execute the purchase order on behalf of the Commission.

BACKGROUND INFORMATION:

The 91 and 15 Express Lanes utilize roadside cameras and vehicle detection sensors mounted on roadside poles to collect data necessary for express lanes monitoring, incident management, performance reporting and the calculation of tolls. The equipment mounted on the poles is critical to the successful operation of the express lanes and a high priority for replacement

The 91 and 15 Express Lanes have 80 poles of varying types and sizes. The poles were constructed in accordance with Caltrans standards at the time of the project deployment. Caltrans standards have changed over time, which has resulted in various pole types and sizes being installed in the express lanes.

DISCUSSION:

Kapsch, the toll service provider, is contractually required to replace damaged poles but is entitled to reimbursement for the cost of their services and the poles. The Commission seeks reimbursement from motorists or their insurance companies for the cost of damage.

In the last year two poles have required replacement due to damage by motorists. There were delays in the replacement of the poles due to long lead times for the fabrication of poles which delayed the operational return of critical equipment. To prevent future delays in the replacement of damaged poles, staff has determined it is in the best interest of the Commission's express lanes operation to procure and store spare poles to be used as replacements.

To facilitate the purchase of spare poles staff surveyed the pole types, sizes and quantities and prepared a scope for bid. The scope includes the fabrication and delivery of seven (7) spare poles of various types and sizes: two (2) 30-foot poles for vehicle detection systems (MOD), two (2) 30-foot poles for electronic toll collection CCTV systems (ETTM), one (1) 60-foot high-mast pole, one (1) 80-foot high-mast pole, and one (1) 25-foot pole for general CCTV use. All poles must be fabricated in accordance with Caltrans standards and specifications to ensure compatibility with existing infrastructure and regulatory requirements.

Procurement Process

On June 18, 2025, the Commission advertised Invitation for Bids (IFB) No. 25-31-120-00 for the Express Lanes Spare Intelligent Transportation Systems (ITS) Poles. A public notice was advertised in the *Press Enterprise,* and the complete IFB, including all contract documents, was posted on the Commission's PlanetBids website, which is accessible through the Commission's website. Electronic mail messages were sent to vendors registered in the Commission's PlanetBids database that fit the IFB qualifications. Twenty-six (26) firms downloaded the IFB. Five (5) were located in Riverside County. Two (2) bids were received by the July 30, 2025 bid deadline. A summary of the bids received is shown in Table 1.

	Firm (In order from low bid to high bid)	Bid Amount
	Engineers Estimate	$ 48,337
1	American Right-of-Way	$ 75,918
2	Walters Wholesale Electric Co.	$ 147,635

Table 1 – Bid List

The basis for award for a materials, supplies, and equipment contract is the lowest responsive and responsible bidder as defined by the Commission's procurement policy and state law. The bid price submitted by American Right-of-Way was 57 percent higher than the engineer's estimate. The engineer's estimate was based on a prior pricing quoted for poles. An analysis of the bid did not find any irregularities in either bid received and American Right-of-Way was selected based on the information submitted.

After analyzing the bids received, staff concluded that American Right-of-Way is the lowest responsible bidder submitting a responsive bid in the amount of $75,918 for the project. A contingency amount of approximately 10 percent ($7,600) is recommended for this purchase order to account for other potential expenses.

Staff recommends purchasing spare poles to allow for an expedited response in the event a pole is damaged and requires replacement.

RECOMMENDATION:

Staff recommends award of a purchase order to American Right-of-Way in the amount of $75,918, plus a contingency amount of $7,600, for a total amount not to exceed $83,518.

FISCAL IMPACT:

Fiscal Year 2025/26 budget includes an amount of $83,518.

Financial Information					
In Fiscal Year Budget:	Yes	Year:	FY 2025/26	Amount:	$ 83,518
Source of Funds:	Toll Revenues			Budget Adjustment:	N/A
GL/Project Accounting No.:	009199 73305 00135 0000 591 31 73301 $41,759 001599 73305 00135 0000 515 31 73301 $41,759				
Fiscal Procedures Approved:				Date:	08/04/2025

AGENDA ITEM 6C

RIVERSIDE COUNTY TRANSPORTATION COMMISSION	
DATE:	August 18, 2025
TO:	Toll Policy and Operations Committee
FROM:	Anthony Parada, Senior Management Analyst
THROUGH:	Jennifer Crosson, Toll Operations Director
SUBJECT:	Kapsch TrafficCom Change Order 41 for Back Office System Updates

STAFF RECOMMENDATION:

This item is for the Committee to recommend the Commission take the following action(s):

1) Authorize Change Order No. 041 to the Kapsch TrafficCom Agreement No. 16-31-043-00 for back-office system enhancements in the amount of $579,510; and
2) Authorize the Chair or Executive Director, pursuant to legal counsel review, to execute the agreement on behalf of the Commission.

BACKGROUND INFORMATION:

In January 2017, the Commission approved Agreement No. 16-31-043-00 with Kapsch TrafficCom (Kapsch) to be the Toll Service Provider for the 15 Express Lanes. The Kapsch contract provides for change orders to the Kapsch provided system for modifications beyond the scope of work and approved system design. Kapsch's back-office system (BOS) provides prepaid and violation account management, trip processing, customer notifications, a customer website, an automated phone system and financial and operating reporting. Since inception, several BOS updates have been deployed to implement new trip processing requirements, to ensure compliance with new legislation and to implement changes to procedures that improve customer service.

DISCUSSION:

Staff and Kapsch have identified several enhancements that will ensure compliance with credit card processing security regulations, improve efficiency and customer service and improve the website. Staff reviewed the level of effort in this change order with Kapsch and found the costs to be fair and reasonable. A summary of the proposed changes are as follows:

Credit Card and Automated Clearing House (ACH) Processing ($175,010)

Approximately 80 percent of all payments processed by the BOS are through a credit card. Kapsch and the Commission are required to adhere to Payment Card Industry (PCI) standards in order to maintain a credit card processing system. Kapsch and the Commission have an agreement with

J.P Morgan Chase (Chase) for credit card processing. The BOS provides an interface with Chase which complies with the PCI standards. Chase has updated the credit card and ACH processing interface to further improve credit card security. This change order includes the cost for changes to the BOS to adhere with those changes and comply with updated PCI requirements.

Customer Service Enhancements ($331,570)

Over a dozen updates to the BOS have been identified which will improve efficiency of customer service operation and customer experience. Assembly Bill 2594 required increased accessibility of cash payment transaction locations to customers who do not use financial institutions, such as banks, for payment transactions. Kapsch contracted with PayNearMe in March 2024 as a third-party payment channel where customers can add funds to their Riverside Express account and pay violations with cash at participating 7-Eleven, Walgreens, CVS, and Walmart retailers. Updates in this change order will improve access to PayNearMe through emailed website links and improve visibility of account balances through more frequent updates with PayNearMe. Improvements to violations processing include system updates to allow for bulk transaction processing. This will allow customer service representatives to process DMV Hold release letters through automated forms, filter and select specific trips from violation accounts with a large number of vehicles and enhance the process of resolving violations with other FasTrak agencies.

Customer Website Updates ($72,930)

The customer website will be enhanced to improve clarity and functionality. Updates include a refined enrollment process, a new Vehicle History page, expanded self-service violation dispute options, and account update capabilities. These changes aim to create a more transparent and efficient self-service experience for customers.

Kapsch will design, document, deploy and test all BOS changes prior to implementation. Kapsch will also update written standard operating procedures to address the changes and train customer service center representatives. Staff has reviewed the estimated hours for each effort and found them to be reasonable based on the level of complexity. The Kapsch Agreement provides an hourly rate table for use in change orders. The provided change order complies with the hourly rate table arriving at what staff believes to be a fair cost for the change order.

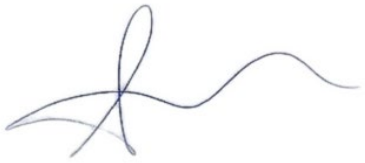
The Kapsch provided BOS is the cornerstone of the customer service operation and critical to the Commission's goal to provide excellent customer service. This change order will allow the 15 Express Lanes customer service operation to be compliant with PCI regulations and improve customer service.

RECOMMENDATION:

Staff recommends that the Commission approve Contract Change Order No. 041 to Agreement No. 16-31-043-00 with Kapsch TrafficCom in the amount of $579,510.

FISCAL IMPACT:

Funds in the amount of $579,510 are included within the current fiscal year approved budget.

Financial Information							
In Fiscal Year Budget:		No	Year:	FY 2025/26	Amount:	$579,510	
Source of Funds:	Toll Revenue				Budget Adjustment:		Yes
GL/Project Accounting No.:		001504 81041 00000 0000 515 31 81002					
Fiscal Procedures Approved:					Date:	08/04/2025	

Attachment:

1) Kapsch Change Order No. 041

Change Response / TSP Change Request
RIVERSIDE COUNTY TRANSPORTATION COMMISSION
I-15 Toll Services Provider Contract

Change Order No. 41

Pursuant to: (check appropriate box)

☐ Written Change Notice No. 00, dated _____, submitted by RCTC to TSP pursuant to Section 20.4.1 of the Contract

☒ TSP Change Request dated July 29, 2025, submitted by TSP to RCTC pursuant to Section 20.6 of the Contract

☐ Directive Letter No. _____, dated _____, submitted by RCTC to TSP pursuant to Section 20.3 of the Contract

Reference is made to that certain Toll Services Contract (Contract No. 16-31-043-00) dated 26 January 2017, by and between Riverside County Transportation Commission ("RCTC"), a public entity of the State of California ("RCTC"), and Kapsch TrafficCom USA, Inc., f/k/a Kapsch TrafficCom Transportation NA, Inc. ("Kapsch"), a corporation organized under the laws of Delaware ("TSP"), as amended, together with all Exhibits and prior amendments (the "Contract").

This Change Order amends the Contract.

Capitalized terms used, but not defined, in this Change Order have the meanings given in, and all Section and Exhibit references shall be to the Contract.

SECTION I – Narrative, Discussion of Additions, Deletions, Modifications to the Requirements of the Toll Services Contract

A. Evaluation of Change including whether TSP considers any RCTC-Initiated Change to constitute a Change and the specific provision(s) of this Contract which permit a Change Order (Section 20.4.3(a)(i)):

N/A – TSP Initiated Change Order

B. Overview of scope of Change (Section 20.4.3(a)(iii)). For detailed scope of Change, please complete the Change Response Price Form:

Upgrade Chase APIs to current Chase Orbital Gateway json API.
Implement Chase ACH Early Warning System (EWS).
Customer Web Enhancements for Enrollment, Vehicle/Plate Updates, and Dispute Process.
Changes to the VTX CSR Application.
New Reports and Reports Modifications.

C. Analysis of (impact of the Change on the performance of other aspects of the D&D Work, O&M Work, RCTC or RCTC's toll operations (as applicable); (Section 20.4.3(a)(v)):

N/A – there is no impact negative impact on D&D or O&M work, RCTC or RCTC's toll operations from this change order. This change order will provide O&M efficiencies, enhance customer experience, and reinforce electronic payment security.

D. Proposed plan for mitigating impacts of the Change (Section 20.4.2(a)(x)):

N/A

E. Additions / deletions / modifications to the requirements of the Contract including KPIs (if any) (Section 20.4.3(a)(viii)):

N/A – there are no changes to KPIs.

SECTION II – Cost Impact(s)

A. Summary

Compensation under this Change Order is to be paid (check the applicable boxes below):

☐ n/a[1] $0.00 ("no cost") Change Order.

☐ as a lump sum adjustment to the Contract Price in the amount of _____ dollars ($_____).

☒ as a series of milestone payments in accordance with Attachment B, for a total amount of Five Hundred Seventy-Nine Thousand Five Hundred Three dollars and Zero cents ($579,503.00).

☐ as an adjustment to Total O&M Years 1 and 2 Cost or Total O&M Years 3, 4 and 5 Cost

☐ as a Unit Price Change Order for increases or decreases in the Contract Price [not to exceed] / [in the amount of] _____ dollars ($ _____))

☐ as a Time and Materials Change Order, [not to exceed _____ dollars ($ _____)]

☐ as is set forth below, under Section II(B)([2] / [3]).***[select the proper reference]***

☐ If more than one box has been checked, also check this box and summarize terms here:

_____
_____
_____
_____

Documentation supporting the Change Order is attached as Annex[es] _____ [through _____].

B. Special Considerations

1. Delay and disruption damages for Excusable Delay (Section 20.10). ☒ n/a

Compensation available for Change Orders are (only) extra Work Costs and delay Costs directly attributable to the proposed Change and exclude certain costs and expenses.

- Total extra Work Costs: $_____
- Total delay and disruption damages: $ _____

_____

[1] If $0 (i.e., a "no cost" Change Order), leave remainder of Section II blank.

Discussion (if any):

_Contract section 10.10.1 provides an extension of time for repairs in the case of "Force Majeure"

2. Deductive RCTC Changes. ☒ n/a

If this Change Order is a deductive change

Net Cost[2] Savings attributable to the deductive change $ _____

Amount due to RCTC attributable to the deductive Change (or which can be used by RCTC, in its sole discretion, to offset payment to TSP) $ _____

Discussion (if any):

[2] When both additions and reductions are involved in any one Change Order, the adjustment shall be determined on the basis of net increase or decrease. TSP Margin will be allowed only for the net increase in labor Cost in order to establish the amount to be added to the Contract Price. In determining a deductive change order, any deduction will include the amount of TSP Margin and Audited Overhead which would have been payable on such amounts by RCTC in accordance with Section 20.

SECTION III – Completion Deadline Impacts (Applicable to All Change Orders)

The status of the CSC Commencement Deadline is as follows:

☒ Unaffected by this Change Order

☐ Affected by [extending] / [accelerating] the date of the CSC Commencement Deadline by _____calendar days to _____ calendar days prior to Revenue Service Commencement.

The status of the Revenue Service Commencement Deadline is as follows:

☒ Unaffected by this Change Order

☐ Affected by [extending] / [accelerating] the date of the Revenue Service Deadline by _____calendar days to _____ Days after the Package 4 Turnover Date.

The status of the total Float is as follows:

☒ Unaffected by this Change Order

☐ Affected by this Change Order as follows:

_____
_____
_____
_____

If this Change Order is issued as a result of, or relating to, an Excusable Delay or a shortening time, TSP's Critical Path time impact delay analysis is attached as Annex _____ (Section 20.4.3(a)(vi)). ☒ n/a

SECTION IV - (Reviewed and recommended agreed by TSP's [Project Manager-D&D Work] or [Project Manager-O&M Work])

By: _____

Name: Joseph Stephenson
Title: Project Manager
Date: _____

Comments:

_____
_____
_____
_____

SECTION V - (Reviewed and agreed by TSP)

The undersigned Authorized Representative of TSP hereby certifies, under penalty of perjury, as follows:

1. Sections I, II and III of this Change Order, including all Worksheets and Annexes, collectively represent a true, accurate and complete summary of all aspects of this Change Order.

2. The amounts of time and/or compensation set forth in this Change Order (a) are, in each case, justified as to entitlement and amount, (b) reflect all changes to compensation for and scheduling of the Project (inclusive of all Subcontractor and Supplier amounts, impacts), (c) is complete, accurate and current and (d), in each case, the amounts of time, if any, and/or compensation, if any, agreeable to, and is hereby agreed by, TSP.

3. This Change Order includes all known and anticipated impacts or amounts, direct, indirect and consequential, which have been and may be incurred, as a result of the event, occurrence or matter giving rise to this Change Order. This Change Order constitutes a full and complete settlement of all Losses, Claims, matters, issues and disputes existing as of the effective date of this Change Order, of whatever nature, kind or character relating to the event, occurrence or matter giving rise to this Change Order and the performance of any extra Work that this Change Order documents or relates, including all direct and indirect costs for services, equipment, manpower, materials, overhead, profit, financing, delay and disruption arising out of, or relating to, the issues set forth herein. TSP acknowledges that it shall not be entitled to assert any Claim for relief under the Contract for delay, disruption costs or any other adverse financial or Project Schedule impacts existing as of the effective date of this Change Order and arising out of, or relating to, the event, occurrence or matter giving rise to this Change Order or such extra Work.

4. If the foregoing Change Order includes claims of Subcontractors or Suppliers, TSP represents that authorized representatives of each Subcontractor and Supplier, if any, reviewed such claims, this Change Order and accept this Change Order as dispositive on the same, subject to separate Contract between TSP and each such Subcontractor and Supplier, as applicable. Furthermore, TSP has determined in good faith that such claims are justified as to both entitlement and amount.

5. The cost and pricing data forming the basis for the Change Order is complete, accurate and current, with specific reference to the California False Claims Act (Government Code section 12650 et. seq.) and the U.S. False Claims Act (31 USC § 3729 et seq.)

6. It is understood and agreed that this Change Order shall not alter or change, in any way, the force and effect of the Contract, including any previous amendment(s) thereto, except insofar as the same is expressly altered and amended by this Change Order.

7. This Change Order supersedes all prior commitments, negotiations, correspondence, conversations, Contracts or understanding applicable to the issues addressed herein. No deviation from the terms hereof shall be predicated upon any prior representations or Contracts, whether oral or written, other than the Contract, as amended in accordance with its terms.

8. This Change Order is binding upon, and shall insure to the benefit of, each of the parties and their respective heirs, personal representatives, successors and assigns.

IN WITNESS, WHEREOF, TSP, intending to be legally bound, has executed this Change Order as of the date below.

TSP:
Kapsch TrafficCom USA, Inc.

By: _____
Name: Joseph Stephenson
Title: Project Manager,
Date: _____

SECTION VI - (Reviewed and recommended by RCTC)

By: _____
Name: Jennifer Crosson
Title: Toll Operations Director
Date: _____

Comments:

_____
_____
_____
_____

SECTION VII - (Agreed by RCTC's Authorized Representative)

IN WITNESS WHEREOF, RCTC, intending to be legally bound, has executed this Change Order as of the date first written above.

RCTC

RIVERSIDE COUNTY TRANSPORTATION COMMISSION

By: _____
Name: Aaron Hake
Title: Executive Director

Date: _____

(the effective date of this Change Order)

ATTACHMENT A

SCOPE OF WORK

EXECUTIVE SUMMARY: SYSTEM MODERNIZATION ENHANCEMENTS

As part of our ongoing commitment to enhance customer service and ensure the delivery of modern, efficient tolling solutions, Kapsch is pleased to propose a change order for the integration of several strategic initiatives into the services we provide at the Riverside County Transportation Commission (RCTC).

Kapsch is committed to delivering innovative, customer-centric solutions that strengthen RCTC's tolling operations while maintaining the highest standards of service and compliance. We look forward to continued collaboration in driving forward these vital enhancements.

This initiative encompasses a series of critical system upgrades across three key areas: **Chase API integration**, **VTX CSR application enhancements**, and **Customer Website updates**. The goal is to modernize payment processing, enhance system functionality, and improve the customer experience, while ensuring scalability, security, and compliance.

1. Chase API Upgrade & ACH Early Warning

The CSR Back Office and external web interfaces will be upgraded to support the latest **Chase Orbital Gateway JSON API**, including **Enrollment**, **Payment**, **Payment Methods**, and **Payment Plans**. In parallel, the **ACH Early Warning System (EWS)** will be implemented to strengthen transaction risk handling, including IVR integration via Twilio. The upgrade will adhere to PCI and Chase standards without impacting system performance.

2. VTX Enhancements

Enhancements to the **VTX CSR Application** will improve usability and operational efficiency. Key features include support for **Pay Near Me**, extended **case and payment plan management**, new **reporting and audit fields**, and additional **filtering and automation**. These changes will streamline case resolution, improve KPI tracking, and optimize user interactions.

3. Customer Website Updates

The **customer portal** will be enhanced to improve clarity and functionality. Updates include a **refined enrollment process**, a new **Vehicle History page**, expanded **dispute options**, and improved data editing capabilities. These changes aim to create a more transparent and efficient self-service experience for customers.

Chase API Upgrade and ACH Early Warning

Background

Upgrading to use the latest Chase Orbital Gateway JSON API requires modifications to the CSR Back Office System and external web interfaces in the following areas:

- Enrollment
- Payment
- Payment Method
- Payment Plans

Additionally, implementing Chase's ACH Early Warning System (EWS) is necessary for improved transaction handling.

Objective

Upgrade the system to use the latest Chase Orbital Gateway JSON API and implement Chase's ACH EWS for enhanced payment processing capabilities.

Functional Requirements

- **Enrollment:** Modify enrollment process to support new Chase APIs on both CSR and external web interfaces.
- **Payment:** Update payment functionality to use the latest Chase Orbital Gateway JSON API, including one-time and recurring payments.
- **Payment Method:** Integrate new Chase APIs for managing payment methods on both CSR and external web interfaces.
- **Payment Plan:** Modify payment plan management to support new Chase APIs on both CSR and external web interfaces.
- **ACH Early Warning System (EWS)**: Implement EWS functionality on both CSR and external web interfaces, including modifications to the TX API interface with Twilio for IVR and SIVR handling.

Non-Functional Requirements

- **Security:** Ensure PCI compliance during data handling, storage, and communication using encrypted APIs.
- **Performance:** No reduction in performance compared to existing processing capacity or speed.
- **Compliance:** Adhere to PCI and Chase requirements.
- **Scalability:** Design the system to support increasing transaction volumes without compromising performance or stability.

Customer Website Updates

Background

The current customer website could use additional information that addresses the variety of account types during enrollment and requires additional features to provide historical vehicle data to account holders.

Objective

Update the customer website with improved enrollment process, a Vehicle History page, and revised dispute process options for better user experience.

Functional Requirements

- Enhance enrollment process by clearly display types of accounts and required information for completion.

- Implement a Vehicle History page that allows customers to view historical vehicle data.

- Modify dispute process to include options for:
  Rental/leased vehicles
  Sold/transferred
  Stolen (with police report requirement)

- Map the 'I have a FasTrak account at another Agency' selection to Case Type 'Have Interoperable Account'.

- Enable editing of Make, Model, Color, and Year on vehicle update screens.

Non-Functional Requirements

- **Security:** Ensure integrity of PII (Personally Identifiable Information) by maintaining secure coding and data handling practices, encryption, and access controls when implementing the enhancements.
- **Performance:** Enhance the user experience and provide additional capabilities and information to the user without degradation in responsiveness or performance.
- **Scalability:** Upgrade the system to include displaying additional vehicle information without compromising performance or stability, including high-volume accounts.

VTX enhancements

Background

The VTX CSR Application requires enhancements to improve functionality and user experience.

Objective

Develop, test and deploy upgrades to the VTX CSR Application.

Functional Requirements

- Add Pay Near Me link to the email version of the following letters:
  NOT-148 DMV Hold Letter
  NOT-118 Low Balance Manual Replenishment
  NOT-119 Low Balance Automatic Replenishment
  NOT-121 NSF Check
  NOT-124 Suspended Account

- Periodically (daily) update Pay Near Me with the current balance of an account for accounts that were issued the following letter types:
  NOT-148 DMV Hold Letter
  NOT-118 Low Balance Manual Replenishment
  NOT-119 Low Balance Automatic Replenishment
  NOT-121 NSF Check
  NOT-124 Suspended Account

- Allow transactions to move out to Interop accounts before case closure for 'Have Interoperable Account' case type.

- Modify Case Management Dashboard layout and add Time data to the 'Created On' field.

- For Generic Cases, Enable modification of the Name and Address fields. Also add License Plate field.

- Add a Contact Type for 'Survey Monkey' and track KPI 21_22 report.

- Display 'Created by' and 'Created on' fields on Payment Plan Installments.

- Generate DMV Abstract Letter for release of DMV Holds.

- Create a new On Demand letter for zero balance owed.

- Add the ability to create a payment plan that covers multiple accounts on the same plan. Automatically close payment plans when no more payments are due on all the combined accounts in the plan.

- Add filtering by License Plate on the Violation payment screen. This is useful for large fleet/rental accounts.

- Add Start and End dates to 'Authorized Users' entry. Ensure that authorized users attempting to login on the website are active withing the Start and End dates.

- Add History page for 'Authorized Users' and add a link to this new page.

- Implement an additional sweep process for corrected license plates. This ensures that when a license plate on a transaction is changed, the trip is paid to a customer (RCTC or Interop) if the plate is active on a customer account for the date of the trip.

- Remove clean air vehicle (CAV) option from both the Customer website and CSR application. Modify CTOC files to reflect CAV program expiration. Extend current I-15/91 Express Lanes CAV program to 12/31/2025 or later (configurable).

Non-Functional Requirements

- **Performance:** No reduction in performance compared to existing processing capacity or speed.
- **Security:** Ensure data exchanged with external entities (PayNearMe) is appropriate for purpose and transits securely.
- **Compliance:** Adhere to PCI and Chase requirements.
- **Scalability:** Design the system to support increasing transaction volumes without compromising performance or stability.

Additional Reports

Background

The VTX CSR Application requires additional reports to improve data analysis and decision-making capabilities.

Objective

Create new Follow Up Note report and a new Resolutions report based on existing queries in the VTX CSR Application.

Functional Requirements

- Create new Follow Up Note report - The new report should provide detailed information about follow-up notes added to cases, including date, time, case number, and user who created the note. This will help users track communication history with customers more efficiently.

Non-Functional Requirements

- **Performance:** The new reports should generate within a reasonable amount of time and not inhibit other running reports while generating
- **Scalability:** The reports should be able to run using the existing data set, including appropriate projected future growth.

Closing Summary

Kapsch is proud to present this comprehensive proposal for System Modernization Enhancements at RCTC, reflecting our shared commitment to innovation, customer service, and operational excellence. Through key technology upgrades, we aim to significantly improve toll revenue recovery while enhancing the customer experience. These initiatives will empower RCTC to manage delinquent accounts more effectively, streamline operations, and uphold the agency's reputation for service and accountability. We are excited to partner with RCTC in deploying these forward-thinking solutions and advancing the region's tolling capabilities.

ATTACHMENT B

TOTAL COST

Change Order Task Breakdown

Task	Amount
Upgrade Chase APIs to current Chase Orbital Gateway json API. Implement Chase ACH Early Warning System (EWS)	$ 175,008.62
Customer Web Enhancements for Enrollment, Vehicle/Plate Updates, and Dispute Process	$ 72,929.40
Changes to the VTX CSR Application	$ 296,884.42
New Reports and Reports Modifications	$ 34,680.56
Total	**$ 579,503.00**

Disbursement Schedule

Disbursement Schedule	**Amount**
At NTP	$289,751.50
Completion of Tasks	$289,751.50
Total	**$579,503.00**

AGENDA ITEM 7

RIVERSIDE COUNTY TRANSPORTATION COMMISSION	
DATE:	August 18, 2025
TO:	Toll Policy and Operations Committee
FROM:	David Thomas, Toll Project Delivery Director Jennifer Crosson, Toll Operations Director
THROUGH:	Aaron Hake, Executive Director
SUBJECT:	241/91 Express Connector Master and Operating Agreements

STAFF RECOMMENDATION:

This item is for the Committee to recommend the Commission take the following action(s):

1) Approve Agreement No. 26-31-006-00 (Master Agreement) with the Foothill/Eastern Transportation Corridor Agency (F/ETCA), California Department of Transportation (Caltrans), and Orange County Transportation Authority (OCTA) for the development and operation of the 241/91 Express Connector in substantially the form attached to this staff report;
2) Approve Agreement No. 26-31-007-00 (Operating Agreement) with the F/ETCA and OCTA for the operation of the 241/91 Express Connector in substantially the form attached to this staff report;
3) Authorize the Chair or Executive Director, pursuant to legal counsel review, to finalize and execute the agreements on behalf of the Commission;
4) Approve an appropriation adjustment authorizing the allocation of approximately $1,644,270 for construction of betterments; and
5) Approve the use of 91 Express Lanes surplus toll revenue funding the proposed betterments totaling $1,644,270.

BACKGROUND INFORMATION:

The 241/91 Express Connector project (Project) is a regionally significant median-to-median tolled facility that provides a direct connection between the 91 Express Lanes and 241 Toll Road (see Figure 1). In 2019, F/ETCA, Caltrans, OCTA and the Commission (RCTC) collectively developed and adopted a term sheet that established the partnership and guidelines for developing and operating the 241/91 Express Connector. For several years, staff has been working in close partnership with F/ETCA, Caltrans, and OCTA, collectively identified as the "Partner Agencies", to implement the Project, with a keen focus on maximizing system performance, meeting performance metrics and providing operational benefits to the traveling public. Interagency agreements have been developed to document the roles and responsibilities of each Partner Agency.

Figure 1: Rendering of proposed 241/91 Express Connector

.

DISCUSSION:

The following sections provide a summary of the key terms of each of the agreements.

Master Agreement

The Master Agreement is a four-party agreement among F/ETCA, Caltrans, OCTA, and RCTC to set forth various responsibilities of the parties related to the development, construction and operation of the Project. Key commitments included in this agreement are:

F/ETCA

The agreement provides that F/ETCA will:

- Be the Operator of the Express Connector.
- Provide 100 percent funding for the Express Connector project delivery costs.
- Pay closure fees to OCTA and RCTC for closures of the 91 Express Lanes related to the Express Connector construction and operation.
- Commit to performance metrics, progressive demand management strategies, and key east end considerations with final approval by OCTA and RCTC.

- Be responsible for maintenance of Express Connector roadway infrastructure and toll systems and performance of roadway infrastructure maintenance work by Caltrans which will be reimbursed from Express Connector toll revenues.
- Apply for Assembly Bill (AB) 194 Toll Authority Approval, codified as Streets and Highways Code §149.7, from the California Transportation Commission (CTC).
- Coordinate among the Partner Agencies for Express Connector construction and scheduled maintenance closures with the 91 Express Lanes.
- Use and reimburse (from Express Connector toll revenues) the 91 Express Lanes Traffic Operations Center jointly operated by OCTA and RCTC for monitoring and incident management of the Express Connector.
- Use California Highway Patrol (CHP) for enforcement.
- Use Excess Revenue to fund programs and projects in the Corridors with limits currently defined as in proximity to State Route 91 Express Lanes, SR-261 and SR-241 north of SR-133 via the Expenditure Plan adopted annually by F/ETCA.
- Reimburse RCTC for consultant costs related to project development and delivery of the EB McKinley 2.0 project.
- Fund a fair-share contribution to projects that alleviate the cut-through traffic for the Green River Road interchange in the city of Corona.
- Establish a high-occupancy vehicle discount program established for the Express Connector toll point.

<u>RCTC and OCTA</u>

The agreement provides that RCTC and OCTA will:

- Support F/ETCA's application to the CTC pursuant to SHC §149.7 for approval to develop, construct and operate the 241/91 EC
- Amend and/or grant any necessary rights and/or permits to F/ETCA for the purpose of building, operating, and maintaining the 241/91 EC
- Enter into an agreement with F/ETCA to perform traffic/incident monitoring via closed circuit television (CCTV) in the Traffic Operations Center, dispatching of California Highway Patrol (CHP) in response to incidents, and coordinating closures for the 241/91 EC as required for incident management.
- Provide input into the setting of parameters and monitoring performance of the Dynamic Pricing Algorithm and Progressive Demand Management systems in accordance with the governance process included in the Operating Agreement.
- Coordinate Closure periods with F/ETCA to minimize lost toll revenues due to any closures of the 241/91 EC during and due solely to 91 Express Lanes activities.
- Coordinate with F/ETCA to minimize impacts to the traveling public includes minimizing the Closure period and good faith discussions for mitigating impacts of delays to reopening.

Caltrans

The agreement provides that Caltrans will:

- Be responsible for construction of the 241/91 EC.
- Honor the existing OCTA Franchise Agreement and RCTC Toll Facility Agreement with the 91 Express Lanes operators. During construction of the Project, Caltrans will deliver to OCTA and RCTC written notice of any closures of all or a portion of the 91 Express Lanes, including a Closure plan and Closure criteria, not less than ten (10) calendar days (or as otherwise agreed to by the parties) prior to the proposed commencement date of the agreed upon Closure. Caltrans will coordinate with OCTA and RCTC on consistency of the closures with the Closure plan and criteria. Caltrans will make its best efforts to conduct construction and maintenance activities in such a manner as to minimize any required closures of the 91 Express Lanes. Notice of withdrawal or amendment of a planned closure will be provided by Caltrans to OCTA and RCTC no less than seventy-two (72) hours prior to the proposed commencement date of the agreed upon Closure or as soon as this information is available.

Other

- The term of the agreement is defined to end on the later of the sunset dates for the existing 91 Express Lanes, F/ETCA Toll Facility Agreement, or any subsequent amendments in the future.
- The agreement provides for the assignment of the Operator responsibilities to OCTA should F/ETCA dissolve prior to the end of the term of the agreement and OCTA will continue debt repayment to F/ETCA after the funding of operations and maintenance and other reserves.
- The agreement includes defined dispute resolution processes which include processes for injunctions and termination.

Betterments

The Project includes betterments that have been requested by staff as noted in Table A below. RCTC will be responsible for the cost of these betterments to be funded by 91 Express Lanes toll revenue.

Table A – RCTC Betterments

Description	Purpose	Cost
Separate fiber optic line	Toll system enhancement	$ 521,270
Full depth shoulder section	Compatibility with 91 ECOP[1]	$ 223,000
Full depth traveled way	Compatibility with 91 ECOP[1]	$ 750,000
Overhead sign extension	Compatibility with 91 ECOP[1]	$ 150,000
	Total Betterment Cost	**$1,644,270**

[1]91 ECOP – SR-91 Corridor Operations Project

Operating Agreement

The Operating Agreement is a three-party agreement between F/ETCA, OCTA and RCTC to more fully establish the obligations of the parties with respect to the operation and maintenance of the Project toll systems. Key provisions included in this agreement are:

- Key Traffic Operations metrics including:
  - Maintaining 60 miles per hour (mph) or more in the 91 Express Lanes critical zone.
  - Volumes not exceeding 1500 vehicles per hour in each direction on the Express Connector.
  - Volumes not exceeding 200 vehicles egressing the EB 91 Express Lanes at the Orange-Riverside county line.
  - Queue length not exceeding 100 vehicles from the Toll Connector Meter.
- A major consideration for the 91 Express Lanes in Riverside County (referred to as the "East End") includes:
  - Maximum of 370 vehicles per hour from the Express Connector on the EB 91 Express Lanes during Superpeak periods.
  - Superpeak periods are initially defined as meeting all of the following criteria:
    - EB McKinley toll rates 25 percent above the baseline toll rate.
    - Maximum density of 23 vehicles per hour per lane.
    - Average speed of less than 65 mph, or a queue length of more than 0.5 mile.
  - Governance process that allows for piloting/testing of criteria modifications for enhanced corridor operations and requirement for mutual consent for permanent modifications to criteria.
- Description of the operational elements, including the toll collection system and monitoring equipment of the Project.
- Roles and responsibilities of the three-party agencies as it relates to operations, monitoring, governance and change management.
- Implementation and change management of a progressive demand management form of traffic demand management.
- Toll policy exhibit, that includes toll setting, discounts and enforcement policies.
- Details on enforcement approach that includes CHP and available automated technologies.
- Incident management during operations, including emergencies.
- Traffic operations monitoring and governance processes.
- Maintenance of the Project toll collection system and supporting equipment.
- F/ETCA reimbursement of any additional costs for the 91 Express Lanes related to operations.
- Customer messaging development processes.

Each of these agreements represents the roles and responsibilities each agency has agreed to assume for the Project development, construction and operation. Partner Agencies have

substantially agreed to the terms within each draft agreement. Remaining revisions are expected to be minor formatting and language refinement. Staff does not anticipate any material changes. Staff and legal counsel have worked extensively with the Partner Agencies to arrive at the agreements attached to the staff report. Staff believes that the 241/91 Express Connector is an important element to achieving system-wide mobility and that these agreements provide the assurances required to ensure the 91 Express Lanes continue optimized operations and mobility for the traveling public through Riverside County.

FISCAL IMPACT:

In connection with executing the Master Agreement with F/ETCA, RCTC will be reimbursed by F/ETCA for expenses (already incurred) related to the EB McKinley 2.0 project in the amount up to $8,000,000. The actual expenses to be reimbursed are $7,360,930. The anticipated revenue amount has materially been estimated and included within the FY 2025/26 budget.

RCTC will be responsible for the cost of betterments for a total cost of $1,644,270 to be funded by 91 Express Lanes surplus toll revenue.

<table>
<tr><th colspan="7">Financial Information</th></tr>
<tr><td colspan="2">In Fiscal Year Budget:</td><td>No</td><td>Year:</td><td>FY 2025/26</td><td>Amount:</td><td>$ 7,360,930
(Revenue)
$1,644,270
(Expense)</td></tr>
<tr><td colspan="2">Source of Funds:</td><td colspan="3">91 Express Lanes Surplus Toll Revenue</td><td>Budget Adjustment:</td><td>Y</td></tr>
<tr><td colspan="2">GL/Project Accounting No.:</td><td colspan="5">Budgeted within FY 2025/26 Budget (materially):
913054 416 41603 0000 591 31 41204 Revenue $7,360,930

Appropriation Adjustment:
009104 81301 00000 0000 591 31 81301 Expense $ 521,270
913055 81301 00000 0000 591 31 81301 Expense $1,123,000</td></tr>
<tr><td colspan="2">Fiscal Procedures Approved:</td><td colspan="3">  </td><td>Date:</td><td>08/08/2025</td></tr>
</table>

Attachments:

1) Draft Final Master Agreement No. 26-31-006-00 for Development, Construction and Operation of the 241/91 Express Connector
2) Draft Final Operating Agreement No. 26-31-007-00 for the Operations of the 241/91 Express Connector

F/ETCA AGREEMENT NO. __

OCTA AGREEMENT NO. __

RCTC AGREEMENT NO. 26-31-006-00

CALTRANS AGREEMENT NO. __

BY AND AMONG

FOOTHILL/EASTERN TRANSPORTATION CORRIDOR AGENCY,

ORANGE COUNTY TRANSPORTATION AUTHORITY,

RIVERSIDE COUNTY TRANSPORTATION COMMISSION,

AND

STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION

FOR

THE DEVELOPMENT AND OPERATION OF THE

241/91 EXPRESS CONNECTOR

TABLE OF CONTENTS

F/ETCA AGREEMENT NO. __

OCTA AGREEMENT NO. __

RCTC AGREEMENT NO. __

CALTRANS AGREEMENT NO. __

BY AND AMONG

FOOTHILL/EASTERN TRANSPORTATION CORRIDOR AGENCY,

ORANGE COUNTY TRANSPORTATION AUTHORITY,

RIVERSIDE COUNTY TRANSPORTATION COMMISSION,

AND

STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION

This Agreement is effective this ___ day of _____, 2025 (the "Effective Date") by and among the Foothill/Eastern Transportation Corridor Agency, a California joint powers authority comprised of Member Agencies (hereinafter referred to as "F/ETCA"); the Orange County Transportation Authority, a public entity of the State of California (hereinafter referred to as "OCTA"); the Riverside County Transportation Commission, a public entity of the State of California (hereinafter referred to as "RCTC"); and the State of California Department of Transportation (hereinafter referred to as "Caltrans"). F/ETCA, OCTA, RCTC, and Caltrans may individually be referred to herein as a "Party" or collectively as the "Parties."

RECITALS

WHEREAS, F/ETCA constructed and, pursuant to cooperative agreements with Caltrans, operates a tolled highway facility on SR-241 between Oso Parkway and SR-91 in Orange County; and

WHEREAS, F/ETCA and Caltrans entered into that certain Cooperative Agreement (12-643), dated May 22, 2014, and entered into that certain Cooperative Agreement (12-708), dated February 17, 2017, whereby, in both agreements, F/ETCA and Caltrans detailed the responsibilities associated with Project Approval and Environmental Document (PA&ED), Plans, Specifications, and Estimate (PS&E), Right of Way (R/W) capital, R/W support, construction capital and construction support project components, and other costs related to the Project (as defined below); and

WHEREAS, in 2002, OCTA, California Private Transportation Company ("CPTC"), and Caltrans entered into that certain Estoppel Certificate and Assignment and Assumption Agreement, dated December 30, 2002 ("Assignment Agreement"), whereby CPTC assigned to OCTA, and OCTA assumed, CPTC's interest in that certain Amended and Restated Development Franchise Agreement (State Route 91 Median Improvements), dated as of June 30, 1993, as

amended by that certain Amendment 1 to Amended and Restated Development Franchise Agreement (State Route 91 Median Improvements), dated July 16, 1993, as further amended by that certain Amendment No. 2 to Amended and Restated Development Franchise Agreement (State Route 91 Median Improvements), dated as of December 30, 2002 and as further amended by Amendment No. 3 to Amended and Restated Development Franchise Agreement (State Route 91 Median Improvements), dated December 12, 2011 (collectively, the "OCTA Franchise Agreement") to operate and maintain a toll collection facility on SR-91 between SR-55 and the Orange County/Riverside County line ("OCTA 91 Express Lanes") and has been operating and maintaining that facility since that time; and

WHEREAS, the Assignment Agreement also assigned to OCTA the Lease Agreement regarding SR-91 Median Improvements, dates as of June 30, 1993, between Caltrans and CPTC for the lease of certain Real Property associated with the tolled transportation facilities within a portion of SR-91 within Orange County (the "OCTA Lease Agreement"); and

WHEREAS, RCTC constructed and, pursuant to that certain Toll Facility Agreement, dated May 14, 2012, with Caltrans, as amended by that certain Amendment No. 1 to Toll Facility Agreement, dated May 1, 2018 and Amendment No. 2 to Toll Facility Agreement, dated October 27, 2023 (collectively, the "RCTC Toll Facility Agreement") and assignment of the OCTA Franchise Agreement in Riverside County, as of 2017 operates and maintains a toll collection facility on SR-91 between Interstate 15 (I-15) and the Orange County/Riverside County Line, and express lane connectors between SR-91 and the express lanes facility on I-15 ("RCTC 91 Express Lanes"); and

WHEREAS, the OCTA 91 Express Lanes and RCTC 91 Express Lanes are referred to, collectively, in this Agreement as the 91 Express Lanes; and

WHEREAS, OCTA and RCTC have entered into various agreements for joint implementation, operation, and maintenance of the 91 Express Lanes; and

WHEREAS, the Parties desire to develop, construct, and operate a direct, tolled connector linking the northbound SR-241 toll road to the eastbound 91 Express Lanes and the westbound 91 Express Lanes to the southbound SR-241 toll road and related corridor improvements to improve throughput between Riverside and Orange Counties, relieve traffic congestion, enhance connectivity between the two tolled systems, improve air quality along the corridor, and promote safety for the traveling public in a manner that does not negatively impact or compromise the operations of SR-241, the 91 Express Lanes, or adjacent general-purpose lanes; and

WHEREAS, on March 3, 2011, F/ETCA and OCTA entered into a cooperative agreement to define the roles and responsibilities for completing a Project Study Report/Project Report for the 241/91 EC; and

WHEREAS, on May 23, 2011, F/ETCA, OCTA, and RCTC entered into a memorandum of understanding to address coordination and implementation of the 241/91 EC; and

WHEREAS, Caltrans, in coordination with F/ETCA, has conducted the environmental review for the 241/91 EC, as required by the California Environmental Quality Act (California Public Resources Code §21000 et seq.) and the National Environmental Policy Act (42 United States Code §4331 et seq.); and

WHEREAS, through their governing boards, F/ETCA, OCTA, and RCTC formally approved the SR-241/91 EC Term Sheet, dated September 12, 2019, as further modified, amended, supplemented, and restated through the date hereof ("Term Sheet"). Caltrans sent its formal agreement and letter of support for the Term Sheet on September 26, 2019. The Term Sheet set forth the basic priorities and framework for developing, implementing, and operating the Project, which have been incorporated into this Agreement and the Operating Agreement (as defined below); and

WHEREAS, coordination among the Parties prior to and during planning, development, construction, and operation of the 241/91 EC is crucial to enable the integration of the toll collection and traffic management systems; mitigate potential impacts that construction and operations may have on the SR-241, 91 Express Lanes, and SR-91; and to ultimately provide for the seamless operation of the 241/91 EC into the SR-241 and the 91 Express Lanes in both Riverside and Orange Counties; and

WHEREAS, it is the intent of the Parties in entering into this Agreement to establish certain opportunities for cooperation and coordination and to set forth various responsibilities of the Parties, as further set forth herein.

WHEREAS, F/ETCA authorized this Agreement on _____.

WHEREAS, OCTA authorized this Agreement on _____.

WHEREAS, RCTC authorized this Agreement on _____.

WHEREAS, Caltrans authorized this Agreement on _____.

NOW, THEREFORE, it is mutually understood and agreed by the Parties as follows:

AGREEMENT

ARTICLE I. DEFINITIONS

The following terms as used in this Agreement are capitalized and shall have the meaning as provided herein:

"**91 Express Lanes**" means the toll collection facility located on SR-91 extending between SR-55 to the west and I-15 to the east, the express connectors from the 91 Express Lanes to the 15 Express Lanes, and all appurtenances necessary for the operation of this toll collection facility. The 91 Express Lanes consist of the OCTA 91 Express Lanes and the RCTC 91 Express Lanes,

collectively. "91 Express Lanes" may also refer to OCTA and RCTC acting collectively as the 91 Express Lanes.

"**AAA**" means Advertise, award and administer.

"**Alternative Dispute Resolution**" has the meaning set forth in Section 23.01(c).

"**Betterments**" shall mean and refer to any OCTA, RCTC, or Caltrans requested improvements to the Project beyond the required scope to implement the 241/91 EC that F/ETCA may agree to complete in conjunction with the Project, at the requesting agency's sole cost and expense including (i) the costs incurred to incorporate acceptable requested improvements into the scope of work of the Project; (ii) additional design, construction, and oversight costs arising from or associated with the requested improvements, including changes thereto; (iii) the costs associated with preparing and obtaining approval of an environmental revalidation and/or necessary permits associated with the requested improvements; (iv) additional operations and maintenance costs arising from or associated with the requested improvements, including changes thereto; and (v) costs associated with any impact on the design and construction schedule associated with the requested improvements. These costs and expenses shall be agreed to by affected parties prior to incorporating the betterment into the Project and shall not be considered Project Contributions. Safety updates required by Caltrans are not considered Betterments and shall be implemented as a Project Cost.

"**Build Alternative**" means the proposed build alternative for the Project as described in the Supplemental Final Environmental Impact Report/Environmental Impact Statement and any changes that result from any environmental revalidations.

"**Caltrans**" means the State of California Department of Transportation.

"**CHP**" means the California Highway Patrol.

"**CIP**" means the Capital Improvement Plan.

"**Claims**" has the meaning set forth in ARTICLE XIX.

"**Closure**" means any restriction on toll-paying customers' access to 241/91 EC, or 91 Express Lanes resulting from the construction, operation and/or maintenance of the 241/91 EC, for a limited time or allowing non-toll paying vehicles to use the 241/91 EC, or 91 Express Lanes and/or 241 toll road for construction, operation and/or maintenance of the 241/91 EC, for a limited time as provided for in this Agreement or Closure plans developed by Parties.

"**Closure Fees**" has the meaning set forth in Section 7.01(a)(x).

"**Corridors**" means the routes on which Excess Revenue may be expended in accordance with SHC §149.7. Such expenditures are limited to projects and programs on or in proximity to SR-91, SR-261, and SR-241 north of SR-133.

"**CPTC**" has the meaning set forth in the Recitals.

"**Critical Zones**" means the portion of the 91 Express Lanes where traffic from both the 91 Express Lanes and the 241/91 EC share the same roadway, and is the focus of density measurement for the purpose of managing Dynamic Pricing and Progressive Demand Management strategy. In the eastbound direction, this zone extends from the touchdown point of the 241/91 EC to the Orange County and Riverside County county line exit. In the westbound direction, it spans from the county line entrance to the location where the connector diverges from the mainline roadway.

"**Cure Activities**" has the meaning set forth in Section 23.03(a).

"**Cure Schedule**" has the meaning set forth in Section 23.03(a).

"**Dispute**" has the meaning set forth in Section 23.01.

"**Dynamic Pricing**" means the setting of a toll price in real-time based on level of traffic congestion and other factors.

"**Dynamic Pricing Algorithm**" means a technological capability of the ETC System that calculates toll pricing in real-time within set parameters, based on real-time inputs/factors such as traffic demand, flow rates, speeds, density, with a goal to achieve a particular objective such as free-flow conditions.

"**Dynamic Pricing Input Values**" means the input factors to the Dynamic Pricing Algorithm.

"**District 12**" means the Caltrans district responsible for the geographic area of Orange County.

"**Eastbound McKinley 2.0**" means the Eastbound 91 Express Lane extension project relating to extending a second eastbound toll express lane from the exit to the express lane connectors (just east of the Main Street Undercrossing) to the beginning of the SR-91 HOV lane just east of Promenade Avenue Overcrossing.

"**EC**" means Express Connector.

"**EIR/EIS**" means the Environmental Impact Report/Environmental Impact Statement.

"**Emergency**" means, in the context of the Closure of the 241/91 EC, any situation that includes a circumstance that poses an immediate and serious threat to life, public safety, the environment, or any Closure deemed necessary by CHP or other first responder agencies that cannot be abated except by Closure of the Toll Facility.

"**ETC**" means the electronic toll collection.

"**ETC Data**" means all data generated by or accumulated in connection with the operation of the ETC System, including traffic volumes, and violation data.

"**ETC Equipment**" means automated vehicle identification systems, video, or other surveillance equipment and enforcement equipment (for Toll Connector Meter, occupancy detection, HOV-Only and Bus/Registered Vanpool enforcement), communications equipment and all other hardware necessary for ETC.

"**ETC Facilities**" means the signs, gantries, and utility connections related to the ETC System.

"**ETC System**" means the ETC Equipment and software, which monitors, controls, or executes the ETC Equipment.

"**Excess Revenue**" has the meaning set forth in Section 9.02(b)(iii).

"**F/ETCA**" means the Foothill/Eastern Transportation Corridor Agency.

"**F/ETCA Toll Facility Agreement**" has the meaning set forth in Section 7.01(a)(x).

"**Incident Management Plan**" means a plan for identifying and responding to incidents on SR-241, SR-91, or the 241/91 EC that have the potential to impact operation of the 241/91 EC and/or the 91 Express Lanes as a result of an incident on the 241/91 EC.

"**Indemnified Parties**" has the meaning set forth in ARTICLE XIX.

"**Indemnifying Party**" has the meaning set forth in ARTICLE XIX.

"**Maintenance Agreement**" means the Express Connector Maintenance Agreement between Caltrans and F/ETCA for roadway infrastructure.

"**Member Agencies**" means the member agencies listed in Exhibit xii. Any updates or changes to the Member Agencies, if approved, in writing, by each agency's respective authorized designee, as described in ARTICLE XXX, shall be automatically incorporated into Exhibit xii of this Agreement without formal amendment.

"**OCTA**" means the Orange County Transportation Authority.

"**OCTA 91 Express Lanes**" has the meaning set forth in the Recitals.

"**OCTA Franchise Agreement**" has the meaning set forth in the Recitals.

"**OCTA Lease Agreement**" has the meaning set forth in the Recitals.

"**Operating Agreement**" has the meaning set forth in Section 7.01(a)(xii). For the avoidance of doubt, any reference to the Operating Agreement shall only apply, as applicable, to

the parties to the Operating Agreement, and not to Caltrans, which is not a party to the Operating Agreement as of the Effective Date.

"**Progressive Demand Management**" (or "**PDM**") means operational control strategies that will be applied to the 241/91 EC to effectively manage demand such that the expected performance metrics are achieved. Strategies to be applied include Dynamic Pricing, Toll Connector Meter, HOV-only mode, and Bus/Registered Vanpool mode. In the west-to-south direction, the initial strategy will be Dynamic Pricing only. Additional PDM strategies in the west-to-south direction may require additional infrastructure components not included in the initial construction of the Project.

"**Project**" or "**241/91 EC**" has the meaning set forth in ARTICLE III.

"**Project Contributions**" means capital and support funding for Project development that shall be repaid according to ARTICLE IX.

"**Project Costs**" means all costs incurred by F/ETCA associated with Project development, including plans, specifications, and estimate (PS&E); planning documents; environmental studies, documents and approvals; preliminary and final civil and toll systems design; right-of-way (ROW) and utilities; OCTA and RCTC Project Development Costs; construction management, and construction and installation of the Project including Closure Fees. For reference only, the current content and estimate of these costs as of the Effective Date is included as Exhibit ii of this Agreement. Any updates to the Project Costs, if approved, in writing, by each agency's respective authorized designee, as described in ARTICLE XXX, shall be automatically incorporated into Exhibit ii of this Agreement without formal amendment.

"**Project Development Costs**" means the costs incurred by OCTA and RCTC for consultant, contractor and legal support associated with Project development incurred after September 12, 2019, including environmental studies, traffic analysis, documents and approvals, preliminary and final design, construction management, and construction of the Project including Closure Fees as specified in this Agreement, 91 Express Lanes customer communication, and payment to RCTC for the Eastbound McKinley 2.0 project.

"**RCTC**" means the Riverside County Transportation Commission.

"**RCTC 91 Express Lanes**" has the meaning set forth in the Recitals.

"**RCTC Toll Facility Agreement**" has the meaning set forth in the Recitals.

"**Ready to List Certification**" means the "RTL Approved By" signature date on the Caltrans "Ready to List Certification Form."

"**Revenues**" means toll revenues received from the Project, violation revenues from the Project, and interest earnings on balances from Project bank accounts.

"**Roadway Ownership**" has the meaning set forth in ARTICLE V.

"**SHC §149.7**" means California Streets and Highways Code (SHC) Section 149.7 (Assembly Bill (AB) 194 (Frazier, 2015)).

"**Supplemental Final EIR/EIS**" means that certain Supplemental Final Environmental Impact Report/Environmental Impact Statement, prepared by Caltrans.

"**Surplus Money Investment Fund Rate**" shall mean for each fiscal year a rate equal to the "Average Annual Yield" of the State of California Surplus Money Investment Fund for the preceding fiscal year as determined and reported by the State Treasurer; and, if no figure is available, "Interest Rate" shall mean, to the maximum extent permitted by law, the rate established pursuant to an interest rate index (or a percentage thereof) selected by the Chief Financial Officer of F/ETCA, with input from Caltrans, OCTA, and RCTC, as having generally produced a rate of interest reasonably comparable to the rate described above.

"**Term**" has the meaning set forth in ARTICLE XV.

"**Term Sheet**" has the meaning set forth in the Recitals.

"**Toll Connector Meter**" means a traffic control device controlled by the ETC System that regulates the flow of traffic from the 241/91 EC to the 91 Express Lanes in the north to east direction.

"**Toll Facility**" means the elements comprising the 241/91 EC required for tolled operation, as generally depicted in Exhibit iii. Any updates to the Toll Facility, if approved, in writing, by each agency's respective authorized designee, as described in ARTICLE XXX, shall be automatically incorporated into Exhibit iii of this Agreement without formal amendment.

"**Tolling Infrastructure**" means the ETC Equipment, ETC Facilities, Toll Connector Meter, and all appurtenances necessary for the operation of the 241/91 EC toll collection facility.

"**Tolling Infrastructure Ownership**" has the meaning set forth in ARTICLE V.

"**Traffic Management Center**" means the facility located at Irvine, California operated by Caltrans for the purpose of monitoring traffic and roadway facilities on the State Highway System in Orange County.

"**Traffic Operations Center**" means the facility located in Anaheim, California operated by OCTA and RCTC for the purposes of monitoring traffic and roadway facilities and services on the 91 Express Lanes.

"**Traffic Operations Metrics**" means a set of metrics agreed to by the Parties as a means to measure the performance of the 241/91 EC and 91 Express Lanes traffic conditions as set forth in Exhibit xi. Any updates to the Traffic Operations Metrics, if approved, in writing, by each agency's respective authorized designee, as described in ARTICLE XXX, shall be automatically incorporated into Exhibit xi of this Agreement without formal amendment. The Dynamic Pricing

Algorithm, Progressive Demand Management systems and operating policies of the 241/91 EC will be adjusted to meet these Traffic Operations Metrics.

ARTICLE II. PURPOSE

The purpose of this Agreement is to define the terms and conditions under which the Project is to be developed, designed, constructed, and operated.

ARTICLE III. PROJECT DESCRIPTION

The project shall include the planning, design, construction, operation, and maintenance of the direct, tolled connector linking the northbound SR-241 toll road to the eastbound 91 Express Lanes and the westbound 91 Express Lanes to the southbound SR-241 toll road and related corridor improvements, consistent with the Build Alternative described in the Supplemental Final EIR/EIS and any changes that result from any environmental revalidations ("241/91 EC" or the "Project").

ARTICLE IV. COMPONENTS OF AGREEMENT AND INTERPRETATION

Section 4.01 Entire Agreement; Severability; Interpretation of Terms. This Agreement and the Schedules and Exhibits hereto constitute the expression of the Parties' intent and understanding with respect to the terms discussed herein and supersede all prior representations, understandings, and communications relating to the terms discussed herein. The invalidity in whole or in part of any term or condition of this Agreement shall not affect the validity of other terms or conditions. Terms capitalized herein shall, unless otherwise defined herein, have the same meaning as set forth in ARTICLE I, Definitions. Where this Agreement uses the term "including" it shall mean including but not limited to, unless otherwise specifically indicated.

Section 4.02 Agreement Interpretation.

(a) This Agreement and each of the attached documents are all an essential part of the Parties' agreement and should be interpreted in a manner that harmonizes their provisions. However, if an actual conflict exists, the following descending order of precedence shall apply:

(i) Agreement Amendments adopted in accordance with this Agreement;

(ii) The terms of this Agreement, excluding any exhibits;

(iii) All Exhibits attached hereto;

Section 4.03 A Party's failure to insist in any one or more instances upon any other Party's performance of any terms or conditions of this Agreement shall not be construed as a waiver or relinquishment of that Party's right to such performance by the defaulting Party or to future performance of such terms or conditions, and the defaulting Party's obligation in respect thereto shall continue in full force and effect. This Agreement may be amended or modified only by mutual written agreement of the Parties.

ARTICLE V. PROJECT OWNERSHIP

At all times during construction and operation of the 241/91 EC all real estate interests and other components of the Project, except Tolling Infrastructure and any on-site mitigation parcels associated with the Project, shall be the property of Caltrans ("Roadway Ownership"). The Tolling Infrastructure and off-site mitigation parcels for the Project shall be the property of F/ETCA or other Parties ("Tolling Infrastructure Ownership"). The legal description and associated schematics and other documentation identifying Roadway Ownership are included as Exhibit iv to this Agreement. Any updates to such description and schematics, if approved, in writing, by each agency's respective authorized designee, as described in ARTICLE XXX, shall be automatically incorporated into Exhibit iv of this Agreement without formal amendment. The description and associated diagram identifying Tolling Infrastructure Ownership is included as Exhibit iii to this Agreement.

ARTICLE VI. RELATIONSHIP TO OTHER AGREEMENTS

Unless otherwise provided for in this Agreement, this Agreement is separate from and does not directly, or by implication, modify or replace any other cooperative agreement or memorandum of understanding among the Parties regarding the Project or any of the adjacent or connected facilities described herein. If there is a conflict between this Agreement and any prior understanding related to the Project, the terms of this Agreement shall prevail.

ARTICLE VII. ROLES AND RESPONSIBILITIES OF THE PARTIES

Section 7.01 The Parties to this Agreement shall generally have the following responsibilities:

(a) **F/ETCA**

(i) Seek approval from the California Transportation Commission (CTC) to develop and operate the 241/91 EC pursuant to SHC §149.7.

(ii) Pursue all environmental clearances and required permits for the Project.

(iii) Fund 100% of PS&E; ROW; and construction of the Project, including Tolling Infrastructure.

(iv) Complete final design of the 241/91 EC with oversight provided by Caltrans.

(v) Deliver the Project pursuant to AAA agreements and other appropriate and necessary agreements with Caltrans.

(vi) Duly reimburse Caltrans as per SHC Section 149.7(e)(2) for the project delivery, construction, oversight, maintenance and operation costs as agreed to in applicable agreements between F/ETCA and Caltrans.

(vii) Enter into Construction and Maintenance agreements with Caltrans for the operation and maintenance of the 241/91 EC.

(viii) Provide OCTA and RCTC with a reasonable opportunity to review and concur with the final design of the Project.

(ix) Consider all timely and reasonable comments and requests from Caltrans, OCTA and RCTC regarding the final design of the Project.

(x) Agree to Closure periods and to pay fees to OCTA and RCTC, in the month that the Closure occurs, for any Closure, including lane reductions, of the 91 Express Lanes resulting from the construction, operation, and/or maintenance of the 241/91 EC (the "Closure Fees"). During and related to construction, the schedules for such Closure Fees are attached as Exhibit v. Any updates to the methodology, if approved, in writing, by each agency's respective authorized designee, as described in ARTICLE XXX, shall be automatically incorporated into Exhibit v of this Agreement without formal amendment. During and related to operations and maintenance, the methodologies for such compensation during operation will be included in the Operating Agreement. F/ETCA will also pay Closure Fees to itself for any Closure of the SR 241, including connectors, resulting from the construction, operation, and/or maintenance of the 241/91 EC. F/ETCA shall seek no Closure Fees from OCTA, RCTC or Caltrans for Closure of the 241/91 EC due to Closure of the 91 Express Lanes or 241 toll road.

(xi) Enter into the Toll Facility Agreement between F/ETCA and Caltrans to set forth the terms of the tolling infrastructure operation, maintenance and transfer of the 241/91 EC consistent with the terms of this Agreement and the Operating Agreement (the "F/ETCA Toll Facility Agreement").

(xii) Enter into an agreement with OCTA and RCTC, concurrently with this Agreement, setting forth the commitments to the operation and maintenance of the Tolling Infrastructure for the 241/91 EC (the "Operating Agreement").

(xiii) Operate the 241/91 EC pursuant to the Operating Agreement and the F/ETCA Toll Facility Agreement.

(xiv) Contract with OCTA and RCTC to monitor traffic/incidents as described in Section 7.01(b)(iv).

(xv) Provide OCTA and RCTC with the access to the data collected and compiled by the 241/91 EC Dynamic Pricing and Progressive Demand Management systems.

(xvi) Provide Caltrans with the access to the traffic data collected and compiled by the 241/91 EC.

(xvii) Conduct regular traffic operations review meetings and make changes to the Dynamic Pricing Algorithm and Progressive Demand Management systems in accordance with the requirements set forth in the Operating Agreement and the F/ETCA Toll Facility Agreement.

(xviii) F/ETCA shall notify Caltrans of any changes in the strategy of the Progressive Demand Management systems for review and comment.

(xix) Develop maintenance and associated Closure plan for the 241/91 EC with the Parties.

(xx) Coordinate maintenance of the 241/91 EC and Tolling Infrastructure located on the 91 Express Lanes with the Parties.

(xxi) Provide Caltrans the Toll System Integration plans for procurement for review and comment; and ultimate issuance of an encroachment permit for access to State Highway System for installation, connectivity, and operation, and annual permit for maintenance of the Toll System Integration Infrastructure.

(xxii) F/ETCA agrees to reimburse OCTA for the direct cost incurred by OCTA to maintain incremental roadway infrastructure within the OCTA 91 Express Lanes as part of the Project, pursuant to the agreed upon boundary of such incremental roadway infrastructure elements identified in Exhibit iv, marked in purple with a yellow hatch overlay. For the avoidance of doubt, such incremental roadway infrastructure elements shall include drainage, overhead and roadside static signs specific to the 241/91 EC, pavement, striping, channelizers, and similar related maintenance items to be added, but shall not include maintenance items that currently exist in the maintenance for the 91 Express Lanes, including the median concrete barrier, overhead and roadside static signs specific to the 91 Express Lanes, median turnaround, and related existing maintenance items as specifically identified in Exhibit viii.

(xxiii) F/ETCA shall ensure that the 91 Express Lanes and the SR-91 general purpose lanes are in good condition and repair during and after construction and maintenance activities. It is the intent of the Parties, and their respective contractors, that upon completion of such work, business activities on the 91 Express Lanes may promptly resume without hindrance, obstruction or delay, loss of revenue, and the 91 Express Lanes and general purpose lanes must be substantially in the same condition as prior to the performance of such work. If the performance of the work causes damage to the 91 Express Lanes, general purpose lanes, or any adjacent structures, facilities,

underground utilities or equipment, then F/ETCA shall be responsible for coordinating the timely replacement and repair of such damage and shall reimburse the Parties for all applicable costs, other than direct staff costs, including Closure Fees, during the time that the 91 Express Lanes facility is not fully available for use or affecting operations.

(xxiv) F/ETCA will fund a fair-share contribution to reasonable projects that alleviate measurable potential increases in cut-through traffic, resulting from the Project, of the Green River Road eastbound SR-91 off-ramp in the City of Corona. F/ETCA shall work with RCTC to determine the fair-share contribution amount of such projects by reviewing traffic studies, proposed improvements, and calculating the proportional contribution using an industry-standard formula for mobility improvement projects.

(b) OCTA and RCTC

(i) Support F/ETCA's application to the CTC pursuant to SHC §149.7 for approval to develop and operate the 241/91 EC, including reasonably seeking authorization from their respective boards of directors for demonstrated support for the Project to the CTC.

(ii) Amend and/or grant any necessary rights and/or permits to F/ETCA for the purpose of building, operating, and maintaining the 241/91 EC subject to the conditions specified herein.

(iii) Enter into the Operating Agreement with F/ETCA, concurrently with this Agreement.

(iv) Enter into an agreement with F/ETCA to perform traffic/incident monitoring via closed circuit television (CCTV) in the Traffic Operations Center, dispatching of California Highway Patrol (CHP) in response to incidents, and coordinating Closure for the 241/91 EC as required for incident management.

(v) OCTA and RCTC shall focus their comments regarding the Project's final design on the interface of the 241/91 EC with the existing 91 Express Lanes, where features may impact the 91 Express Lanes, and the agreed-upon projects (i.e., the 15/91 EB/NB Express Lanes Connector (ELC), the SR-91 WB Corridor Operations Project (COP), and the SR-91/SR-71 EB/NB Connector).

(vi) Provide input into the setting of parameters and monitoring performance of the Dynamic Pricing Algorithm and Progressive Demand Management systems in accordance with the governance process included in the Operating Agreement.

(vii) Coordinate Closure periods with F/ETCA to minimize lost toll revenues due to any Closures of the 241/91 EC during and due solely to 91 Express Lanes activities. Coordinating with F/ETCA to minimize impacts to the traveling public includes minimizing the Closure period and good faith discussions for mitigating impacts of delays to reopening.

(viii) OCTA shall provide documentation demonstrating costs incurred for the incremental roadway infrastructure described in Section 7.01(a)(xxii), including costs incurred by Caltrans and OCTA's independent roadway services contractor, and OCTA shall together with Caltrans amend the 91 Express Lanes maintenance agreement between OCTA and Caltrans, if necessary, to include the 241/91 EC incremental roadway infrastructure.

(c) **Caltrans**

(i) Enter into the F/ETCA Toll Facility Agreement to provide for roadway infrastructure toll operation and maintenance consistent with the terms of this Agreement.

(ii) Cooperate with F/ETCA to deliver the 241/91 EC Project Approval and Environmental Document and any environmental revalidations of the Project.

(iii) Cooperate with F/ETCA to obtain approval of the Project from the CTC pursuant to SHC §149.7 or through any other applicable statute, including demonstrated support for the Project to the CTC.

(iv) Provide oversight and approve the final design of the 241/91 EC.

(v) Consider all reasonable and timely comments regarding Project design from F/ETCA, OCTA, and RCTC.

(vi) Enter into the Maintenance Agreement with F/ETCA for the maintenance of all Project improvements except those related to the Tolling Infrastructure, including maintenance of the roadway and structures. The Maintenance Agreement will not address maintenance responsibilities that will be defined under a separate maintenance agreement between OCTA and Caltrans that incorporates the 241/91 EC incremental maintenance elements.

(vii) Subject to a separate construction agreement with F/ETCA, Caltrans shall advertise, award, and administer the construction phase of the Project.

(viii) For the duration of the construction phase (Project advertisement to final Project acceptance and close-out) Caltrans will provide support for F/ETCA staff to respond to questions related to the construction phase at meetings of

F/ETCA's, OCTA's, and RCTC's governing Board and Committees, including the State Route 91 Advisory Committee, provided that the relevant agency provides reasonable notice to Caltrans of the meeting date, time, and location.

(ix) Prior to construction of the Project, lane closure charts will be provided to all Parties as part of the review of the Plans, Specifications and Estimates prepared by F/ETCA, and approved by all Parties twelve (12) weeks prior to the Ready to List date.

During construction of the Project, the contractor's staging, and scheduling of operations, including Closure, will be shared with RCTC, OCTA, and F/ETCA for review and comments, prior to Caltrans' approval of the contractor's construction schedule. Further, during construction of the Project, RCTC, OCTA, and F/ETCA are welcome and encouraged to attend the weekly construction meetings with the contractor (where Closure, among other issues, are discussed).

Caltrans will honor the existing OCTA Assignment Agreement, OCTA Lease Agreement, and RCTC Toll Facility Agreement with the 91 Express Lanes operators. During construction of the Project, Caltrans shall deliver to OCTA and RCTC written notice of any agreed Closure of all or a portion of the 91 Express Lanes, including a Closure plan and Closure criteria, not less than ten (10) calendar days (or as otherwise agreed to by the parties) prior to the proposed commencement date of the agreed Closure. Caltrans will coordinate with OCTA and RCTC on consistency of the Closure with the Closure plan and criteria. Caltrans shall make its best efforts to conduct construction and maintenance activities in such a manner as to minimize any required Closure of the 91 Express Lanes. Notice of withdrawal or amendment shall be provided by Caltrans to OCTA and RCTC no less than seventy-two (72) hours prior to the proposed commencement date of the agreed Closure or as soon as this information is available.

During construction of the Project, Caltrans shall provide the 91 Traffic Operations Center with notification of Closure 48 hours in advance of the Closure and notification of cancelled Closure as soon as this information is available. Caltrans shall coordinate Closure with the 91 Traffic Operations Center as they are occurring and ensure notice is given to the Traffic Operations Center when the Closure is picked up. The 91 Traffic Operations Center will be responsible for posting Closure messages on 91 Express Lanes signs and for suspending tolling. The Closure window will not end until Caltrans has notified the 91 Traffic Operations Center and the 91 Traffic Operations Center has reopened the 91 Express Lanes. Where the Closure extends past the agreed Closure window, Caltrans will ensure the Traffic Operations Center will be notified when the Closure ends.

During construction of the Project, if any Emergency Closure of the 91 Express Lanes, 241/91 EC, and/or 241 toll road, including connectors, is required, Caltrans will notify RCTC, OCTA, and/or F/ETCA as soon as practicable for coordination and for notice to the public. Closures due to Emergencies shall be limited to the shortest reasonable time to address the Emergency situation and each party shall act with all due diligence to address such Emergency.

During construction, if a Closure of the 91 Express Lanes, 241/91 EC, and/or 241 toll road, including connectors, does not reopen on time, Caltrans will require a corrective action plan from the contractor to avoid recurrence pursuant to the requirements in the construction contract with the contractor. Caltrans will share that corrective action plan with the Parties for comment. Any comments will not be unreasonably delayed.

After construction contract acceptance by Caltrans, this section shall no longer apply.

(x) Under separate agreements Caltrans will amend and/or grant any necessary rights and/or permits to F/ETCA for the purpose of building, operating, and maintaining the 241/91 EC subject to the conditions specified herein.

(xi) F/ETCA, RCTC, and OCTA will address Closure Fees amongst themselves. Parties agree that Caltrans will not pay any Closure Fees related to the 241/91 EC, 91 Express Lanes and/or 241 toll road for construction, operation, and maintenance of the 241/91 EC. No obligation of F/ETCA to pay Closure Fees will be inherited by Caltrans after the dissolution of F/ETCA.

(xii) When invoicing OCTA for work performed on the 91 Express Lanes for the incremental roadway infrastructure described in Section 7.01(a)(xxii), Caltrans shall invoice such work separately from maintenance work performed for 91 Express Lanes or 241/91 EC, to differentiate the different workstreams, and Caltrans shall together with OCTA amend the 91 Express Lanes maintenance agreement between OCTA and Caltrans, if necessary, to include the 241/91 EC incremental roadway infrastructure.

ARTICLE VIII. COOPERATION AMONG AGENCIES

Section 8.01 Each Party hereto will cooperate with the other Parties and, among other actions and consistent with their role and appropriate exercise of discretion, will promptly consider, execute, and deliver such additional reviews, approvals, agreements, assignments, endorsements, and other documents as the other Parties hereto may reasonably request to carry out the full intents and purposes of this Agreement.

Section 8.02 In addition to the above, the Parties agree to cooperate on the following Project activities:

(a) The Parties will work collaboratively to support F/ETCA's application for supplemental tolling authority to develop and operate the 241/91 EC pursuant to SHC §149.7. If Parties agree to support development and operation of the Project without supplemental tolling authority, Parties will meet and agree to a path forward for use of F/ETCA's existing authority pursuant to GC §66484.3 and incorporation of all elements of SHC §149.7 allowable under F/ETCA's existing authority, as of the Effective Date.

(b) All Parties agree to work together to resolve geometric and operations issues between the SR-91 Corridor Operations Project (COP) which was opened to traffic in early 2022, 241/91 EC, and a future eastbound 6th General Purpose Lane Addition (SR-241 to SR-71) (SR-91 EB Corridor Operations Project, "91 ECOP") with the mutual goal of minimizing cost, scope, schedule, and construction impacts to the three projects.

(c) If OCTA, RCTC or Caltrans desire any Betterments to be completed as part of the Project, that Party desiring the Betterments may make a request, in writing, and provide F/ETCA (with a copy to the other agencies) with a detailed description of the Betterments, including sufficient information and detail as would be required for inclusion in the Project. F/ETCA will consider the need for the Betterment on a case-by-case basis. If the Betterments are acceptable to F/ETCA, in its sole discretion, F/ETCA may agree to include them in the scope of work for the Project, provided that all agencies shall be given an opportunity to review and provide written approval of proposed Betterments. No Betterment that would delay the completion date or otherwise result in an unreasonable deviation from the Project schedule shall be considered. Details of accepted Betterments, including Betterments accepted during construction, if approved by all agencies in writing, shall be automatically incorporated into Exhibit vi of this Agreement without formal amendment. The requesting Party shall pay for the entirety of their requested Betterment to TCA within an agreed upon timeline, that is no later than opening of the Project and following receipt of an invoice for such Betterment from F/ETCA.

(d) Traffic utilizing the 241/91 EC eastbound will be allowed to exit the 91 Express Lanes at a location at or near the Orange County/Riverside County line. F/ETCA will post and collect the toll for the 241/91 EC and RCTC will post and collect the toll for the 91 Express Lanes.

(e) F/ETCA, OCTA, and RCTC shall develop the 241/91 EC Dynamic Pricing Algorithm and Progressive Demand Management system parameters to achieve the Traffic Operations Metrics and will memorialize the process for adoption and modification in the Operating Agreement.

(f) F/ETCA, OCTA, and RCTC shall work together to achieve the agreed-upon Traffic Operations Metrics by making necessary changes to the 241/91 EC Dynamic Pricing Algorithm and 241/91 EC Progressive Demand Management system.

(g) F/ETCA, OCTA, and RCTC shall provide input on the design of signage, traffic measurement/monitoring locations, and considerations for the ETC System and ETC Data.

Caltrans will have final approval of such signage. The Dynamic Pricing Algorithm, Progressive Demand Management system, Dynamic Pricing Input Values, and reports will be developed jointly and calibrated by F/ETCA, OCTA, and RCTC based on parameters described in the Operating Agreement. F/ETCA, OCTA and/or RCTC may request changes to the Dynamic Pricing Algorithm and Progressive Demand Management systems. F/ETCA, OCTA, and RCTC shall act reasonably in reviewing requests for changes and respond to the requesting party in a timely manner. OCTA and RCTC will have final approval of the Dynamic Pricing Algorithm and Dynamic Pricing Input Values, including changes. The 241/91 EC will operate with Dynamic Pricing in both directions. OCTA and RCTC will have final approval of the Progressive Demand Management configuration in accordance with the governance process included in the Operating Agreement.

(h) An operational goal of the Project is to utilize available 91 Express Lanes capacity, without negatively impacting 91 Express Lanes operations within established thresholds, consistent with the Traffic Operations Metrics set forth in Exhibit xi as of the Effective Date, unless otherwise agreed to by the Parties. Non-conformance with performance metrics for the 91 Express Lanes is further addressed by the governance process included in the Operating Agreement. Notwithstanding the above, the Parties agree that there will be no pre-determined maximum toll associated with the 241/91 EC, and traffic will be managed using Dynamic Pricing in combination with the Progressive Demand Management.

(i) Parties shall use reasonable efforts, and undertake good faith attempts, to notify, and identify any operations changes that may arise from contemplated toll policy or operating procedure changes related to the 91 Express Lanes that could affect the operations of the 241/91 EC.

(j) F/ETCA shall provide OCTA and RCTC with the inputs to and outputs from the Dynamic Pricing Algorithm and Progressive Demand Management system.

(k) F/ETCA, OCTA, RCTC, and Caltrans shall establish protocols for the installation and operation of a Toll Connector Meter on the 241/91 EC to be used to control traffic flows.

(l) The Parties shall jointly develop and approve the Incident Management Plan.

(m) F/ETCA, OCTA, and RCTC shall develop a maintenance closure plan for use in managing the 241/91 EC after construction acceptance of the Project. The maintenance closure plan shall be included in the Operating Agreement and shall include, but is not limited to: the physical maintenance closure plan, the process for inter-agency communication for Closure of the 241/91 EC that impact the 91 Express Lanes and Closure of the 91 Express Lanes that impact the 241/91 EC, the method for determining which Closures require reimbursement of toll revenue, and a commitment to coordinate Closure during maintenance to minimize the impact to the traveling public. Caltrans shall not be liable to any other Party for any losses or reduction in revenue due to Closure of the 241/91 EC. The maintenance closure plan will be developed at least three (3) months prior to opening of the Project. The maintenance closure plan is not intended to be a part of the Progressive Demand Management strategies.

(n) F/ETCA shall be responsible for communication related to the 241/91 EC. A detailed communication plan will be developed by F/ETCA, no less than three months prior to construction start, to detail the communications strategy and timing of deliverables, reviews, and approvals, which shall be approved by OCTA, RCTC, and Caltrans within thirty (30) days. During construction, F/ETCA will provide notice to OCTA, RCTC, and Caltrans no less than three (3) business days prior to publication of any public communication materials; provided that in the case of an Emergency, F/ETCA will provide notice as far in advance as practicable. Publications shall be provided for review and comment by OCTA, RCTC, and Caltrans, and F/ETCA shall resolve comments in good faith and in a timely manner. Timing for review and approvals of such publications will be defined in the communication plan.

(o) Operational parameters as specified in the Operating Agreement shall be based on existing operating policies where they exist. 91 Express Lanes operating policies shall govern where there is a conflict with other agencies' operating policies. OCTA and RCTC will not be required to change their toll pricing to control the 241/91 EC volume.

(p) Maintenance of the incremental roadway infrastructure described in Section 7.01(a)(xxii) shall be coordinated with Caltrans and OCTA. In connection with the aforementioned maintenance, F/ETCA, OCTA, and Caltrans shall develop a workplan and budget each year to include in the F/ETCA board-adopted annual expenditure plan.

ARTICLE IX. PROJECT FUNDING, SOURCES, USES OF FUNDS, REIMBURSEMENT FOR SERVICES, AND RELEASE OF DEBT OBLIGATION

Section 9.01 Project Funding and Sources

(a) F/ETCA will fund one hundred percent (100%) of the cost of the PS&E, ROW, all required environmental mitigation, and construction of the Project, including the cost of Tolling Infrastructure.

(b) F/ETCA will not finance its contribution, but its contribution will be treated as if it were Project debt in accordance with California Streets and Highways Code, § 149.7 and such debt shall be repaid with interest at the Surplus Money Investment Fund Rate until the end of Term or if Caltrans becomes the successor operator. Interest payments shall be made semi-annually on each January 15 and July 15. In the event of a shortfall in Revenues to make any interest payment, any unpaid interest shall compound semi-annually on each January 15 and July 15.

Section 9.02 Revenues, Uses of Funds and Reimbursement for Costs and Services

(a) Amounts shall be set aside by F/ETCA and reserved from the Revenues generated from the 241/91 EC to cover the following:

(i) Incremental operating costs incurred by each Party, including reserves set aside in accordance with the reserve funding schedule attached as Exhibit ix hereto and adjusted by the Chief Financial Officer of F/ETCA as needed to meet funding requirements, for the development, maintenance, repair,

rehabilitation, improvement, reconstruction, administration and operation of the 241/91 EC, including Closure Fees and liquidated damages, as specified in the Operating Agreement and Maintenance Agreement; and

(ii) Administrative expenses to operate the 241/91 EC as specified in the Operating Agreement (up to 3 percent of Revenues).

(b) After deducting the amounts set forth in subsection (a) of this section, the resulting revenues shall be distributed as follows:

(i) F/ETCA shall be repaid the full amount it contributed to the Project with interest as specified in Section 9.01(b). Principal shall be paid on each January 15 in accordance with an amortization schedule through the Term. The amortization schedule shall be determined by the Chief Financial Officer of F/ETCA following a final determination of the total costs of the Project and may be adjusted from time to time in accordance with any prepayments of principal pursuant to subsection (ii) below or any deferral of payments pursuant to subsection (iv) below. For clarification purposes, a sample amortization schedule based on current estimated costs is set forth in Exhibit x hereto. Funds set aside by F/ETCA for projects prior to debt payments will reduce the outstanding debt balance. Past due interest and principal shall be paid prior to any regularly scheduled payments of interest or principal.

(ii) F/ETCA may elect to prepay amounts due to F/ETCA pursuant to Section 9.02(b)(i) if Excess Revenues are not projected to be expended in the following five (5) Fiscal Years pursuant to the expenditure plan described in Section 9.02(c).

(iii) All remaining revenue ("Excess Revenue") will be attributed to F/ETCA to fund project improvements and programs in the Corridors; and

(iv) If a project or program on one of the Corridors is identified for funding and projected Excess Revenues do not cover the funding in the time period needed, F/ETCA may agree to defer scheduled debt payments to advance the project or program.

(c) Excess Revenues shall be deposited in an account under the control of F/ETCA and shall be used for a project or program in the Corridors pursuant to an expenditure plan developed by F/ETCA, with input from Caltrans, OCTA, and RCTC. Procedures for the development of the expenditure plan are in Exhibit vii. Planned expenditures for a project or program in the Corridors shall be approved through the appropriate planning document for Caltrans, OCTA, or RCTC and F/ETCA shall reference such project or program in its expenditure plan for the 241/91 EC. The expenditure plan shall be updated and adopted annually by the F/ETCA Board of Directors as part of F/ETCA's CIP in consultation with Caltrans as required under the enabling SHC Section 149.7(e)(5)(A)(i). The CIP shall include both civil and Tolling Infrastructure improvements and

systems. F/ETCA shall submit the CIP to OCTA and Caltrans for consistency review with the Regional Transportation Plan and related programs.

Section 9.03 Reimbursement of Pre-Operational Expenses

(a) Project Development Costs incurred after the Effective Date and prior to the date the Project is open to revenue traffic may be submitted to F/ETCA for reimbursement in accordance with Section 9.03(c). OCTA and RCTC shall notify F/ETCA of all estimated costs for reimbursement at least ninety (90) days in advance of incurring such costs by submitting a list of anticipated costs, purpose, and estimated timing of expense, provided that estimated Closure Fees are not subject to this ninety (90) day requirement. F/ETCA will endeavor to provide a response in writing within thirty (30) days indicating approval to proceed with the cost activity or a reason for denial of the proposed cost activity. OCTA and RCTC shall estimate costs and necessary activities in good faith and F/ETCA shall not unreasonably withhold approval.

(b) Project Development Costs incurred prior to the Effective Date may be submitted to F/ETCA for reimbursement in accordance with Section 9.03(c). Reimbursed costs to RCTC shall also include up to $10 million for the Eastbound McKinley 2.0 project.

(c) OCTA and RCTC shall submit actual costs incurred and supporting documentation. F/ETCA will review the documentation and within sixty (60) days of receipt, provide a response indicating whether costs have been accepted or rejected due to lack of documentation or ineligibility. Any costs not accepted for payment will be reasonably reconsidered with the submission of necessary documentation or further explanation. Reimbursable Project Development Costs accepted by F/ETCA will be paid within thirty (30) days of acceptance.

Section 9.04 Release of Debt Obligation

(a) Should Caltrans be designated as the successor operator, Caltrans' responsibility to pay Project debt will be released and Caltrans will receive the 241/91 EC free and clear of all obligations.

(b) At the end of the Term, any responsibility to pay Project debt will be released.

Section 9.05 Post-Transfer Use of Funds. Caltrans shall assume ownership and control over any Excess Revenues in the account described in Section 9.02(c) as of the date of the transfer set forth in ARTICLE XXII after deducting any obligations due and owing F/ETCA to compensate it for its costs of operating the toll road as of such date and consistent with the expenditure plan then in effect updated and adopted F/ETCA's CIP in consultation with Caltrans as required under the enabling SHC Section 149.7(e)(5)(A)(i).

ARTICLE X. ROADWAY AND TOLL FACILITY OPERATIONS, MAINTENANCE, AND INCIDENT MANAGEMENT

Section 10.01 Caltrans shall maintain all non-Tolling Infrastructure related improvements and related infrastructure constructed as part of the 241/91 EC, including roadway and structures

as set forth in the F/ETCA Toll Facility Agreement and Maintenance Agreement. Maintenance of the Tolling Infrastructure for the 241/91 EC shall be the responsibility of F/ETCA.

Section 10.02 Project roadway and Toll Facility operations, maintenance, and incident management activities will be funded from 241/91 EC toll revenues.

Section 10.03 The 241/91 EC shall be operated as an ETC facility and use of the facility shall require a FasTrak transponder.

Section 10.04 The Operating Agreement incorporates operating policies specific to the 241/91 EC, including the following: (i) High Occupancy Vehicles (HOV) with three or more passengers will travel toll-free on the 241/91 EC during weekday off-peak periods and on weekends; (ii) vanpools registered with F/ETCA, municipal transit buses, designated veteran license plates issued by the California Department of Motor Vehicles with a valid FasTrak transponder, and other vehicle classes that are required by law to travel toll-free on toll roads will travel toll-free; and (iii) motorcycles and electric vehicles will pay full tolls at all times.

Section 10.05 [Reserved.]

Section 10.06 Should a Closure of the SR-241/91 EC and/or 91 Express Lanes be necessary due to an Emergency, no Party shall be liable to any other Party for any losses or reduction in revenue.

Section 10.07 The Parties recognize the rights conveyed by this Agreement, including that the 241/91 EC may be over, under, or on existing State ROW that crosses several local jurisdictions and that is improved with, among other things, an existing State Highway and other improvements such as local roads and utilities. While F/ETCA is granted exclusive use and possession of the surface of the Caltrans ROW for operation of the Toll Facility, it is understood that this Agreement is subject to all existing rights conveyed to others, including local entities and utilities, and Caltrans is not obligated to clear, remove, relocate, or otherwise extinguish the rights of third parties as a condition of this Agreement. Further, the grant of exclusive use and possession of the Caltrans ROW as described in the foregoing sentence is not intended to, and shall not prevent, Caltrans from entering the Toll Facility to perform its own surveillance, monitoring, inspections, and similar activities, provided that the same do not materially interfere with operation of the Toll Facility. Similarly, this Agreement does not preclude Caltrans from issuing new encroachment permits to third parties nor does it preclude Caltrans from amending or extending the term of existing encroachment permits; provided that F/ETCA, RCTC, and OCTA are first provided notice of any new encroachment permits proposed or amendments to existing encroachment permits and afforded an opportunity to review and comment on the issuance/amendment of such permits, and provided further that such permits do not materially interfere with the operation of the Toll Facility. Moreover, this Agreement does not preclude Caltrans from requesting that existing utilities be relocated or preclude Caltrans from causing utilities to be relocated, provided that F/ETCA, RCTC, and OCTA are first provided notice and an opportunity to review and comment on such relocation, and provided further that such relocation does not materially interfere with the operation of the Toll Facility. The Parties recognize that the ultimate authority to approve or deny any encroachment permit and/or utility rests with Caltrans.

Section 10.08 This Agreement is subject to the terms and provisions of Division 1, Chapter 3 of the Streets and Highways Code (Streets and Highways Code section 660 et seq.) and any subsequent amendment thereto, as may be applicable.

Section 10.09 Caltrans may close 241/91 EC and/or open 241/91 EC to general-purpose traffic for incident management, or Emergency response in accordance with established rules, guidelines and criteria in the approved Incident Management Plan developed for the 241/91 EC by all Parties in accordance with Section 8.02(l).

Section 10.10 Caltrans may close the 241/91 EC and/or open the 241/91 EC to general-purpose traffic for construction purposes and maintenance purposes in accordance with the terms of the F/ETCA Toll Facility Agreement and in accordance with the Traffic Operations Metrics. In such event, Caltrans shall share the project Transportation Management Plan (TMP) with F/ETCA for review and comment thirty (30) days in advance of such occurrences and notify F/ETCA ten (10) days in advance of such occurrences. Should the 241/91 EC Closure affect the 91 Express Lanes, Caltrans shall also include OCTA and RCTC in the coordination consistent with applicable agreements in the corridor.

Section 10.11 Caltrans shall not close the 241/91 EC during peak hours without meeting and conferring with F/ETCA prior thereto, and Caltrans shall provide at least three (3) months prior written notice to F/ETCA in the event any Caltrans activity in a portion of the 241/91 EC requires a partial or full Closure of the 241/91 EC for longer than twenty-four (24) hours, except as to those Closure for incident management, or Emergency response which are not anticipated by Caltrans prior to the inception of the event causing such Closure. Should the 241/91 EC Closure affect the 91 Express Lanes, Caltrans shall also include OCTA and RCTC in the coordination consistent with applicable agreements in the corridor.

ARTICLE XI. OWNERSHIP OF DOCUMENTS, MAINTENANCE OF, AND ACCESS TO RECORDS

Each Party shall maintain records associated with its responsibilities under this Agreement. Upon reasonable notice, each Party shall permit the authorized representatives of the other Parties and the State of California such access to the Party's accounting books, records, payroll documents and facilities of the Party which are directly pertinent to this Agreement for the purposes of examining, auditing and inspecting them in connection with the Party's performance of this Agreement. The Parties shall make available the books and records of their subcontractors and consultants which are directly pertinent to this Agreement for audit and inspection upon the request of another Party. Each Party shall maintain such books, records, data, and documents in accordance with generally accepted accounting principles and shall clearly identify and make such items readily accessible to such parties during the Party's performance hereunder and for a period of four (4) years from their date of creation, except in the event of litigation or settlement of claims arising from the performance of this Agreement, in which case the Party agrees to maintain same until the disposal of all such litigation, appeals, claims, or other exceptions related thereto. Each Party shall permit any of the foregoing parties to reproduce documents by any means whatsoever or to copy excerpts and transcriptions as reasonably necessary. Each Party agrees to include these requirements in all subcontracts at any tier.

ARTICLE XII. FINANCIAL ACCOUNTING, REPORTING, AND AUDITING

Section 12.01 F/ETCA shall have overall responsibility for financial accounting, reporting, and auditing of all Project activities. F/ETCA shall maintain accounting records such that financial information for the 241/91 EC is identifiable separately from other F/ETCA facilities. OCTA, RCTC, and Caltrans shall have responsibility for financial accounting, reporting, and auditing as may be required under separate agreement(s) with F/ETCA.

ARTICLE XIII. PERFORMANCE REQUIREMENTS, MONITORING AND REPORTING

Section 13.01 Where assigned to a specific Party or the Parties in general, performance requirements, monitoring, and reporting for assigned activities shall be established in separate agreements associated with such assignment(s).

Section 13.02 F/ETCA shall provide OCTA and RCTC with a 241/91 EC operational and performance data report monthly and shall provide OCTA and RCTC with access to an operational performance data portal.

Section 13.03 F/ETCA shall provide Caltrans with a 241/91 EC traffic performance data report monthly.

Section 13.04 At the request of OCTA and RCTC, F/ETCA shall provide a quarterly operational and performance summary report to the OCTA and RCTC Boards of Directors and/or 91 Advisory Committee.

ARTICLE XIV. COMMUNICATION AND NOTICES

All Notices hereunder and communications regarding the interpretation of the terms of this Agreement, or changes thereto, shall be effected by delivery of said Notices (a) in person or by courier; (b) by depositing said Notices in the U.S. mail, registered or certified mail, returned receipt requested, postage prepaid; or (c) sent by electronic mail, provided that the recipient of the electronic Notice acknowledges receipt of such transmission by electronic mail. Personal or courier delivery shall be deemed given upon actual delivery to the intended recipient at the designated address. Mailed Notices shall be deemed given upon the date of the actual receipt as evidenced by the return receipt. Electronic mail Notice shall be deemed given upon the date the email is acknowledged as received by the recipient; provided that if acknowledgement is received after 5 p.m., Pacific Time, delivery shall be deemed received as of 8 a.m., Pacific Time, the following business day. Any Notice shall be sent, transmitted, or delivered, as applicable, to the applicable Party or Parties at the following addresses:

To: Orange County Transportation Authority	To: Riverside County Transportation Commission	To: Foothill/Eastern Transportation Corridor Agency	To: California Department of Transportation District 12

550 South Main Street P.O. Box 14184 Orange, CA 92863-1584	4080 Lemon Street P.O. Box 12008 Riverside, CA 92502	125 Pacifica Irvine, CA 92618	1750 East Fourth Street Santa Ana, CA 92705
ATTENTION: Kirk Avila, General Manager of Express Lanes Programs	ATTENTION: David Thomas, Toll Project Delivery Director	ATTENTION: Stephanie Blanco, Chief Capital Programs Officer	ATTENTION: District Director With a copy to: Department of Transportation Legal Division 4050 Taylor Street M.S. – 130 San Diego, CA 92110 Attn: Deputy Chief Counsel
Phone: (714) 560-5674	Phone: (951) 787-7141	Phone: (949) 754-3454	Phone: (657) 328-6000
Email: Kavila@octa.net	Email: dthomas@rctc.org	Email: sblanco@thetollroads.com	Email: AA.to.the.district.12.director@dot.ca.gov

ARTICLE XV. TERM OF AGREEMENT

The term of this Agreement ("Term") shall begin on the Effective Date and end on the later of the sunset dates for the existing 91 Express Lanes, F/ETCA Toll Facility Agreement, or any subsequent amendments in the future.

ARTICLE XVI. ASSIGNMENT

Section 16.01 The provisions of this Agreement shall be binding upon and inure to the benefit of the Parties and their successors and permitted assigns; provided, that no Party may assign, delegate or otherwise transfer any of its rights or obligations under this Agreement without prior written consent of all non-assigning parties. Any purported assignment in violation of this ARTICLE XVI shall be treated as invalid from the outset.

Section 16.02 In the event F/ETCA dissolves or the authority of OCTA or RCTC to operate the 91 Express Lanes expires or the entity authorized to operate such toll roads changes, the other Parties will amend this Agreement to reflect such changes. Tolling, as described in ARTICLE VIII, shall continue until the end of the Term. If F/ETCA dissolves prior to the end of the Term, then the parties will meet and confer no later than five (5) years before such dissolution to identify a successor operator and obtain the necessary legal authority for the successor operator to operate the 241/91 EC. Thereafter the parties will facilitate the assignment and transfer of

F/ETCA property, obligations, contracts, all cash and reserve accounts as identified in Exhibit ix, and related items to the successor operator. F/ETCA will set aside excess operating expenditure reserves for the projected period between dissolution and the end of the Term.

(a) Parties agree that OCTA shall be the successor operator for the 241/91 EC; provided that OCTA obtains the necessary legal authority to operate the 241/91 EC; and OCTA shall be responsible for the F/ETCA obligations and commitments to the operation and maintenance of the Tolling Infrastructure for the 241/91 EC consistent with the terms of this Agreement and the Operating Agreement, including continued tolling and continued repayment of any Project debt, subject to the conditions set forth in subsection (b). If OCTA is unable to become the successor operator, the Parties shall work to obtain the necessary legal authority for another entity to operate the 241/91 EC as the successor operator who shall take over the F/ETCA obligations and commitments with regard to the operation and maintenance of the 241/91 EC and its Tolling Infrastructure, including obtaining the necessary legal authority to operate the 241/91 EC, continued tolling, and continued repayment of any Project debt.

(b) If the successor operator agrees to repay Project debt, then excess operating expenditure reserves shall be used by that successor operator for payment of operating expenses and repayment of Project debt pursuant to this Section 16.02(b). Should there be a reserve balance at the end of the Term, the balance shall then be distributed to F/ETCA Member Agencies.

(i) If 241/91 EC revenues generated meet operating expense funding needs, the successor operator will release excess operating expense reserves annually and apply those funds to the repayment of Project debt; and

(ii) If 241/91 EC revenue generated does not meet operating expense funding needs, then the successor operator will use the excess operating expense reserves to support operating expense funding needs and, if additional funding is needed, debt payments may be suspended until such time revenue is sufficient to fund operating expenses, reserves, and restart debt payments.

(c) Prior to dissolution of F/ETCA and upon confirmation of a successor operator, F/ETCA shall pay a lump sum amount to OCTA and RCTC for Closure Fees for the period between F/ETCA's dissolution and the end of the Term. The amount shall be calculated by averaging the annual Closure Fees incurred from Closure of the 241/91 EC for the three years prior to the year the meet and confer described in Section 16.02 occurs to determine the expected Closure Fees for the period from F/ETCA's dissolution to the end of the Term. For the avoidance of doubt, this lump sum amount shall be the sole remedy for Closure Fees resulting from Closure. The lump sum amount shall be funded from the excess operating expenditure reserve described in Section 16.02(b) at the time of F/ETCA's dissolution and paid to OCTA and RCTC prior to the successor operator's use of the excess operating expenditure reserve to pay operating expenses and repay Project debt pursuant to Section 16.02(b).

(d) Should Caltrans be designated as the successor operator, the 241/91 EC will be transferred free and clear of obligations, including debt and Closure Fees, pursuant to Section

9.04(a) and will operate the 241/91 EC until the end of Term in accordance with the Traffic Operations Metrics.

(e) Any amendments or assignment of this Agreement shall ensure the continued operation of the 241/91 EC in accordance with the terms of this Agreement and in a manner that will not result in a negative impact to operations of the 91 Express Lanes beyond established thresholds consistent with the Traffic Operations Metrics as of the Effective Date, unless otherwise agreed to by the Parties.

(f) For the avoidance of doubt, F/ETCA shall have no further obligations under this Agreement after the date on which it dissolves, and the successor operator shall assume F/ETCA's obligations and commitments to the operation and maintenance of the Tolling Infrastructure for the 241/91 EC.

ARTICLE XVII. INSURANCE

Each Party agrees to self-insure or maintain appropriate insurance in such amounts and with such coverage, as determined necessary in its sole discretion, sufficient for its respective responsibilities, obligations, risks, and liabilities under this Agreement.

ARTICLE XVIII. CONFLICTS OF INTEREST

Each Party agrees to avoid organizational conflicts of interest. An organizational conflict of interest means that due to other activities, relationships, or contracts, the Party is unable, or potentially unable, to render impartial assistance or advice to another Party(ies) or the Party's objectivity in performing the work required herein is or might be otherwise impaired. Operation of the 91 Express Lanes, or F/ETCA tolled facilities, or operation or construction of any other project specifically identified in this Agreement, shall not be considered an organizational conflict of interest under this section.

ARTICLE XIX. INDEMNIFICATION

To the fullest extent permitted by law, each Party (the "Indemnifying Party") shall defend (at the Indemnifying Party's sole cost and expense with legal counsel reasonably acceptable to the other Parties), indemnify, protect, and hold harmless the other Parties, their officers, directors, employees, and agents (collectively the "Indemnified Parties"), from and against any and all liabilities, actions, suits, claims, demands, losses, costs, judgments, arbitration awards, settlements, damages, demands, orders, penalties, and expenses, including legal costs and attorney fees (collectively, the "Claims"), including Claims arising from injuries to or death of persons (Indemnifying Party's employees included), for damage to property, including inverse condemnation or for property owned by any of the Indemnified Parties arising from any violation of federal, state, or local law or ordinance or the negligent acts, omissions, or willful misconduct of the Indemnifying Party, its officers, directors, employees, agents, consultants, or contractors arising out of the performance of this Agreement. Any dispute relating to this ARTICLE XIX or concerning any indemnification obligation described in this Agreement shall be subject to the dispute resolution process set forth in Section 23.01 of this Agreement.

ARTICLE XX. RESOLUTION OF CLAIMS WHEN ONE OR MORE PARTY ARE NAMED AS JOINT DEFENDANTS

If one or more Parties are named joint defendants pursuant to a Claim arising under or related to this Agreement, the legal issues between the plaintiff(s) bringing forth such claim and the joint defendants shall be resolved first without consideration as to the allocation or apportionment of liability or damages between the defendant Parties, if any liability or damages can be allocated or apportioned between them. A determination regarding allocation or apportionment of liability or damages between the defendant Parties shall be made following final resolution of the Claim. Any Party that is not a named defendant shall have the right, at its sole cost and expense, to intervene in the action and to participate in the defense and resolution of the Claim. Any dispute relating to this ARTICLE XX or concerning allocation or apportionment of liability or damages between Parties for a Claim shall be subject to the dispute resolution process set forth in Section 23.01 of this Agreement.

ARTICLE XXI. RESOLUTION OF INVERSE CONDEMNATION CLAIMS

If any Party is named as a defendant pursuant to a Claim for inverse condemnation arising out of, or related to, the Toll Facility ("Inverse Claim"), then the defendant Party shall immediately notify the other Parties of the existence of the Inverse Claim. If an Inverse Claim is litigated, the legal issues between the plaintiff(s) bringing forth the Inverse Claim and the defendant Parties, as applicable, shall be resolved first without consideration as to the allocation or apportionment of liability or damages between the other Parties, if any liability or damages can be allocated or apportioned between them. Any Party that is not a named defendant shall have the right, at its sole cost and expense, to intervene in the action and to participate in the defense and resolution of the Inverse Claim. Any dispute relating to this ARTICLE XXI or concerning allocation or apportionment of liability or damages between Parties for an Inverse Claim shall be subject to the dispute resolution process set forth in ARTICLE XXIII of this Agreement. Liability or damages will be apportioned based on the extent to which the Inverse Claim is found to have arisen out of the other Party's construction or operation of the Toll Facility.

ARTICLE XXII. TRANSFER BACK TO STATE.

Section 22.01 Transfer of Property to Caltrans at End of Term. At the end of the Term, including any extension thereof, all real property, as well as all personal property owned by all relevant Parties and which is related to the 241/91 EC, the Toll Facility, Tolling Infrastructure, including the signs, gantries, other tolling equipment, traffic control devices and video surveillance and enforcement equipment, and other similar equipment utilized for the operation of the Toll Facility, excluding any computer software or hardware for which a license may be required shall automatically become the property of Caltrans. Caltrans may, but is not obligated to, assume the rights and obligations of the relevant Parties with respect to Tolling Infrastructure which is not owned by such Parties, but which is subject to a lease or other financing arrangement with a third party. The relevant Parties shall take all reasonable steps to allow for the substitution of Caltrans for such Parties with respect to any such lease or arrangement. Five (5) years prior to the end of the Term, Parties shall meet and confer for purposes of addressing any actions necessary for the transfer of obligations from the relevant Parties to Caltrans.

Section 22.02 Condition of Toll Facility at End of Term. The Toll Facility shall be returned to Caltrans in a state of good repair, and a condition that meets the handback requirements identified in the F/ETCA Toll Facility Agreement.

Section 22.03 Transfer of Obligations for Toll Facility to Caltrans. At the end of the Term of this Agreement, including any extension of the Term, and to the extent the handback requirements identified in the F/ETCA Toll Facility Agreement have been met, all operations, maintenance and other obligations of the relevant Parties under this Agreement shall become the responsibility of Caltrans, other than, unless otherwise agreed upon by the Parties, any then-existing financing obligations of the relevant Party to third parties that relate to the Toll Facility.

Section 22.04 Vendor Contracts. Caltrans may, but is not obligated to, assume the role of any other Party with respect to any third-party vendor contracts relating to the maintenance or operation of the Toll Facility. The Parties agree to take all reasonable steps to allow for the substitution of Caltrans for the relevant Parties with respect to any third-party vendor contracts.

Section 22.05 Punch List. The Parties agree that a punch list, to include all outstanding maintenance and repair obligations of any Party related to the 241/91 EC, shall be developed by the Parties one (1) year prior to transfer of the Toll Facility to Caltrans. All Parties shall complete all agreed-upon items on the punch list prior to the end of the Term of this Agreement.

Section 22.06 Transfer of Records at End of Term. At the end of the Term, Parties shall transfer to Caltrans all records pertaining to material maintenance, operations, unresolved complaints, safety, and modifications of the Toll Facility generated within five (5) years prior to termination of this Agreement and maintained by the Parties.

ARTICLE XXIII. DISPUTE RESOLUTION, DEFAULT, REMEDIES, AND TERMINATION

Section 23.01 Dispute Resolution. Unless otherwise specified herein, the Parties shall comply with the following procedures in the case of a dispute, claim, or controversy arising under or in relation to this Agreement including, without limitation, the enforcement of any provision of this Agreement, or the existence, validity, interpretation, performance or breach of this Agreement (a "Dispute").

(a) 1st Level Review: Submission to Agency Representatives. It is the Parties' intent to resolve disputes at the lowest level and as early as possible. Within ten (10) business days after a Party has notified any other Party of the existence of a Dispute pursuant to the Notice procedure provided in Section 23.03, each Party shall designate an agency representative to review the Dispute. Within ten (10) business days after each Party has designated their agency representative, the designated agency representatives shall meet to resolve the Dispute. The Parties may mutually agree to extend the timeframes.

(b) 2nd Level Review: Submission to Executive Director, District Director, and Chief Executive Officers (CEO's). If the Dispute is unable to be resolved at the agency representative level, such Dispute shall be referred for negotiation to the Executive Director of RCTC, the District

Director of Caltrans District 12, and the respective CEO's of F/ETCA and OCTA. These individuals agree to undertake good faith attempts to resolve said Dispute within ten (10) business days, or other agreed-upon timeframe, after the receipt of written notice from the Party alleging that a Dispute exists. The Parties additionally agree to cooperate with the other Party in the scheduling of negotiation sessions. However, if the Dispute is not resolved within thirty (30) calendar days after conducting the first negotiating session, any Party may then request that the matter be submitted to further dispute resolution procedures, as may be agreed upon by the Parties.

(c) Alternative Dispute Resolution. If a Dispute is not resolved at the 2nd Level Review, the parties may agree to submit the Dispute to non-binding arbitration or other form of alternative dispute resolution ("Alternative Dispute Resolution"). Each party to bear its own attorney fees and costs. The costs of any Alternative Dispute Resolution to be shared equally among the parties participating in the Alternative Dispute Resolution process.

(d) Remaining Legal Remedies. If the parties do not agree to submit a Dispute for Alternative Dispute Resolution, or the Dispute remains unresolved following Alternative Dispute Resolution, any party may seek any other legal remedies available, including but without limitation, injunctive relief, equitable relief, specific performance, and/or termination (in whole or in part).

(e) Preliminary Injunctive Relief Pending Dispute Resolution. During the pendency of Alternative Dispute Resolution, pursuant to Section 23.01(c), any Party may bring a proceeding seeking only preliminary injunctive relief in any state court located in San Diego County, California until the Dispute is resolved. A Party may seek preliminary injunctive relief on an expedited basis prior to the pendency of Alternative Dispute Resolution; provided that (i) the Party seeking the preliminary injunctive relief first provides written notice to the other Parties forty-eight (48) hours prior to seeking preliminary injunctive relief, and (ii) if another Party requests a meeting to meet and discuss resolving the underlying reason for seeking the preliminary injunctive relief, the Party seeking preliminary injunctive relief shall agree to meet and discuss the dispute within the forty-eight (48) hour period prior to filing a preliminary injunction. For the avoidance of doubt, after the forty-eight (48) hour period has passed, the Party seeking preliminary injunctive relief may proceed if (i) no other Party requests a meeting to meet and discuss within the aforementioned forty-eight (48) hour period or (ii) the Parties have met and discussed, if requested, within the aforementioned forty-eight (48) hour period and a resolution has not been reached. Caltrans reserves its right to oppose any party's request to close the 241/91 EC as part of any preliminary injunctive relief.

Section 23.02 Default. Subject to the extensions of time set forth in this Agreement and/or any extensions agreed upon by the Parties, failure by any Party to perform any material term or provision of this Agreement constitutes a default under this Agreement. Except as otherwise expressly provided in this Agreement, any failures or delays by any Party in asserting any of its rights or remedies with respect to a default shall not operate as a waiver of any default or of any such rights or remedies. Delays by any Party in asserting any of its rights and remedies shall not deprive any Party of its right to institute and maintain any actions or proceedings which it may deem necessary to protect, assert, or enforce any such rights or remedies.

Section 23.03 Notice of Default. A non-defaulting Party shall give written notice of any alleged default to the Party in default, specifying the alleged default. The defaulting Party shall attempt to cure the default within sixty (60) calendar days following written notice of default. If the alleged default is not reasonably capable of cure within the sixty (60) day period specified above, then:

(a) The defaulting Party shall, within sixty (60) calendar days following receipt of the notice of default, provide a written response to the non-defaulting Parties that (i) identifies the actions to be undertaken to cure the default (the "Cure Activities") and (ii) identifies a schedule of performance for implementation and completion of the Cure Activities (the "Cure Schedule");

(b) The non-defaulting Parties shall review the proposed Cure Activities and Schedule for purposes of confirming the reasonableness thereof;

(c) At the request of the non-defaulting Party, representatives of the Parties shall meet and confer for purposes of addressing any questions or concerns with respect to the Cure Activities and the Schedule; and

(d) Provided that the defaulting Party is diligently pursuing implementation of the Cure Activities in accordance with the Schedule, the defaulting Party may request reasonable extensions of the Schedule, and the non-defaulting Parties shall not unreasonably withhold their consent to such requests.

Section 23.04 Failure to Cure. In the event that the defaulting Party fails to complete the cure or remedy of a default within sixty (60) calendar days following receipt of written notice, or within such time as the non-defaulting Parties otherwise agree to in writing, the non-defaulting parties may pursue a Termination for Cause pursuant to Section 23.05.

Section 23.05 Termination for Cause. If the default is not timely cured in accordance with Section 23.03, the non-defaulting party may terminate this Agreement through a written notice of termination, the effective date of which shall be no less than sixty (60) days from the date of the notice; provided that such termination has been reported to the respective board of directors of the non-defaulting party. Project Development Costs incurred pursuant to Section 9.03 following the date of termination will not be reimbursed.

Section 23.06 Rights and Remedies. In the event of a default that is not timely cured, the non-defaulting Parties may exercise the right to seek damages, specific performance, or injunctive, or equitable relief. The exercise of a Party's rights and remedies shall be cumulative with the exercise of other rights and remedies. No Party shall be liable for special, punitive, indirect, incidental or consequential damages arising out of this Agreement or the exercise of its rights hereunder.

Section 23.07 Termination for Convenience. Any Party, in its sole discretion, may terminate at any time before Ready to List Certification, without cause, (i) by providing at least sixty (60) calendar days' prior written notice to the other Parties, or (ii) if there are less than sixty (60) calendar days until Ready to List Certification, by providing immediate written notice once

the Party elects to exercise such termination right; provided that such termination has been reported to the respective board of directors of the Party seeking to terminate. If this Agreement is terminated pursuant to this Section 23.07, Project Development Costs incurred pursuant to Section 9.03 following the date of termination will not be reimbursed.

Section 23.08 Cooperation Prior to Termination. Prior to the effective date of a termination for cause, the Parties shall cooperate in good faith to facilitate the transfer of services, agreements, materials, software, excluding any computer software or hardware for which a license may be required, equipment, and information as necessary for modification to the Project as needed so as not to impede the operation of the SR-241 toll road and 91 Express Lanes in the event the 241/91 EC is no longer operating.

ARTICLE XXIV. SEVERABILITY

In the event that any one or more of the phrases, sentences, clauses, paragraphs, or sections contained in this Agreement shall be declared invalid or unenforceable by a valid judgment or decree of a court of competent jurisdiction, such invalidity or unenforceability shall not affect any of the remaining phrases, sentences, clauses, paragraphs, or sections of this Agreement, which shall be interpreted to carry out the intent of the Parties hereunder.

ARTICLE XXV. INTERPRETATION, GOVERNING LAW, AND COMPLIANCE WITH LAWS

Section 25.01 Each Party warrants that, in the performance of this Agreement, it shall comply with all applicable federal, state, and local laws, statutes, and ordinances and all lawful orders, rules, and regulations promulgated thereunder.

Section 25.02 This Agreement shall be construed and interpreted both as to validity and to performance in accordance with the laws of the State of California. Legal actions arising out of or in relation to this Agreement, subject to the Parties first exhausting the dispute resolution procedures in ARTICLE XXIII, shall be instituted in the Superior Court of the County of San Diego, State of California, and the Parties covenant and agree to submit to the personal jurisdiction of the court in the event of any action.

ARTICLE XXVI. AUTHORITY TO ENTER INTO AGREEMENT

Each Party hereto represents that it is authorized to execute this Agreement on behalf of said Party and that, by so executing this Agreement, the Parties hereto are formally bound to the provisions of this Agreement.

ARTICLE XXVII. NO THIRD-PARTY BENEFICIARIES.

This Agreement is for the benefit of the Parties only. No third-party beneficiary is intended.

ARTICLE XXVIII. LEGISLATIVE AUTHORIZATION.

The Parties agree and understand that the obligations created by this Agreement are subject to the appropriation of the required resources by the board or other governing body of such Party.

ARTICLE XXIX. DRAFTING AMBIGUITIES

The Parties agree that they are aware that they have the right to be advised by counsel with respect to the negotiations, terms, and conditions of this Agreement, and the decision of whether or not to seek advice of counsel with respect to this Agreement is a decision which is the sole responsibility of each Party. This Agreement shall not be construed in favor of or against either Party by reason of the extent to which each Party participated in the drafting of the Agreement.

ARTICLE XXX. AUTHORIZED DESIGNEES

Section 30.01 The Chief Executive Officer of F/ETCA, or designee, shall have the authority to act for and exercise any of the rights of F/ETCA under this Agreement.

Section 30.02 The Chief Executive Officer of OCTA, or designee, shall have the authority to act for and exercise any of the rights of OCTA under this Agreement.

Section 30.03 The Executive Director of RCTC, or designee, shall have the authority to act for and exercise any of the rights of RCTC under this Agreement.

Section 30.04 The District 12 Director of Caltrans, or designee, shall have the authority to execute this Agreement on behalf of Caltrans.

ARTICLE XXXI. COORDINATION WITH OTHER CONTRACTORS

During the course of this Agreement, the Parties, collectively or individually, may undertake or award other agreements for additional work, including separate agreements with different contractors. It is critical that close coordination with interfacing contractors occurs throughout the Term. Each Party shall fully cooperate with the other Parties and their contractors and take reasonable measures to coordinate its own work with said contractors. Should problems in coordination with other contractor(s) occur, Parties shall be made aware of these problems immediately and shall take steps to address the problems and mitigate any delays or additional costs. Parties shall cooperate with other contractors or forces performing construction or work of any other nature within or adjacent to sites specified in order to avoid any delay or hindrance to such other contractors or forces. Parties reserve the right to perform other or additional work at or near the Project site (including material sources) at any time, by the use of other forces.

ARTICLE XXXII. FORCE MAJEURE

Any Party shall be excused from performing its obligations under this Agreement during the time and to the extent that it is prevented from performing by an unforeseeable cause that is beyond its control, including: any incidence of fire, flood, or other acts of God; labor strikes, commandeering of material, products, plants or facilities by the federal, state or local government; national fuel shortage; pandemic; or a material act or omission by another Party; when satisfactory

evidence of such cause is presented to the other Party; and provided further that such nonperformance is unforeseeable, beyond the control and is not due in part, or in whole, to the fault or negligence of the Party not performing and could not have been avoided or limited in the exercise of due diligence by such Party.

ARTICLE XXXIII. COUNTERPARTS OF AGREEMENT; FACSIMILE AND ELECTRONIC SIGNATURES

This Agreement may be executed and delivered in any number of counterparts, each of which, when executed and delivered shall be deemed an original and all of which together shall constitute the same agreement. Facsimile signatures will be permitted. This Agreement may be signed using an electronic signature. A validly executed copy of this Agreement delivered by facsimile, e-mail or other means of electronic transmission shall be deemed to have the same legal effect as delivery of an original validly executed copy of this Agreement.

[signatures next page]

IN WITNESS WHEREOF, the PARTIES hereto have caused this Agreement to be executed on the date first written above.

FOOTHILL/EASTERN TRANSPORTATION CORRIDOR AGENCY By: _____ Ryan Chamberlain Chief Executive Officer **APPROVED AS TO FORM:** By: _____ Ben Rubin, Nossaman General Counsel Dated: _____	**STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION** By: _____ Lan Zhou District 12 Director **APPROVED AS TO FORM:** By: _____ [Name] [Title] Dated: _____
ORANGE COUNTY TRANSPORTATION AUTHORITY By: _____ Darrell E. Johnson Chief Executive Officer **APPROVED AS TO FORM:** By: _____ [Name] [Title] Dated: _____	**RIVERSIDE TRANSPORTATION COMMISSION** By: _____ Aaron Hake Executive Director **APPROVED AS TO FORM:** By: _____ [Name] [Title] Dated: _____

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EXHIBIT i – Not In Use

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EXHIBIT ii – Project Cost Table

EXHIBIT ii – Project Cost Table

This Exhibit represents all costs incurred by F/ETCA associated with 241/91 Express Connector Project development that will be repaid to F/ETCA outlined in Section 9.01 (b).

Table below represents costs as estimated as of _____ (date).

Final Table and total repayment amount will be determined after Project Construction Closeout and agreed to in writing by all parties prior to start of repayment outlined in Section 9.02.

Project Cost Description	Source	Estimated Cost	Actual Incurred To Date
PROJECT APPROVAL			
Professional Services for PAED	TCA Actual Costs, March 2020	$7,991,000	$7,991,000
FINAL DESIGN			
TCA Project Development Costs - Design & Legal	Board Authorized Contract Amounts	$36,030,000	$32,227,900
TCA Right of Way and Utilities Costs and Support Services	Draft Right of Way Data Sheet	$40,000	$0
TCA-Transcore Toll Systems Design & Development	December 2023 TCA Estimate	$5,400,000	$0
OCTA Project Development Costs - Design & Legal	As submitted through June 2023 + 25%	$580,000	$0
OCTA-Kapsch Toll Systems Design & Development	Assume 5% of Transcore	$270,000	$0
RCTC Project Development Costs - Design & Legal	As submitted through April 2024 + 25%	$790,000	$631,740
RCTC-Kapsch Toll Systems Design & Development	Assume 5% of Transcore	$270,000	$0
RCTC Eastbound McKinley 2.0	RCTC Estimate	$10,000,000	$0
CONSTRUCTION			
Caltrans Roadway Construction Cost	October 2024 Engineer's Estimate	$256,150,000	$0
Caltrans Structures Construction Cost	October 2024 Engineer's Estimate	$100,630,000	$0
TCA Closure Reimbursement - OCTA Express Lanes	October 2024 Engineer's Estimate	$3,340,000	$0
TCA Closure Reimbursement - RCTC Express Lanes	October 2024 Engineer's Estimate	$10,000	$0
Caltrans AAA Cost (12-0829)	Caltrans Cost Estimate 07-15-25	$71,370,000	$0
TCA-Transcore Toll Systems Equipment and Installation	December 2023 TCA Estimate	$11,730,000	$0
TCA-Kapsch for OCTA Toll Systems Equipment and Installation	Assume 12.5% of Transcore Estimate	$1,470,000	$0
TCA-Kapsch for RCTC Toll Systems Equipment and Installation	Assume 12.5% of Transcore Estimate	$1,470,000	$0
TCA Construction Support	20% of Caltrans AAA Cost	$15,489,000	$0
OCTA Project Development Costs – Construction	5% of TCA Construction Support	$590,000	$0
RCTC Project Development Costs - Construction	5% of TCA Construction Support	$590,000	$0
	Total Project Cost = F/ETCA Repayment Amount	**$524,210,000**	**$40,850,640**

DRAFT

EXHIBIT iii – Toll Facility

Same content as Operating Agreement Exhibits A and B.
This Master Agreement Exhibit iii will be a static.
Operating Agreement Exhibits A and B will be updated post-construction with the final disposition/location of toll facilities

EXHIBIT A
241/91 EXPRESS CONNECTOR
TOLL FACILITIES

Exhibit A includes all the facilities that will be installed and maintained throughout operations of the 241/91 Express Connector.

Refer to Exhibit B for visual depiction of facilities listed in table below. Notes:

1. All equipment is owned, operated, and maintained by F/ETCA unless otherwise noted.
2. Responsibility Assignment Legend
   - P – Primary Responsibility
   - C – Coordination Responsibility Only
   - N – No Responsibility

Element/Task/Component / Sub-system (Approximate Location)	RCTC	OCTA	F/ETCA	Comments Other Responsibility/Information	RCTC 91 EL Closure	OCTA 91 EL Closure	F/ETCA EC Closure
BI-DIRECTIONAL TOLL POINT ("EC" LINE STATION 38+25)							
Overhead Lane Equipment – NB/EB	**N**	**N**	**P**		No	No	Yes
In Pavement Loop System – NB/EB	**N**	**N**	**P**		No	No	Yes
Overhead Lane Equipment – WB/SB	**N**	**N**	**P**		No	No	Yes
In Pavement Loop System – WB/SB	**N**	**N**	**P**		No	No	Yes
Roadside Cabinet and Controller	**N**	**N**	**P**		No	No	No
Network Communication Equipment	**N**	**N**	**P**		No	No	No
Backup Generator and Enclosure	**N**	**N**	**P**		No	No	No
Gantry Structure and Foundation	**N**	**N**	**P**		No	No	Yes
Maintenance Vehicle Path and Pad	**N**	**N**	**P**	Maintained by Caltrans, refer to the ECMA.	No	No	No

Element/Task/Component / Sub-system (Approximate Location)	RCTC	OCTA	F/ETC A	Comments Other Responsibility/Information	RCTC 91 EL Closure	OCTA 91 EL Closure	F/ETC A EC Closure
TOLL COLLECTION OVERHEAD ELECTRONIC SIGNS (NORTH-TO-EAST MOVEMENT)							
Changeable Message Sign (CMS) ("B" Line Station 730+80) – Overhead Electronic Sign and Static Border – Roadside Cabinet and Sign Controller – Electrical Transformer and Electrical Sub-Panel – Network Communication Equipment – Sign Structure and Foundation	**N**	**N**	**P**		No	No	No
Variable Toll Message Sign (VTMS) ("B" Line Station 749+00) – Overhead Static Sign – Electronic Insert (toll rate display) – Lower CMS Panel (mode display one line) – Roadside Cabinet and Sign Controller – Electrical Transformer and Electrical Sub-Panel – Network Communication Equipment – Sign Structure and Foundation	**N**	**N**	**P**		No	No	No

Element/Task/Component / Sub-system (Approximate Location)	RCTC	OCTA	F/ETC A	Comments Other Responsibility/Information	RCTC 91 EL Closure	OCTA 91 EL Closure	F/ETC A EC Closure
Lane Operational Sign (LOS) #1 (CMS Panel under static guide sign) ("B" Line Station 866+80) – Electronic Insert – Roadside Cabinet and Sign Controller – Electrical Transformer and Electrical Sub-Panel – Network Communication – Equipment	**N**	**N**	**P**	Co-located on Caltrans-owned and maintained overhead sign structure.	No	No	No
Lane Operational Sign (LOS) #2 (Enforcement "X" / arrow) ("B" Line Station 892+80) – Overhead Static Sign with Electronic Insert – Roadside Cabinet and Sign Controller – Electrical Transformer and Electrical Sub-Panel – Network Communication Equipment – Sign Structure and Foundation	**N**	**N**	**P**	Co-located on Caltrans-owned and maintained overhead sign structure.	No	No	No
TOLL COLLECTION OVERHEAD ELECTRONIC SIGNS (WEST-TO-SOUTH MOVEMENT) OCTA ELECTRONIC SIGN (WB PRICING SIGN Sta 567+79)							
Sign Structure and Foundation	**N**	**P**	**C**	Refer to Ops Agreement for shared financial responsibility.	Yes	Yes	Yes
Electrical Power Service and Feed	**N**	**P**	**C**	Refer to Ops Agreement for shared financial responsibility.	Yes	Yes	Yes
Replacement Parts	**N**	**P**	**C**	Refer to Ops Agreement for shared financial responsibility.	Yes	Yes	Yes

Element/Task/Component / Sub-system (Approximate Location)	RCTC	OCTA	F/ETCA	Comments Other Responsibility/Information	RCTC 91 EL Closure	OCTA 91 EL Closure	F/ETCA EC Closure
Sign Warranty	**N**	**P**	**C**	Existing Warranty and Daktronics support through OCTA. Refer to Ops Agreement for shared financial responsibility.	Yes	Yes	Yes
F/ETCA Sign Controller	**N**	**C**	**P**	Daktronics provided and installed F/ETCA Controller, Light Sensor and VCB board will be maintained by F/ETCA for the F/ETCA portion of the sign	Yes	Yes	Yes
OCTA Sign Controller	**N**	**P**	**C**	Daktronics provided and installed OCTA Controller, Light Sensor and VCB board will be maintained by OCTA for the OCTA portion of the sign.	Yes	Yes	Yes
F/ETCA Network Communication Equipment	**N**	**C**	**P**		Yes	Yes	Yes
TOLL CONNECTOR METER (TCM) ("EC" LINE STATION 37+50, NORTH-TO-EAST MOVEMENT)							
Roadside Cabinet and Controller	**N**	**N**	**P**		No	No	Yes
Overhead Signal, Enforcement Signal and Pole	**C**	**C**	**P**	The 91 TOC may identify equipment that is not functioning properly for repair by F/ETCA.	No	No	Yes
Roadside Signal and Pole	**C**	**C**	**P**	The 91 TOC may identify equipment that is not functioning properly for repair by F/ETCA.	No	No	Yes
Toll Connector Meter Camera Detection System	**N**	**N**	**P**	Used to Augment CHP Enforcement	No	No	Yes
Occupancy Detection System	**N**	**N**	**P**	Used to Augment CHP Enforcement	No	No	Yes
In-Pavement Loops	**N**	**N**	**P**		No	No	Yes

Element/Task/Component / Sub-system (Approximate Location)	RCTC	OCTA	F/ETCA	Comments Other Responsibility/Information	RCTC 91 EL Closure	OCTA 91 EL Closure	F/ETCA EC Closure
Roadside Metering Signage	**N**	**N**	**P**		No	No	Yes
Network Communication Equipment	**N**	**N**	**P**		No	No	Yes
TCM SIGNS (QTY 5) ("EC" Line Station 31+50 and 23+00, "EC1" Line Station 22+20, "B" Line Station 884+80 and 875+80)							
Overhead Flashing Beacons	**N**	**N**	**P**		No	No	Yes
Overhead Blank-Out Sign	**N**	**N**	**P**		No	No	Yes
Overhead Sign Structure	**N**	**N**	**P**		No	No	Yes
Electrical Transformer and Electrical Sub-Power	**N**	**N**	**P**		No	No	Yes
Roadside Cabinet and Controller	**N**	**N**	**P**		No	No	Yes
Network Communication to TCM Controller	**N**	**N**	**P**		No	No	Yes
TCM QUEUE DETECTION LOOPS (QTY 3) ("EC" Line Station 33+00 and 22+20, "B" Line Station 892+80)							
In-Pavement Loops	**N**	**N**	**P**		No	No	Yes
Network Communication to TCM Controller	**N**	**N**	**P**		No	No	Yes
ELECTRICAL SERVICE							
EC and TCM ("SAC" Line Station 445+30)	**N**	**N**	**P**	Repairs of electrical service do not require closures due to back up power options.	No	No	No
TDS Locations ("E91" Line Station TBD)	**N**	**N**	**P**	Repairs of electrical service do not require closures due to back up power options.	No	No	No

Element/Task/Component / Sub-system (Approximate Location)	RCTC	OCTA	F/ETCA	Comments Other Responsibility/Information	RCTC 91 EL Closure	OCTA 91 EL Closure	F/ETCA EC Closure
CLOSED CIRCUIT TELEVISION (CCTV) (QTY 9) ("B" LINE STATION 730+00, 748+00, 865+50, 874+00, AND 891+50, "EC" LINE STATION 22+00 AND 38+20, "E91" LINE 498+00 AND 534+50)							
Pole Mounted Camera Equipment with Pan-Tilt-Zoom (PZT) functionality	**C**	**C**	**P**	The 91 TOC may identify cameras that are not functioning properly for repair by F/ETCA.	No	Yes	No
Cabling Equipment	**N**	**N**	**P**		No	Yes	No
Pole Mounted Cabinet	**N**	**N**	**P**	CCTV #1-6, #8-9.	No	Yes	No
EC Gantry Mounted Cabinet	**N**	**N**	**P**	CCTV #7.	No	No	No
Network Communication Equipment	**N**	**N**	**P**		No	Yes	No
Vehicle Detection System (VDS) Pole and Foundation	**N**	**N**	**P**	CCTV #8 shared pole with TDS #4 and #5. CCTV #9 shared pole with TDS #10.	No	Yes	No
TOLL DETECTION SYSTEM (TDS) (QTY 10) – **NORTH-TO-EAST MOVEMENT ("E91" LINE STATION 453+00, 483+00, 498+00, 509+00, AND 522+00)** – **WEST-TO-SOUTH MOVEMENT ("E91" LINE STATION 483+00, 498+00, 509+00, 522+00, AND 534+50)**							
Structure Mounted Microwave Detectors	**N**	**N**	**P**	TDS #1.	No	Yes	Yes
Ground Mounted Cabinet	**N**	**N**	**P**	TDS #1.	No	No	No
Pole Mounted Microwave Detector	**N**	**N**	**P**	TDS #2 and #3 shared pole. TDS #4 and #5 shared with CCTV #8. TDS #6 and #7 shared pole. TDS #8 and #9 shared pole. TDS #10 shared pole with CCTV #9.	No	Yes	Yes

Element/Task/Component / Sub-system (Approximate Location)	RCTC	OCTA	F/ETCA	Comments Other Responsibility/Information	RCTC 91 EL Closure	OCTA 91 EL Closure	F/ETCA EC Closure
Vehicle Detection System (VDS) Pole and Foundation	**N**	**N**	**P**	TDS #2 and #3 shared pole. TDS #4 and #5 shared with CCTV #8. TDS #6 and #7 shared pole. TDS #8 and #9 shared pole. TDS #10 shared pole with CCTV #9.	No	Yes	Yes
Network Communication Equipment	**N**	**N**	**P**		No	Yes	Yes
AUTOMATED VEHICLE IDENTIFICATION (AVI) SYSTEM							
AVI Reader #1 – NB 241 ("B" Line Station 749+00)	**N**	**N**	**P**	Co-located with F/ETCA VTMS.	No	No	Yes
AVI Reader # 2 – EB Egress ("E91" Line Station 523+90)	**C**	**C**	**P**	Co-located on Caltrans-owned and maintained overhead sign structure.	No	Yes	Yes
DATA AND COMMUNICATIONS							
Pacifica Location Data Center – Data Servers – Communication Equipment – Equipment Software Configurations	**N**	**N**	**P**		No	No	No
Irvine Ranch Location Data Center – Servers – Communication Equipment – Equipment Software Configurations	**N**	**N**	**P**		No	No	No

Element/Task/Component / Sub-system (Approximate Location)	RCTC	OCTA	F/ETCA	Comments Other Responsibility/Information	RCTC 91 EL Closure	OCTA 91 EL Closure	F/ETCA EC Closure
Texas Monitoring Center – 24/7 System Monitoring	**N**	**N**	**P**		No	No	No
Fiber Plant Infrastructure NB 241 from "B" Line 783+50 to "B" Line 897+50 – Fiber Cable, splice enclosures and, fiber distribution units. – Network Communication equipment	**N**	**N**	**P**		No	No	No
Fiber Plant Infrastructure NB to EB 241 from "CNW" Line 97+50 to "CNW" Line 103+00 – Fiber Cable, Splice Enclosures and, Fiber Distribution Units. – Network Communication Equipment	**N**	**N**	**P**		No	No	No
Fiber Plant Infrastructure NB to EB 241 from "CNE" Line 103+00 to "CNE" Line 171+00 – Fiber Cable, Splice Enclosures and, Fiber Distribution Units. – Network Communication Equipment	**N**	**N**	**P**		No	No	No

Element/Task/Component / Sub-system (Approximate Location)	RCTC	OCTA	F/ETCA	Comments Other Responsibility/Information	RCTC 91 EL Closure	OCTA 91 EL Closure	F/ETCA EC Closure
Fiber Plant Infrastructure EB 91 from "E91" Line 477+00 to "E91" Line 527+00 – Fiber Cable, Splice Enclosures and, Fiber Distribution Units. – Network Communication Equipment	**N**	**N**	**P**		No	No	No
91 EXPRESS LANES TOLL OPERATIONS CENTER (TOC)							
91 EL TOC Advanced Traffic Management System (ATMS) Software and Configuration System Updates.	**P-Joint Operation with OCTA**	**P-Joint Operation with RCTC**	**N**	Data Sharing Configurations between 91 TOC Advanced Traffic Management System (ATMS) and F/ETCA Toll Service Provider.	No	No	No
F/ETCA System Software and Configuration	**C**	**C**	**P**	Data Sharing Configurations between 91 TOC Advanced Traffic Management System (ATMS) and F/ETCA Toll Service Provider.	No	No	No
91 EL TOC Hardware. Switches, network communication equipment, Computers, Video Wall, etc.	**P-Joint Operation with OCTA**	**P-Joint Operation with RCTC**	**P**	F/ETCA will provide requirements as additions to the existing ViaPlus contract for the purposes of the 241/91 Express Connector. All three agencies have primary responsibility, F/ETCA will be responsible for payment of additional hardware required for the 241/91 EC.	No	No	No
91 EL TOC Labor and Personnel	**P-Joint Operation with OCTA**	**P-Joint Operation with RCTC**	**P**	F/ETCA will provide requirements as additions to the existing ViaPlus contract for the purposes of the 241/91 Express Connector. All three agencies have primary responsibility, F/ETCA will be responsible for payment monthly expenses of personnel as it relates to monitoring the 241/91 EC.	No	No	No

EXHIBIT B

241/91 EXPRESS CONNECTOR

LOCATION OF ELECTRONIC TOLL COLLECTION SYSTEM FACILITIES

LEGEND:

LOS	LANE OPERATIONAL SIGN
TCM	TOLL CONNECTOR METER
VTMS	VARIABLE TOLL RATE MESSAGE SIGN
CMS	INFORMATION CHANGEABLE MESSAGE SIGN
TDS	TOLL TRAFFIC DETECTION SYSTEM
(symbol)	PROPOSED CCTV (F/ETCA)
(symbol)	PROPOSED TDS (F/ETCA)
(symbol)	PROPOSED AVI READER (F/ETCA)
— — FO	EXISTING TCA FIBER/FIBER PLANT
—— FO	PROPOSED/RELOCATED TCA FIBER/FIBER PLANT
(red)	CALTRANS OWNED AND MAINTAINED SIGN STRUCTURE
(orange)	OCTA OWNED AND MAINTAINED SIGN STRUCTURE

91 TOC - TOLL OPERATIONS CENTER
- -NO F/ETCA OR TOLL PROVIDER EQUIPMENT
- -TCA NETWORK CONNECTIVITY TO EXISITNG 91 TOC INFRASTRUCTURE
- -91 TOC STAFF TO MONITOR LIVE CCTV

TCA DATA CENTER - PACIFICA
- -SERVERS FOR ROADSIDE DEVICES
- -COLLECT AND PROCESS ROADSIDE DATA
- -REDUNDANCY FOR IRVINE RANCH LOCATION

TCA DATA CENTER - IRVINE RANCH
- -SERVERS FOR ROADSIDE DEVICES
- -COLLECT AND PROCESS ROADSIDE DATA
- -REDUNDANCY FOR PACIFICA DATA CENTER

TOLL MAINTENANCE FACILITY
- -TOMATO SPRINGS SOUTH - OPERATIONS BUILDING
- -ROADSIDE EQUIPMENT MAINTENANCE TEAM
- -6AM-6PM ON SITE STAFF
- -24/7 ON-CALL STAFF

SOFTWARE MAINTENANCE
- -TRANSCORE LOCAL TEAM
- -SYSTEM MONITORING
- -SOFTWARE, DATABASE, SERVER, AND NETWORK MAINTENANCE

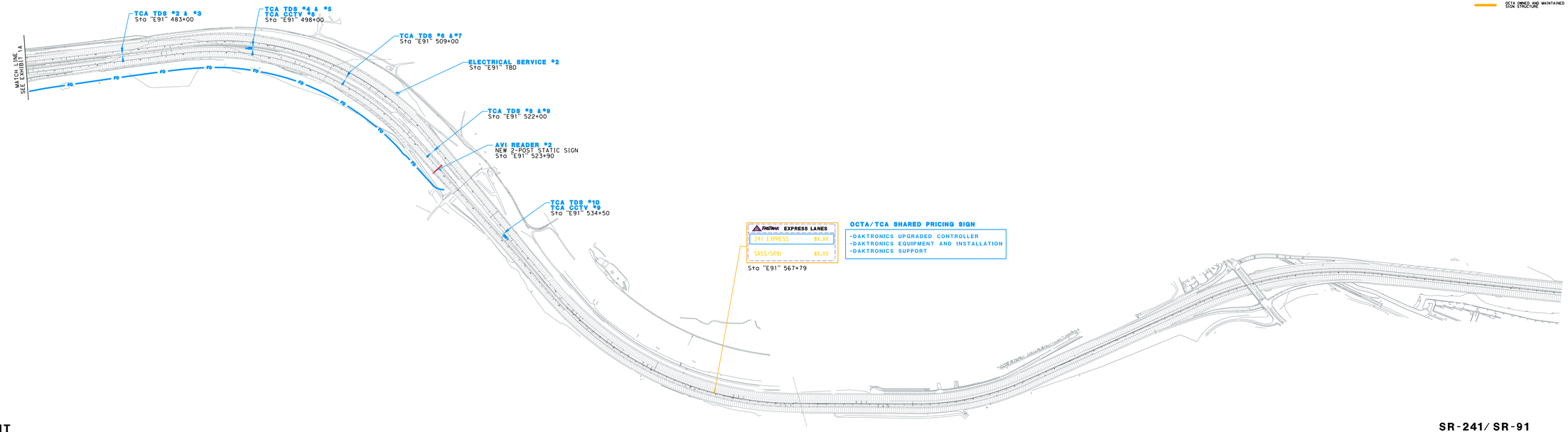
MAINTENANCE MONITORING CENTER
- -TRANSCORE NATIONAL TEAM - TEXAS
- -SYSTEM MONITORING ONLY
- -24/7 SYSTEM MONITORING

COLOR LEGEND:

- TCA EQUIPMENT (blue)
- OCTA EQUIPMENT (orange)
- CALTRANS EQUIPMENT (red)

SR-241/SR-91
LOCATION OF ELECTRONIC TOLL COLLECTION SYSTEM FACILITIES
(EXHIBIT B PAGE 1 of 2)

SCALE 1"= 300'



COLOR LEGEND:

- TCA EQUIPMENT
- OCTA EQUIPMENT
- CALTRANS EQUIPMENT

SR-241/SR-91
LOCATION OF ELECTRONIC TOLL COLLECTION SYSTEM FACILITIES
(EXHIBIT B PAGE 2 of 2)

SCALE 1"= 300'

DRAFT

EXHIBIT iv – Project Ownership

DRAFT

EXHIBIT iv – Project Ownership

This Exhibit includes the real estate interests of the Project that shall be the property of Caltrans (Part 1), real estate interests of the Project that shall be the property of F/ETCA (Part 2), and other components of the Project that are of interest to the Parties (Part 3).

The existing SR-241 right of way was transferred to and is owned by Caltrans when the SR-241 was originally constructed and opened.

There are no on-site (i.e. within State right of way) mitigation parcels required for the Project.

Tolling infrastructure for the Project is shown in separate, Exhibit iii of this Agreement and is owned, operated, and maintained by F/ETCA.

DRAFT

EXHIBIT iv – Project Ownership

Part 1 – Real Estate Interests that Shall be the Property of Caltrans

The sole right of way acquisition required for the 241/91 Express Connector Project is a permanent footing easement acquisition (permanent underground footing easement) of 0.006 acres (241 SF) from the City of Anaheim Santa Ana Canyon Road Right-of-Way, to be acquired by F/ETCA and conveyed to Caltrans upon completion of construction, free and clear of all liens and encumbrances.

460

Recorded at the request of

Foothill/Eastern Transportation Corridor Agency

When Recorded Mail to:
Foothill/Eastern Transportation Corridor
Agency 125 Pacifica, Suite 100
Irvine, CA 92618-3304

WITH A COPY TO:
City of Anaheim
Attn: City Clerk
200 South Anaheim Boulevard
Anaheim, CA 92805

Recorded in Official Records, Orange County
Hugh Nguyen, Clerk-Recorder

* $ R 0 0 1 5 5 8 3 7 2 5 $ *

NO FEE

2025000141920 08:09 am 05/19/25

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0.00 0.00 0.00 0.00 15.00 0.00 0.00 0.00 0.00 0.00

Space above this line for Recorder's Use

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NF

This document is recorded for the benefit of the Foothill/Eastern Transportation Corridor Agency and is therefore exempt from the payment of the recording fee pursuant to Government Code Section 6103 and 27383 and from the payment of the documentary transfer tax pursuant to Revenue and Taxation Code Section 11922.

City Deed No. 12756

ACQ: _____

District	County	Route	Postmile	Number
12	ORA	91	ORA R16.261	301028-1

PERMANENT SUBSURFACE FOOTING EASEMENT

Parcel Number: 301028-1

FOR GOOD AND VALUABLE CONSIDERATION, the receipt and sufficiency of which is hereby acknowledged , the CITY OF ANAHEIM, a California municipal corporation and charter city,

hereinafter called "GRANTOR", hereby grants and conveys to the FOOTHILL/EASTERN TRANSPORTATION CORRIDOR AGENCY, a California joint powers authority ("GRANTEE"), its successors and assigns, a permanent, perpetual, exclusive and assignable subsurface easement together with the right to use all necessary and convenient means of access, including without limitation ingress and egress to and from the easement area over the public street or highway most convenient thereto ("Easement"). The Easement shall be for use by the GRANTEE to construct, reconstruct, use, and maintain, alter, access, inspect, repair, remove or replace a bridge footing and all incidents thereto, upon, in, on, over, through, under, across and along that certain real property in the City of Anaheim, County of Orange, State of California described on Exhibit "A" and shown on Exhibit "B" attached hereto and incorporated herein by reference.

Dated this 17th day of October, 2023.

"GRANTOR"

City of Anaheim,
a California municipal corporation and charter city

By: Ashleigh Aitken

Ashleigh Aitken

Its: Mayor

ATTEST:

By: _____
Theresa Bass, City Clerk

10/27/23

A Notary Public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.

STATE OF CALIFORNIA)
) ss.
COUNTY OF)

On October 17, 2023 before me, Susana Barrios, a notary public, personally appeared Ashleigh Aitken, who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

(AFFIX NOTARIAL SEAL)

Susana Barrios
NOTARY PUBLIC

SUSANA BARRIOS
Notary Public - California
Orange County
Commission # 2384723
My Comm. Expires Nov 27, 2025

Exhibit "A"
Legal Description

CALTRANS PARCEL NO. 301028-1

FOOTING EASEMENT

THAT PORTION OF PARCEL 1 (46540-1), IN THE CITY OF ANAHEIM, COUNTY OF ORANGE, STATE OF CALIFORNIA, AS DESCRIBED IN THE GRANT DEED RECORDED MARCH 8, 1971 IN BOOK 9563, PAGE 744, OF OFFICIAL RECORDS, IN THE OFFICE OF THE COUNTY RECORDER OF SAID COUNTY, BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

COMMENCING AT THE INTERSECTION OF THE EASTERLY LINE OF PARCEL 300261-2 AS DESCRIBED IN THE AMENDED AND RESTATED GRANT DEED RECORDED OCTOBER 14, 1998 AS INSTRUMENT NO. 19980694409, OF OFFICIAL RECORDS, AND PER THE GRANT DEED RECORDED OCTOBER 19, 1998 AS INSTRUMENT NO. 19980702665, OF OFFICIAL RECORDS, BOTH IN THE OFFICE OF THE COUNTY RECORDER OF SAID COUNTY, AND THE SOUTHERLY LINE OF SAID PARCEL 1 (46540-1), SAID PARCEL 300261-2 IS SHOWN ON RECORD OF SURVEY NO. 99-1013, FILED IN BOOK 182, PAGES 1 THROUGH 26, OF RECORDS OF SURVEY, IN THE OFFICE OF THE COUNTY RECORDER OF SAID COUNTY;

THENCE ALONG SAID SOUTHERLY LINE NORTH 69°05'35" WEST, 347.92 FEET TO THE **TRUE POINT OF BEGINNING**;

THENCE CONTINUING ALONG SAID SOUTHERLY LINE NORTH 69°05'35" WEST, 34.67 FEET;

THENCE LEAVING SAID SOUTHERLY LINE NORTH 43°32'31" EAST, 14.20 FEET;

THENCE SOUTH 46°27'29" EAST, 32.00 FEET TO A LINE THAT BEARS NORTH 43°32'31" EAST FROM THE TRUE POINT OF BEGINNING;

THENCE ALONG SAID LINE SOUTH 43°32'31" WEST, 0.86 FEET TO THE **TRUE POINT OF BEGINNING**.

THE ABOVE DESCRIBED PARCEL CONTAINS A GRID AREA 241 SQUARE FEET OR 0.006 ACRES, MORE OR LESS.

THE BEARINGS AND DISTANCES USED IN THE ABOVE DESCRIPTION ARE CALIFORNIA COORDINATE SYSTEM OF 1983 (CCS83), ZONE VI, NAD 83 (2007.00 EPOCH), ALL DISTANCES SHOWN ARE GRID DISTANCES, TO OBTAIN GROUND DISTANCES DIVIDE BY 0.99998151.

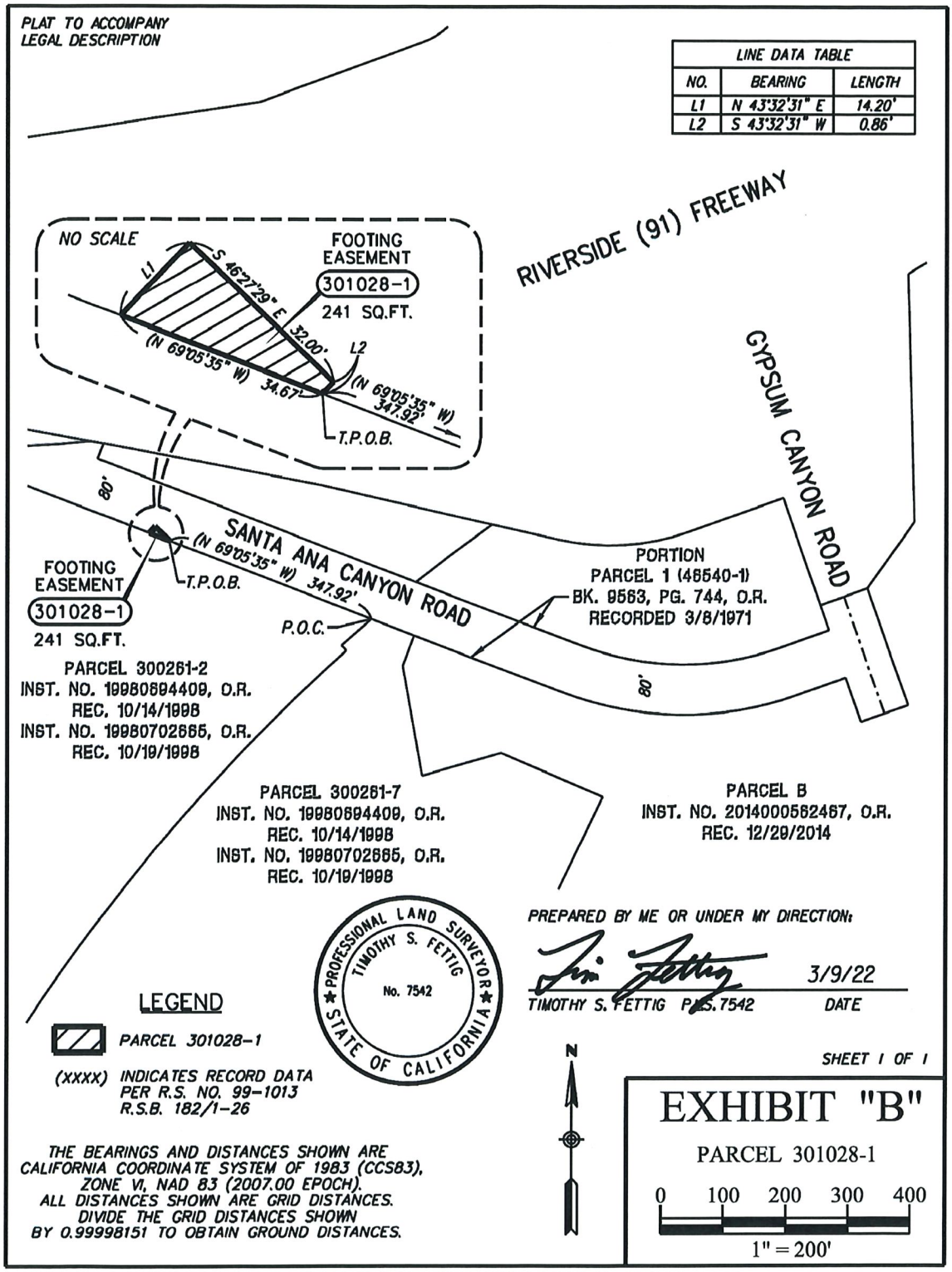
ALL AS MORE PARTICULARLY SHOWN ON EXHIBIT "B", ATTACHED HERETO AND MADE A PART HEREOF.

THIS DOCUMENT HAS BEEN PREPARED BY ME, OR UNDER MY DIRECTION, IN CONFORMANCE WITH THE PROFESSIONAL LAND SURVEYOR'S ACT.

TIMOTHY S. FETTIG P.L.S. 7542

3/9/22
DATE

Exhibit "B"
Depiction



CERTIFICATE OF ACCEPTANCE

This is to certify that the interest in real property conveyed by the within Easement Deed to the Foothill/Eastern Transportation Corridor Agency, a California joint powers authority ("TCA"), is hereby accepted by the undersigned officer on behalf of the Board of Directors of TCA, pursuant to authority conferred by action of said Board of Directors on November 9, 2023, and TCA consents to recordation thereof by its duly authorized officer.

FOOTHILL/EASTERN TRANSPORTATION CORRIDOR AGENCY, a California joint powers authority

By: _____
Name: Ryan Chamberlain
Title: Chief Executive Officer

APPROVED AS TO FORM:

By: _____
Name: Ben Rubin
Title: General Counsel

Orange County
Clerk-Recorder
Hugh Nguyen
601 N. Ross Street
Santa Ana, CA 92701
(714) 834-2500

Receipt No.: RPT20250000120736

Finalization No.: 20250000150788

Cashier: crttsai

Register: RecWin1A

Date/Time: 05/19/2025 08:09 AM

Item	Title	Count
1	E01	1
Easement		
Document ID		Amount
Doc# 2025000141920		No Fee
Time Recorded 08:09 AM		

Total Amount Due: $0.00

Total Paid

No Fee

Amount Due: $0.00

THANK YOU
PLEASE RETAIN THIS RECEIPT
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www.ocrecorder.com

Part 2 – Real Estate Interests that Shall be the Property of F/ETCA

No real estate interests or acquisition of off-site mitigation lands are required for the Project.

Existing F/ETCA mitigation properties will be used to offset credits for the Project.

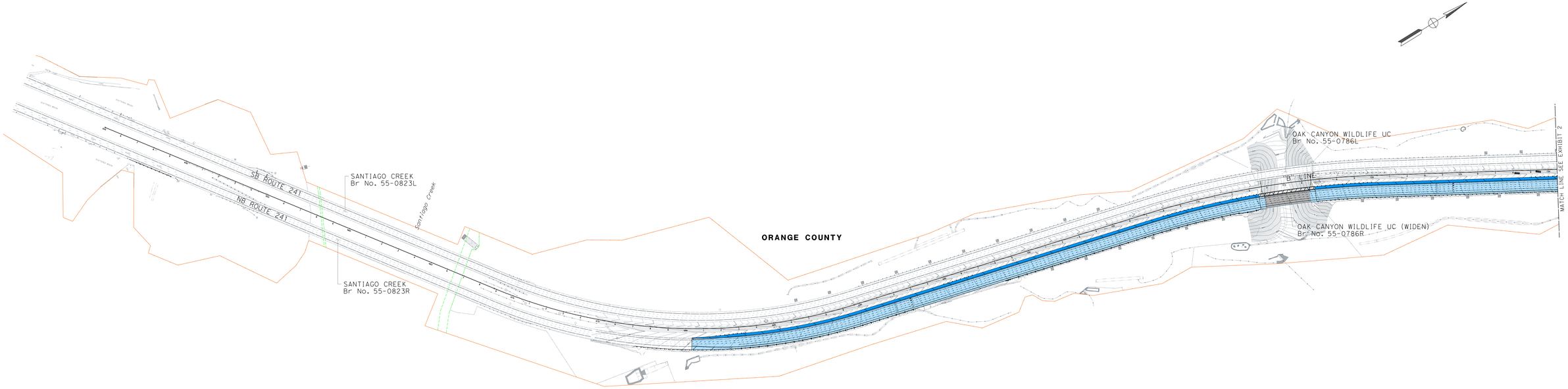
DRAFT

EXHIBIT iv – Project Ownership

Part 3 – Other Components of the Project that are of Interest to the Parties

Project Improvements to → / Project Responsibility of ↓	SR-91 General Purpose Lanes	91 Express Lanes	SR-241	Express Connector[1]
Construction	Sponsor - F/ETCA Administration – Caltrans	Sponsor - F/ETCA Administration – Caltrans	Sponsor - F/ETCA Administration – Caltrans	Sponsor - F/ETCA Administration – Caltrans
Facility Ownership	Caltrans	Caltrans	Caltrans	Caltrans
Roadway Maintenance[2]	Caltrans	Orange County – OCTA Riverside County – RCTC	Caltrans	Caltrans
Incident Management	Caltrans	91 Express Lanes Traffic Operations Center (TOC)[3]	Caltrans	91 Express Lanes TOC and Caltrans Traffic Management Centers Districts 12 and 8
Enforcement	CHP	CHP	CHP	CHP
Toll Operator	N/A	Orange County – OCTA Riverside County – RCTC	F/ETCA	F/ETCA
Toll Collection System Maintenance[4]	N/A	Orange County – OCTA Riverside County – RCTC	F/ETCA	F/ETCA

[1] *Includes Express Connector facilities within the 91 Express Lanes. Except for construction, operations and maintenance are to be funded by Express Connector toll revenues.*
[2] *All roadway features, including but not limited to roadbed, slopes, landscaping, safety devices, overhead and roadside signs, structures, drainage, TMS equipment, highway electrical, traffic control devices (striping and channelizers), etc., related to complete operation of the State Highway System facility and right of way as covered under the separate facility and/or maintenance agreements between Caltrans and each toll operator.*
[3] *Jointly operated by RCTC and OCTA*
[4] *Equipment, cameras, electronic signs, etc. related to complete operation of collection and enforcement. See Exhibit ii.*



LEGEND:

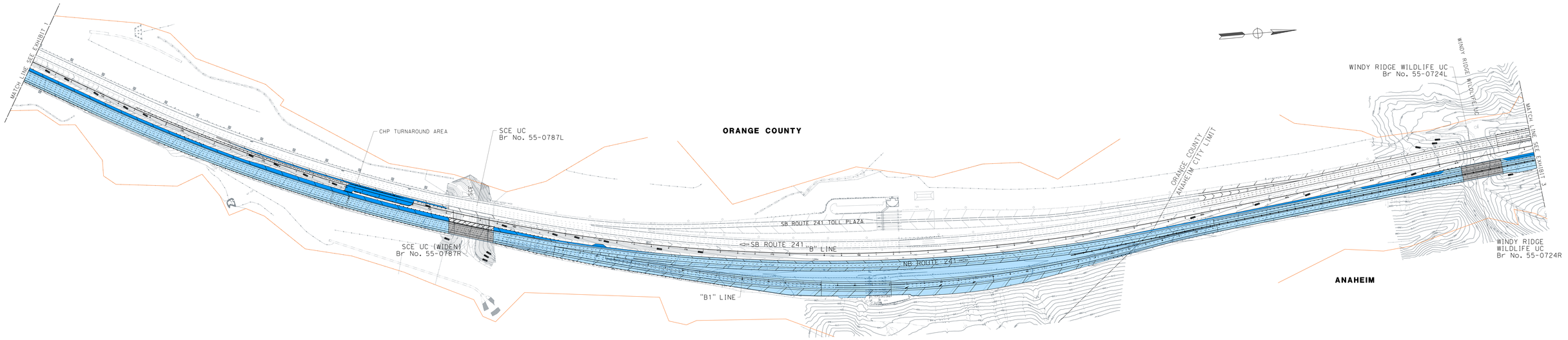
- GENERAL PURPOSE LANES
- EXPRESS LANES
- EXPRESS Conn LANE
- PROPOSED GENERAL PURPOSE LANES IMPROVEMENTS (SR 91)
- EXISTING GENERAL PURPOSE LANES (SR 91)
- PROPOSED GENERAL PURPOSE LANES IMPROVEMENTS (SR 241)
- EXISTING GENERAL PURPOSE LANES (SR 241)
- EXISTING INTERCHANGE (GYPSUM CANYON)
- EXISTING 91 EXPRESS LANES
- PROPOSED BRIDGE
- EXISTING BRIDGE
- PROPOSED EXPRESS CONNECTOR IMPROVEMENTS
- PROPOSED EXPRESS CONNECTOR IMPROVEMENTS WITHIN 91 EXPRESS LANES

SCALE: 1"=100'

SR 241/SR 91 EXPRESS CONNECTOR PROJECT

PROJECT BOUNDARY EXHIBIT (DRAFT) JULY 2024

SHEET 1 OF 5



LEGEND:

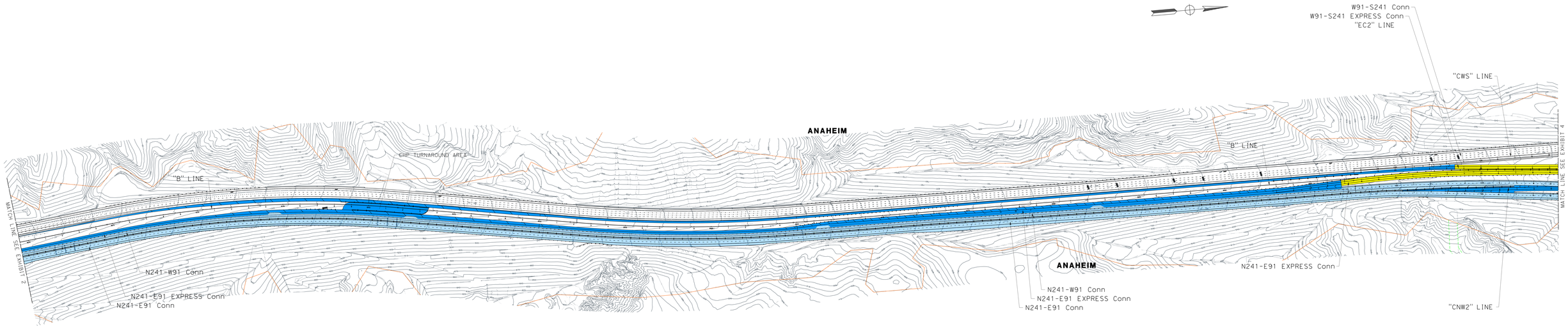
- GENERAL PURPOSE LANES
- EXPRESS LANES
- EXPRESS Conn LANE
- PROPOSED GENERAL PURPOSE LANES IMPROVEMENTS (SR 91)
- EXISTING GENERAL PURPOSE LANES (SR 91)
- PROPOSED GENERAL PURPOSE LANES IMPROVEMENTS (SR 241)
- EXISTING GENERAL PURPOSE LANES (SR 241)
- EXISTING INTERCHANGE (GYPSUM CANYON)
- EXISTING 91 EXPRESS LANES
- PROPOSED BRIDGE
- EXISTING BRIDGE
- PROPOSED EXPRESS CONNECTOR IMPROVEMENTS
- PROPOSED EXPRESS CONNECTOR IMPROVEMENTS WITHIN 91 EXPRESS LANES

SCALE: 1"=100'

SR 241/SR 91 EXPRESS CONNECTOR PROJECT

PROJECT BOUNDARY EXHIBIT (DRAFT) JULY 2024

SHEET 2 OF 5



LEGEND:

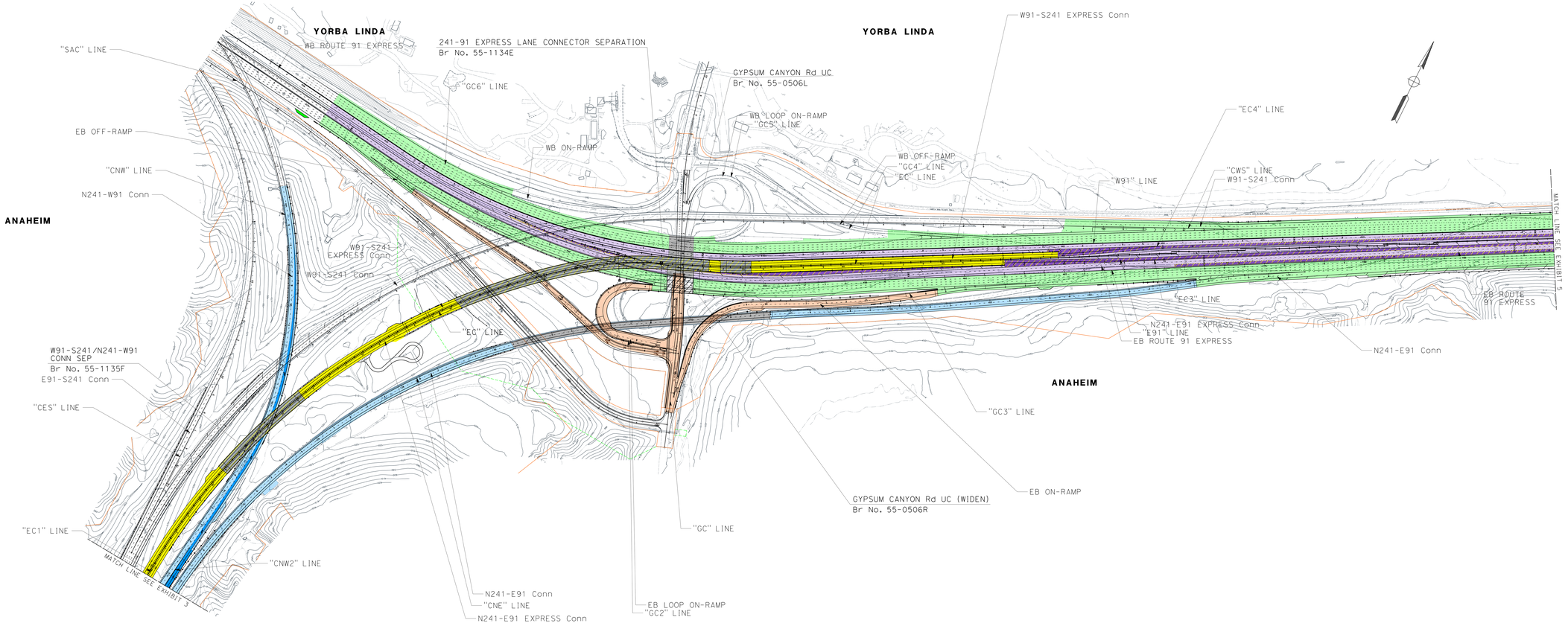
- GENERAL PURPOSE LANES
- EXPRESS LANES
- EXPRESS Conn LANE
- PROPOSED GENERAL PURPOSE LANES IMPROVEMENTS (SR 91)
- EXISTING GENERAL PURPOSE LANES (SR 91)
- PROPOSED GENERAL PURPOSE LANES IMPROVEMENTS (SR 241)
- EXISTING GENERAL PURPOSE LANES (SR 241)
- EXISTING INTERCHANGE (GYPSUM CANYON)
- EXISTING 91 EXPRESS LANES
- PROPOSED BRIDGE
- EXISTING BRIDGE
- PROPOSED EXPRESS CONNECTOR IMPROVEMENTS
- PROPOSED EXPRESS CONNECTOR IMPROVEMENTS WITHIN 91 EXPRESS LANES

SCALE: 1"=100'

SR 241/SR 91 EXPRESS CONNECTOR PROJECT

PROJECT BOUNDARY EXHIBIT (DRAFT) JULY 2024

SHEET 3 OF 5



LEGEND:

GENERAL PURPOSE LANES

EXPRESS LANES

EXPRESS Conn LANE

PROPOSED GENERAL PURPOSE LANES IMPROVEMENTS (SR 91)

EXISTING GENERAL PURPOSE LANES (SR 91)

PROPOSED GENERAL PURPOSE LANES IMPROVEMENTS (SR 241)

EXISTING GENERAL PURPOSE LANES (SR 241)

EXISTING INTERCHANGE (GYPSUM CANYON)

EXISTING 91 EXPRESS LANES

PROPOSED BRIDGE

EXISTING BRIDGE

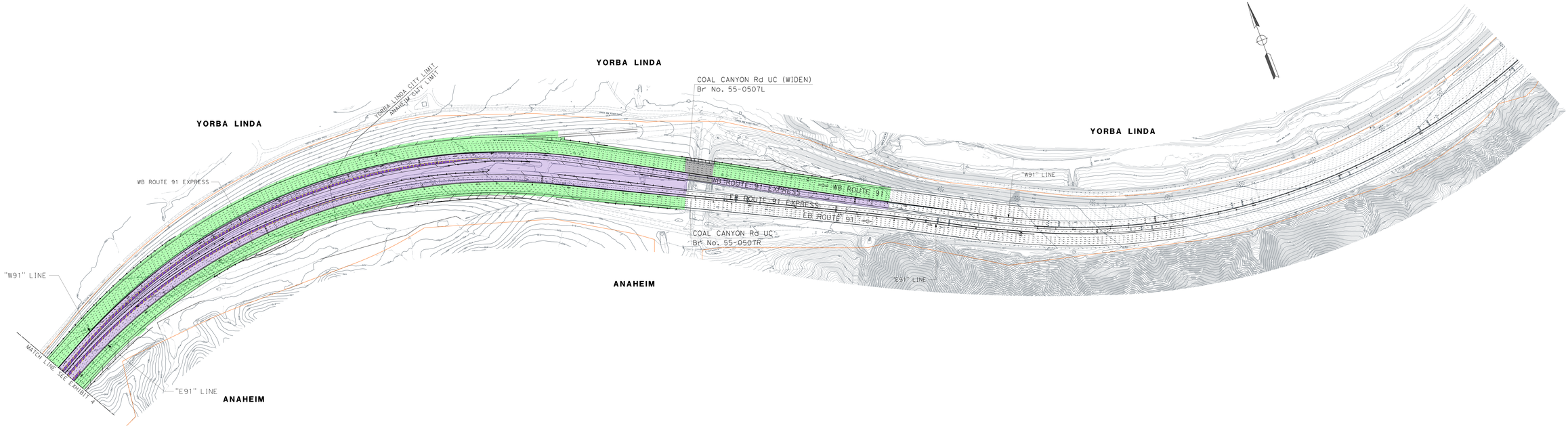
PROPOSED EXPRESS CONNECTOR IMPROVEMENTS

PROPOSED EXPRESS CONNECTOR IMPROVEMENTS WITHIN 91 EXPRESS LANES

SCALE: 1"=100'

SR 241/SR 91 EXPRESS CONNECTOR PROJECT

PROJECT BOUNDARY EXHIBIT (DRAFT) JULY 2024



LEGEND:

- GENERAL PURPOSE LANES
- EXPRESS LANES
- EXPRESS Conn LANE
- PROPOSED GENERAL PURPOSE LANES IMPROVEMENTS (SR 91)
- EXISTING GENERAL PURPOSE LANES (SR 91)
- PROPOSED GENERAL PURPOSE LANES IMPROVEMENTS (SR 241)
- EXISTING GENERAL PURPOSE LANES (SR 241)
- EXISTING INTERCHANGE (GYPSUM CANYON)
- EXISTING 91 EXPRESS LANES
- PROPOSED BRIDGE
- EXISTING BRIDGE
- PROPOSED EXPRESS CONNECTOR IMPROVEMENTS
- PROPOSED EXPRESS CONNECTOR IMPROVEMENTS WITHIN 91 EXPRESS LANES

SCALE: 1"=100'

SR 241/SR 91 EXPRESS CONNECTOR PROJECT

PROJECT BOUNDARY EXHIBIT (DRAFT) JULY 2024

SHEET 5 OF 5

DRAFT

EXHIBIT v – Closure Periods, Closure Fees and Liquidated Damages

DRAFT

EXHIBIT v – Closure Periods, Closure Fees and Liquidated Damages

F/ETCA, OCTA, and RCTC agree to Closure periods and compensation for lost toll revenues due to any Closures, including lane reductions and connectors, of the 241 toll road and 91 Express Lanes during and due to Project construction.

Schedules shown in Tables 1, 2, and 3 are closure fees for the permitted Closures of the toll facilities that have been agreed to by OCTA, RCTC, and/or F/ETCA.

Additional Closure windows not shown in these tables (ie 55-hour closures not already identified) may be submitted for consideration by each agency; associated closure fees for requested additional Closure windows will be calculated by averaging the toll revenue in the 5–6-week period before and/or after the Closure, excluding outliers (like holidays, special events or other closures) unless the Closure is on an outlier event (like a holiday or during a special event).

Schedules shown in Tables 4, 5, and 6 are liquidated damages for the unpermitted Closures of the toll facilities beyond or outside agree Closures.

DRAFT

EXHIBIT v – Closure Periods, Closure Fees and Liquidated Damages

Table 1
Closure Fees for PERMITTED CLOSURES of the OCTA TOLL FACILITY

The following payments are the closure fees required for the PERMITTED CLOSURES of the OCTA TOLL FACILITY.

Type of facility	Route	Direction and segment	Lane Closure Charts	Period	Closure Fees
Express Lanes (OCTA)	Route 91	EB from Route 55 to County Line Ingress	H7	Sunday 23:00 to Monday 5:00	$1,100/night
				Monday 23:00 to Tuesday 5:00	$1,000/night
				Tuesday 23:00 to Wednesday 5:00	$1,200/night
				Wednesday 23:00 to Thursday 5:00	$1,200/night
				Thursday 23:00 to Friday 5:00	TBD
				Friday 24:00 to Saturday 5:00	$2,300/night
				Saturday 23:00 to Sunday 5:00	$2,500/night
Express Lanes (OCTA)	Route 91	WB from County Line Ingress/Egress to Route 55	H8	Sunday 22:00 to Monday 4:00	$1,200/night
				Monday 22:00 to Tuesday 4:00	$1,000/night
				Tuesday 22:00 to Wednesday 4:00	$1,000/night
				Wednesday 22:00 to Thursday 4:00	$1,000/night
				Thursday 23:00 to Friday 5:00	TBD
				Friday 22:00 to Saturday 5:00	$1,500/night
				Saturday 22:00 to Sunday 5:00	$1,900/night
Express Lanes (OCTA)	Route 91	WB from County Line Ingress/Egress to Route 55	H9	Friday 21:00 to Monday 4:00	$166,000/56 hours

Issue Date: _____

Approved By: _____

Update to this Table and PROJECT CONTRACT DOCUMENTS is required if Caltrans has not released civil construction IFB within 6 months of issue date.

Table 2
Closure Fees for PERMITTED CLOSURES of the RCTC TOLL FACILITY

The following payments are the closure fees required for the PERMITTED CLOSURES of the RCTC TOLL FACILITY.

Type of facility	Route	Direction and segment	Lane Closure Charts	Period	Closure Fees
Express Lanes (RCTC)	Route 91	EB from County Line Egress to Route 15	H5	Sunday 22:00 to Monday 6:00	$3,500/night
				Monday 22:00 to Tuesday 6:00	$3,200/night
				Tuesday 22:00 to Wednesday 6:00	$4,500/night
				Wednesday 22:00 to Thursday 6:00	$7,500/night
				Thursday 23:00 to Friday 7:00	$5,000/night
				Friday 23:00 to Saturday 7:00	$4,100/night
				Saturday 23:00 to Sunday 7:00	$6,500/night
Express Lanes (RCTC)	Route 91	WB from Route 15 to County Line Ingress/Egress	H6	Sunday 21:00 to Monday 4:00	$2,600/night
				Monday 21:00 to Tuesday 4:00	$1,600/night
				Tuesday 21:00 to Wednesday 4:00	$1,400/night
				Wednesday 21:00 to Thursday 4:00	$1,600/night
				Thursday 24:00 to Friday 4:00	$1,700/night
				Friday 21:00 to Saturday 6:00	$3,000/night
				Saturday 21:00 to Sunday 6:00	$3,400/night

Issue Date: _____

Approved By: _____

Update to this Table and PROJECT CONTRACT DOCUMENTS is required if Caltrans has not released civil construction IFB within 6 months of issue date.

Table 3
Closure Fees for PERMITTED CLOSURES of the F/ETCA TOLL FACILITY

The following payments are the closure fees required for the PERMITTED CLOSURES of the F/ETCA TOLL FACILITY.

Type of facility	Route	Direction and segment	Lane Closure Charts	Period	Closure Fees
Mainline	Route 241	NB	H1 I2	Sunday 23:00 to Monday 5:00	$9,000/night
				Monday 23:00 to Tuesday 5:00	$9,000/night
				Tuesday 23:00 to Wednesday 5:00	$9,00/night
				Wednesday 23:00 to Thursday 5:00	$9,000/night
				Thursday 23:00 to Friday 5:00	$11,700/night
				Friday 23:00 to Saturday 5:00	$9,500/night
				Saturday 23:00 to Sunday 5:00	$9,500/night
Mainline	Route 241	NB	H10	Friday 22:00 to Monday 4:00	$570,500/56 hours
Connector	Route 241	Northbound-to Eastbound Route 91	I3	Sunday 23:00 to Monday 5:00	$6,700/night
				Monday 23:00 to Tuesday 5:00	$6,700/night
				Tuesday 23:00 to Wednesday 5:00	$6,700/night
				Wednesday 23:00 to Thursday 5:00	$6,700/night
				Thursday 23:00 to Friday 5:00	$6,700/night
				Friday 23:00 to Saturday 5:00	$11,800/night
				Saturday 23:00 to Sunday 5:00	$11,800/night
Connector	Route 91	Eastbound to Southbound Route 241	I3	Sunday 23:00 to Monday 5:00	$5,300/night
				Monday 23:00 to Tuesday 5:00	$5,300/night
				Tuesday 23:00 to Wednesday 5:00	$5,300/night
				Wednesday 23:00 to Thursday 5:00	$5,300/night
				Thursday 23:00 to Friday 5:00	$5,300/night

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EXHIBIT v – Closure Periods, Closure Fees and Liquidated Damages

Type of facility	Route	Direction and segment	Lane Closure Charts	Period	Closure Fees
				Friday 23:00 to Saturday 5:00	$5,000/night
				Saturday 23:00 to Sunday 5:00	$5,000/night
Connector	Route 241	Northbound to Westbound Route 91	I4	Sunday 23:00 to Monday 5:00	$600/night
				Monday 23:00 to Tuesday 5:00	$600/night
				Tuesday 23:00 to Wednesday 5:00	$600/night
				Wednesday 23:00 to Thursday 5:00	$600/night
				Thursday 23:00 to Friday 5:00	$1,200/night
				Friday 23:00 to Saturday 5:00	$1,400/night
				Saturday 23:00 to Sunday 5:00	$1,500/night
Connector	Route 91	Westbound to Southbound Route 241	I4	Sunday 23:00 to Monday 5:00	$13,200/night
				Monday 23:00 to Tuesday 5:00	$13,200/night
				Tuesday 23:00 to Wednesday 5:00	$13,200/night
				Wednesday 23:00 to Thursday 5:00	$13,200/night
				Thursday 23:00 to Friday 5:00	$10,800/night
				Friday 23:00 to Saturday 5:00	$12,700/night
				Saturday 23:00 to Sunday 5:00	$9,600/night
Connector	Route 241	Northbound to Westbound Route 241	I5	Friday 23:00 to Monday 5:00	$72,900/54 hours
Connector	Route 91	Westbound to Southbound Route 241	I6	Saturday 24:00 to Monday 4:00	$473,900/52 hours
Express Connector	Route 241	Northbound to Eastbound Route 91	I7	Sunday 23:00 to Monday 5:00	$500/night
				Monday 23:00 to Tuesday 5:00	$500/night
				Tuesday 23:00 to Wednesday 5:00	$500/night
				Wednesday 23:00 to Thursday 5:00	$500/night

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EXHIBIT v – Closure Periods, Closure Fees and Liquidated Damages

Type of facility	Route	Direction and segment	Lane Closure Charts	Period	Closure Fees
Express Connector	Route 91	Westbound to Southbound Route 241	I7	Sunday 23:00 to Monday 5:00	$500/night
				Monday 23:00 to Tuesday 5:00	$500/night
				Tuesday 23:00 to Wednesday 5:00	$500/night
				Wednesday 23:00 to Thursday 5:00	$500/night

Issue Date: _____

Approved By: _____

Update to this Table and PROJECT CONTRACT DOCUMENTS is required if Caltrans has not released civil construction IFB within 6 months of issue date.

Table 4
Closure Fees for UNPERMITTED CLOSURES of the OCTA TOLL FACILITY

The following payments are the liquidated damages required for the UNPERMITTED CLOSURES of the OCTA TOLL FACILITY.

Type of facility	Route	Direction or segment	Period	Unpermitted Closure Liquidataed Damages / Interval
Express Lanes (OCTA)	Route 91	EB from Route 55 to County Line Ingress	1st half hour 2nd half hour 2nd hour and beyond	$14,500/10 minutes $18,600/10 minutes $21,000/10 minutes
Express Lanes (OCTA)	Route 91	WB from County Line Ingress/Egress to Route 55	1st half hour 2nd half hour 2nd hour and beyond	$14,500/10 minutes $21,200/10 minutes $24,400/10 minutes

Issue Date: _____

Approved By: _____

Update to this Table and PROJECT CONTRACT DOCUMENTS is required if Caltrans has not released civil construction IFB within 6 months of issue date.

Table 5
Closure Fees for UNPERMITTED CLOSURES of the RCTC TOLL FACILITY

The following payments are the liquidated damages required for the UNPERMITTED CLOSURES of the RCTC TOLL FACILITY.

Type of facility	Route	Direction or segment	Period	Unpermitted Closure Liquidated Damages / Interval
Express Lanes (RCTC)	Route 91	EB from County Line Egress to Route 15	1st half hour 2nd half hour 2nd hour and beyond	$14,500/10 minutes $18,600/10 minutes $21,000/10 minutes
Express Lanes (RCTC)	Route 91	WB from Route 15 to County Line Ingress/Egress	1st half hour 2nd half hour 2nd hour and beyond	$14,500/10 minutes $21,200/10 minutes $24,400/10 minutes

Issue Date: _____

Approved By: _____

Update to this Table and PROJECT CONTRACT DOCUMENTS is required if Caltrans has not released civil construction IFB within 6 months of issue date.

Table 6
Closure Fees for UNPERMITTED CLOSURES of the F/ECTA TOLL FACILITY

The following payments are the liquidated damages required for the UNPERMITTED CLOSURES of the F/ETCA TOLL FACILITY.

Type of facility	Route	Direction or segment	Period	Unpermitted Closure Liquidated Damages / Interval
Mainline	Route 241	NB	1st half hour 2nd half hour 2nd hour and beyond	$2,000/10 minutes $2,700/10 minutes $7,700/10 minutes
Connector	Route 241	Northbound-to Eastbound Route 91	1st half hour 2nd half hour 2nd hour and beyond	$1,600/10 minutes $2,100/10 minutes $4,800/10 minutes
Connector	Route 91	Eastbound to Southbound Route 241	1st half hour 2nd half hour 2nd hour and beyond	$1,100/10 minutes $1,400/10 minutes $2,800/10 minutes
Connector	Route 241	Northbound to Westbound Route 241	1st half hour 2nd half hour 2nd hour and beyond	$200/10 minutes $300/10 minutes $700/10 minutes
Connector	Route 91	Westbound to Southbound Route 241	1st half hour 2nd half hour 2nd hour and beyond	$2,700/10 minutes $3,300/10 minutes $7,100/10 minutes
Express Connector	Route 241	Northbound to Eastbound Route 91	1st half hour 2nd half hour 2nd hour and beyond	$1,400/10 minutes $1,600/10 minutes $2,200/10 minutes
Express Connector	Route 91	Westbound to Southbound Route 241	1st half hour 2nd half hour 2nd hour and beyond	$1,500/10 minutes $1,500/10 minutes $2,200/10 minutes

Issue Date: _____

Approved By: _____

Update to this Table and PROJECT CONTRACT DOCUMENTS is required if Caltrans has not released civil construction IFB within 6 months of issue date.

DRAFT

EXHIBIT vi – Betterments

EXHIBIT vi - Betterments

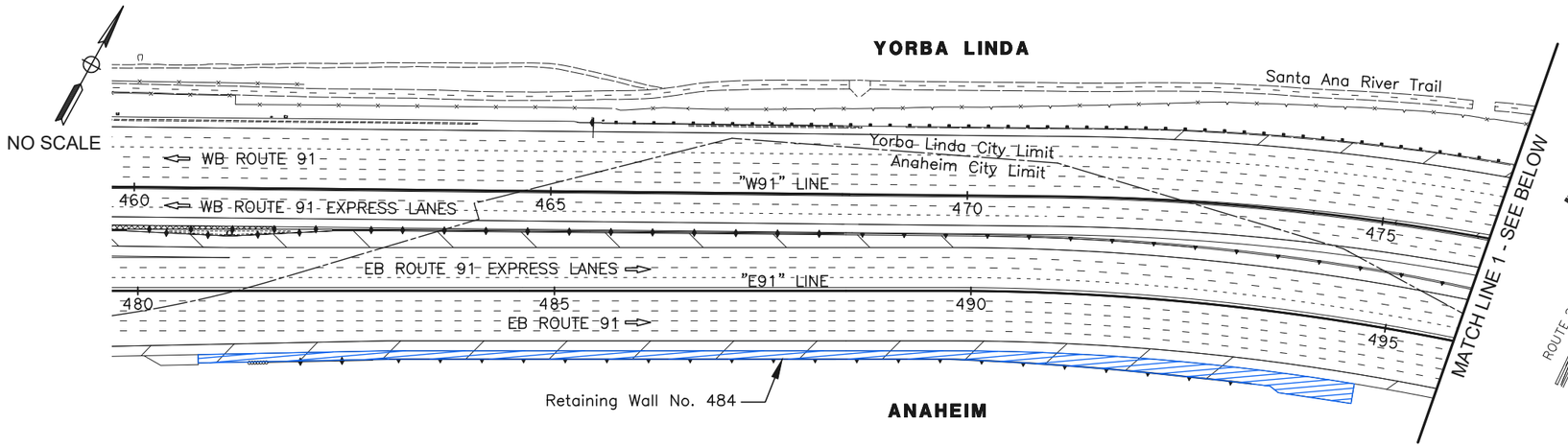
This Exhibit represents the scope and cost of Betterments agreed to by the Parties that are to be incorporated into the 241/91 Express Connector Project.

Table below represents costs as estimated as of _____ (date).

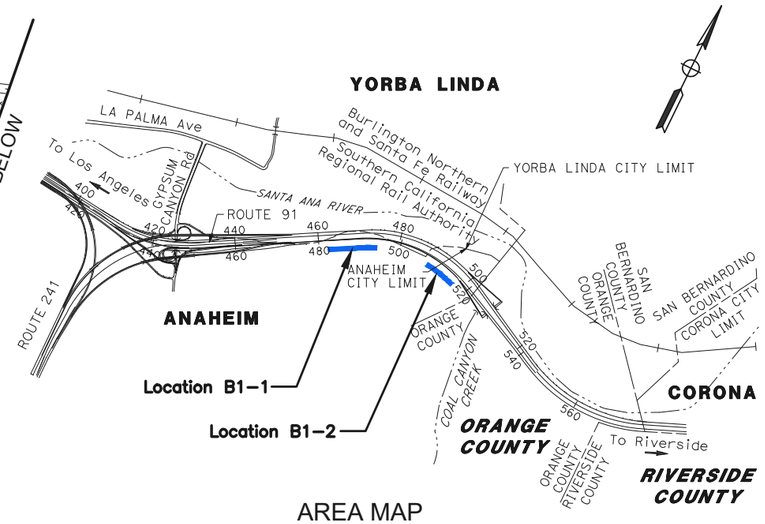
Final table and total betterment amounts will be determined after Project Construction Closeout and agreed to in writing by all parties prior to accounting for payment and/or credits to F/ETCA.

Ref. No.	Description	Betterment Sponsor (See note 1)	Operations & Maintenance Responsible Party (See note 2)	Agreed to Incorporate into Current PS&E	Incremental Cost Increase				
					Engineering & Final Design +	Environmental Clearance & Permitting +	Construction +	Schedule, Management, & Other	=Total
B 1	Replace miscellaneous section (SS 17) with full depth shoulder section (SS1) in front of EB 91 Retaining Walls (RW484 & RW 514)	RCTC	Caltrans	10/13/2022	$ -	$ -	$ 223,000	$ -	$ 223,000
B 2	Separate RCTC fiber optic line from shared OCTA conduit	RCTC	RCTC	3/28/2023	$ 48,264	$ -	$ 473,000	$ -	$ 521,264
B 3	Additional full depth traveled way pavement to accommodate 91 ECOP Design	RCTC	Caltrans	5/21/2024	TCA evaluating concept transmitted by RCTC on 11/05	Included in ECOP	Anticipated CCO	Anticipated CCO	TBD
B 4	Overhead sign width extension to accommodate ECOP design	RCTC	Caltrans	5/21/2024	TCA evaluating concept transmitted by RCTC on 11/05	Included in ECOP	Anticipated CCO	Anticipated CCO	TBD
			Total Betterment Cost		**$ 48,264**		**$ 696,000**		**$ 744,264**

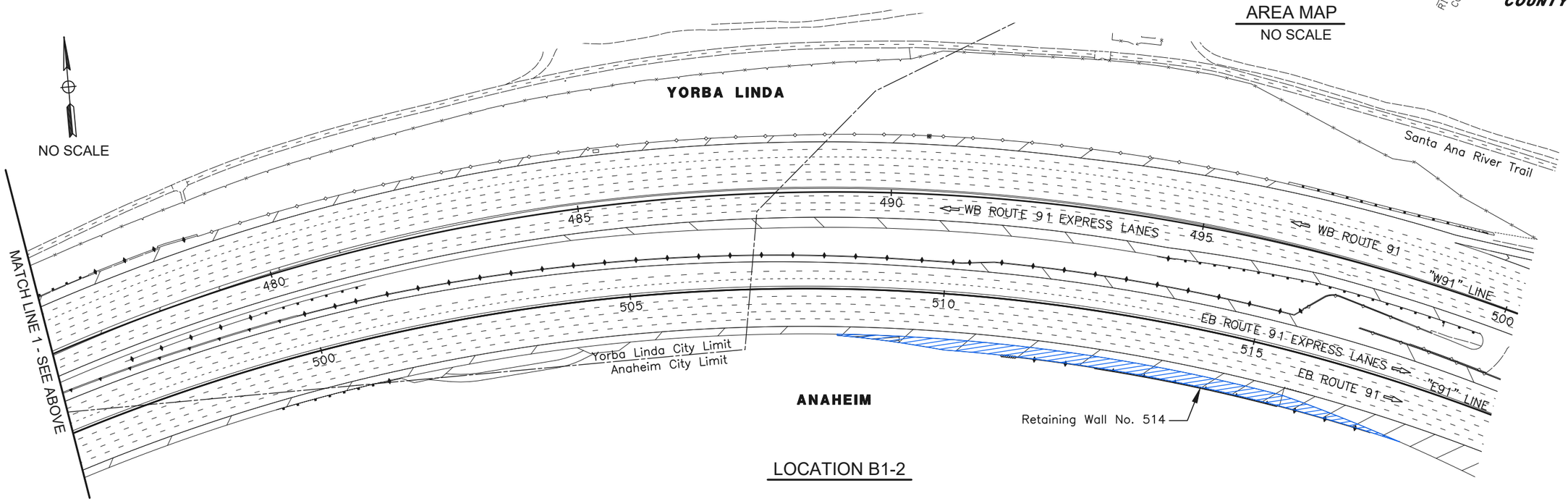
Note 1: The cost of these Betterments will be funded by the Betterment Sponsor as shown as a payment and/or credit to F/ETCA.
Note 2: Operations & Maintenance of the Bettermant has been agreed by the Responsible Party as shown.



LOCATION B1-1



AREA MAP
NO SCALE



LOCATION B1-2

PAVEMENT STRUCTURAL SECTIONS:

1
- 1.10' Joint Plain Concrete Pavement (JPCP)
- 0.25' Hot Mix Asphalt Type A (HMA)
- 0.90' Class 2 AS Aggregate Base

17
- 0.25' Hot Mix Asphalt Type A (HMA)
- 0.50' Class 2 AB Aggregate Base

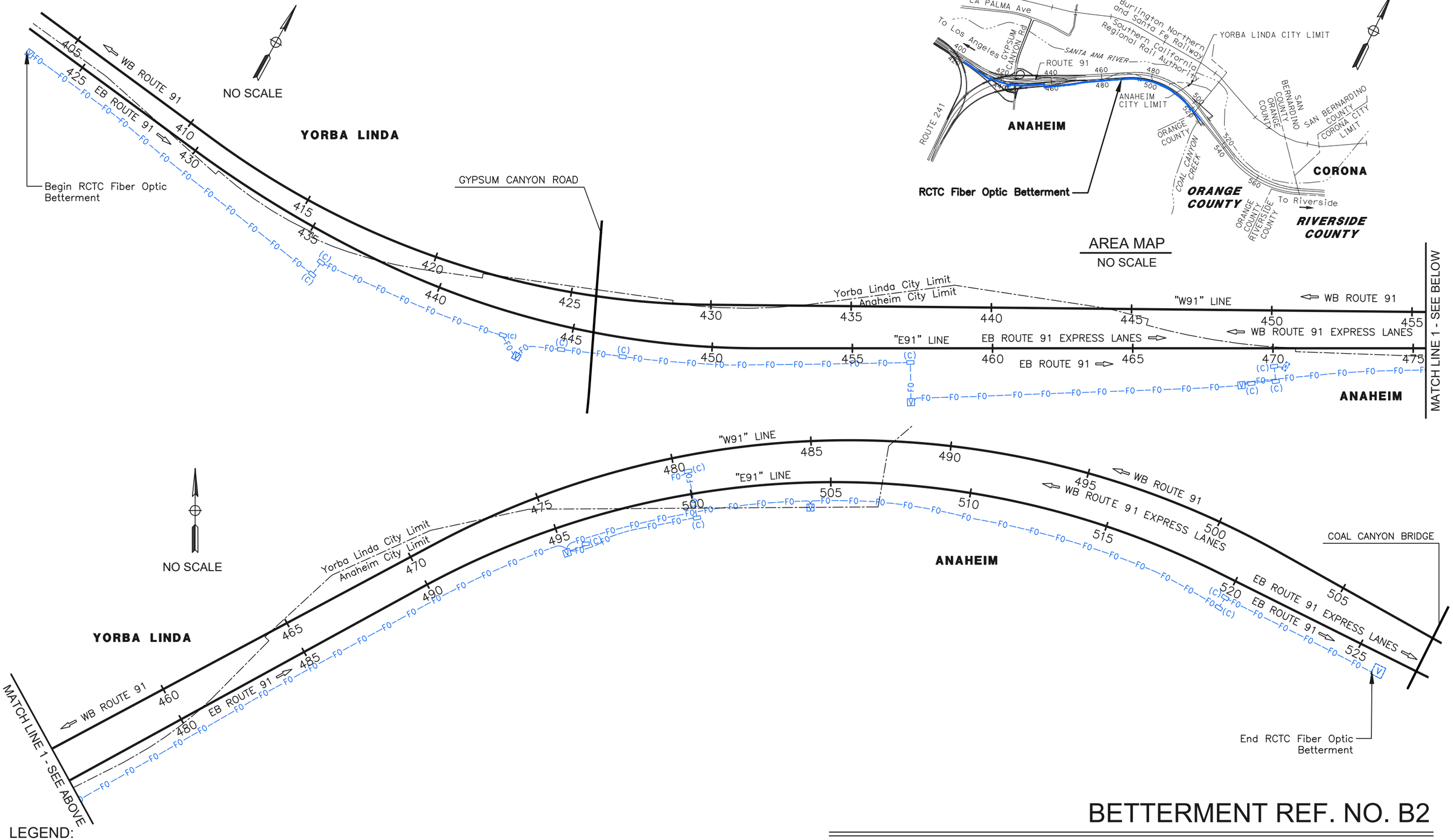
LEGEND:

Area of pavement structural section 17 (SS17) to pavement structural section 1 (SS1); Approx. areas Loc.B1–1=17,261 SF and Loc.B1–2=12,860 SF

BETTERMENT REF. NO. B1

Replace shoulder section with full depth traveled way section (SS17 TO SS1) in front of eastbound SR–91 Retaining Wall No. 484 & Retaining Wall No. 514

Date: June 17, 2024 | Sheet 1 of 1



AREA MAP
NO SCALE

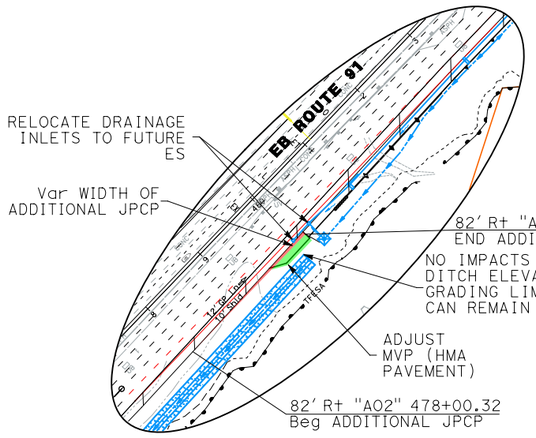
LEGEND:

- Proposed splice vault (6 Total)
- (C) Proposed local pull box (14 Total)
- FO RCTC fiber optic line (Approx. 11,546.5 LF)

BETTERMENT REF. NO. B2

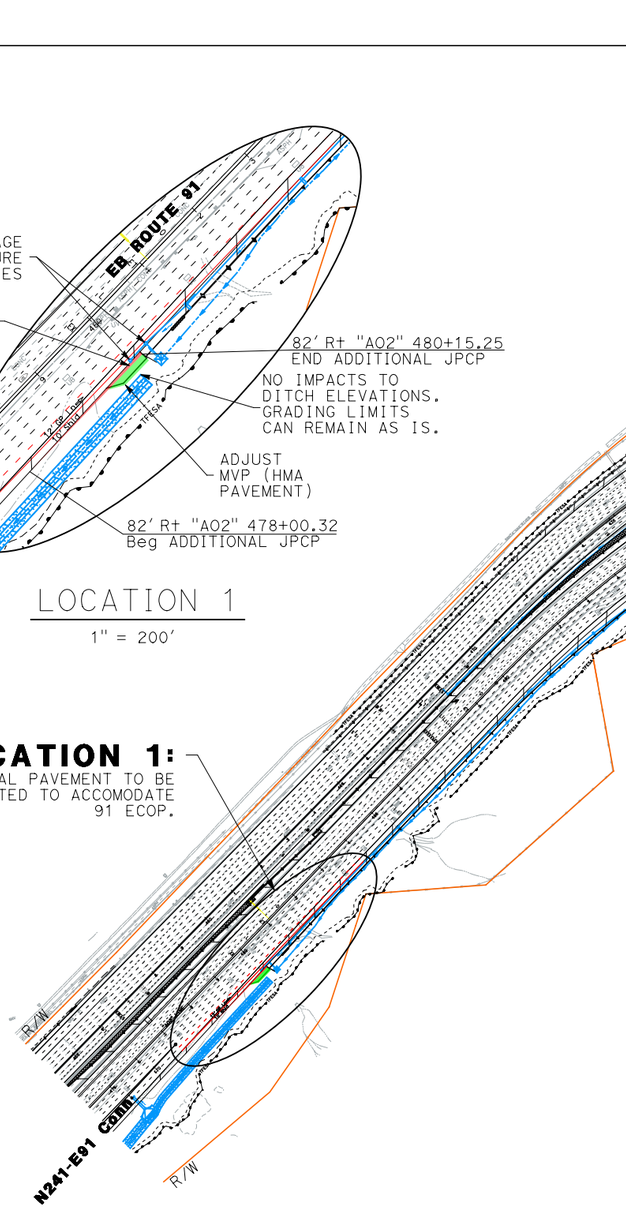
New 4" conduit and vaults to separate RCTC fiber optic backbone from existing shared conduit

Date: June 17, 2024 | Sheet 1 of 1

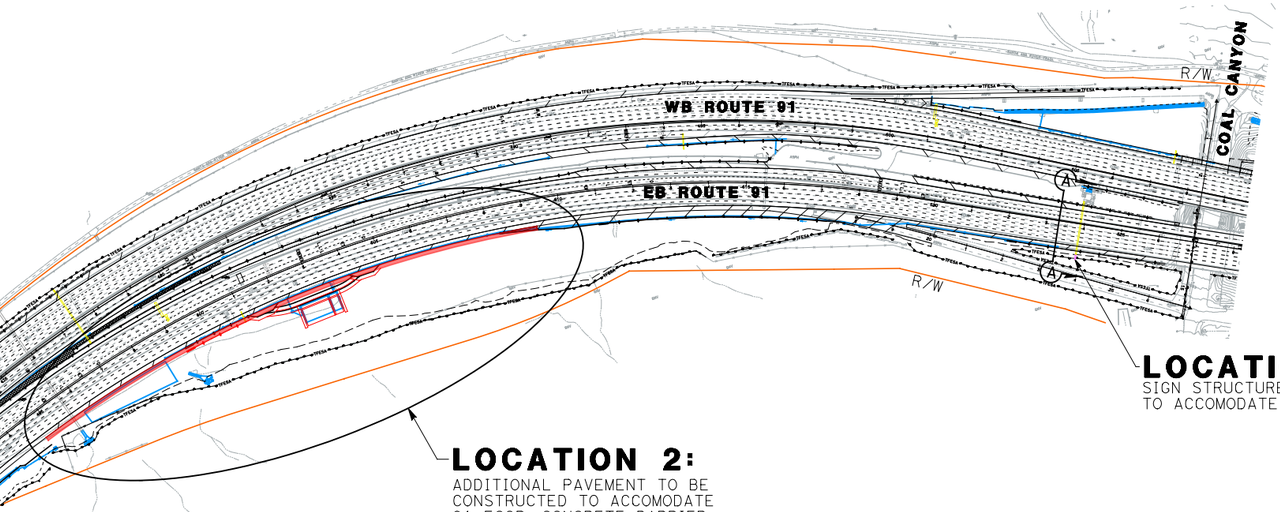


LOCATION 1

1" = 200'

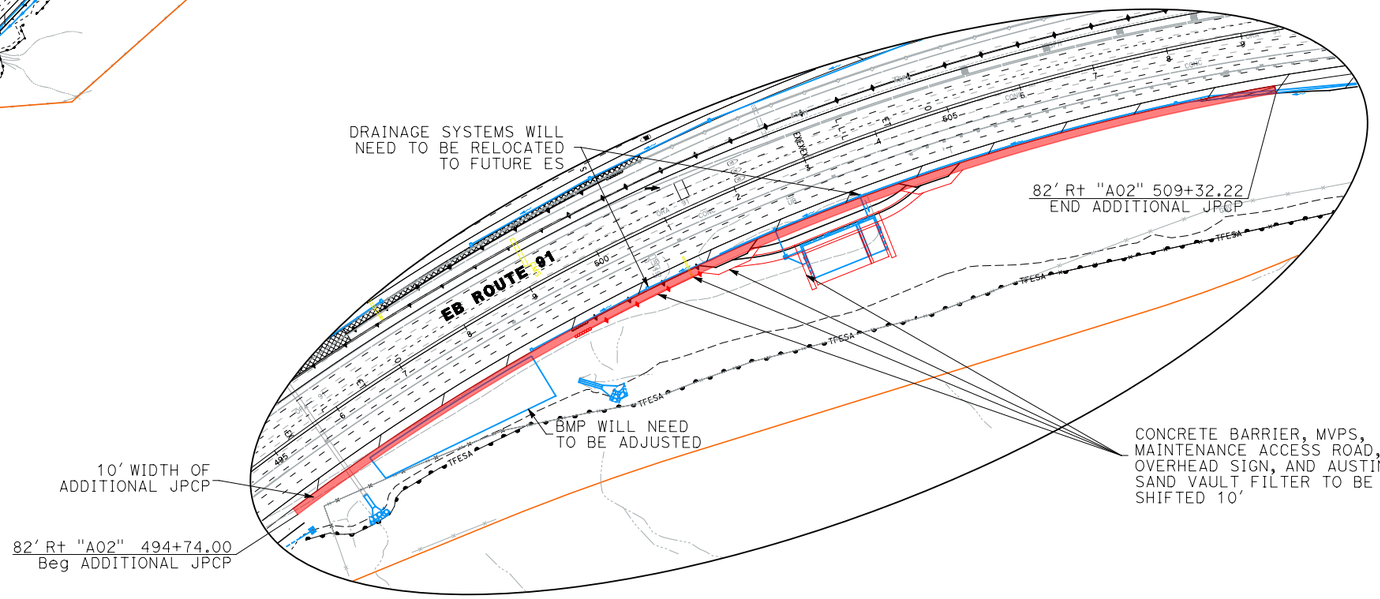


LOCATION 1:
ADDITIONAL PAVEMENT TO BE CONSTRUCTED TO ACCOMODATE 91 ECOP.



LOCATION 2:
ADDITIONAL PAVEMENT TO BE CONSTRUCTED TO ACCOMODATE 91 ECOP. CONCRETE BARRIER, BMPS, AND DRAINAGE TO BE SHIFTED TO ACCOMODATE 91 ECOP.

LOCATION 3:
SIGN STRUCTURE TO BE LENGTHENED TO ACCOMODATE 91 ECOP.



LOCATION 2

1" = 200'

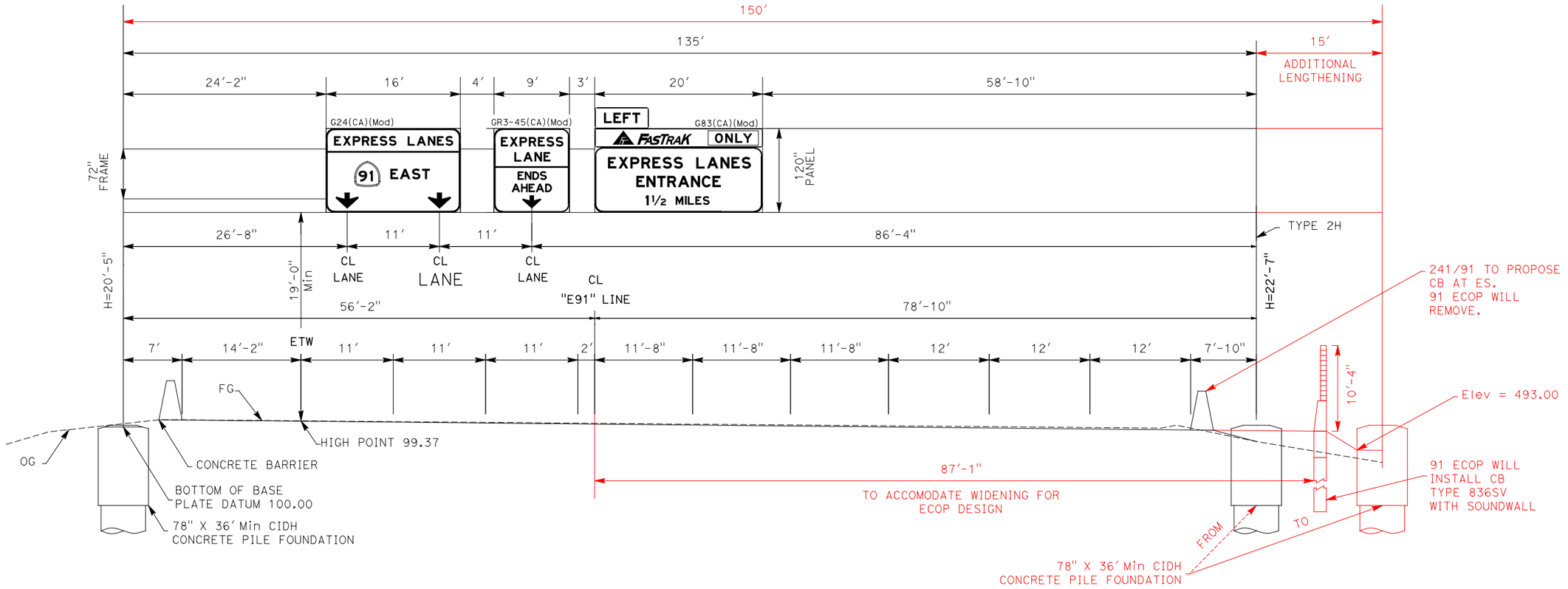
LEGEND:

- 241-91 IMPROVEMENTS
- 91 ECOP FUTURE STRIPING
- 91 ECOP PAVEMENT TO BE CONSTRUCTED WITH 241-91 PROJECT
- 241-91 DRAINAGE
- R/W
- RELOCATED HMA MVP
- 241-91 OVERHEAD SIGN STRUCTURES
- ADDITIONAL 241-91 SIGN STRUCTURE LENGTHENING

Betterment Ref. No. B3

PARSONS

241-91 CCO EXHIBIT
ADDITIONAL PAVEMENT AND SIGN RELOCATION
SCALE: 1" = 400"



SECTION A-A

LOCATION 3

Betterment Ref. No. B4

PARSONS

241-91 CCO EXHIBIT
SIGN RELOCATION
SECTION A-A
NO SCALE

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EXHIBIT vii – Expenditure Plan Process Flowchart

Exhibit vii – Expenditure Plan Flow Chart

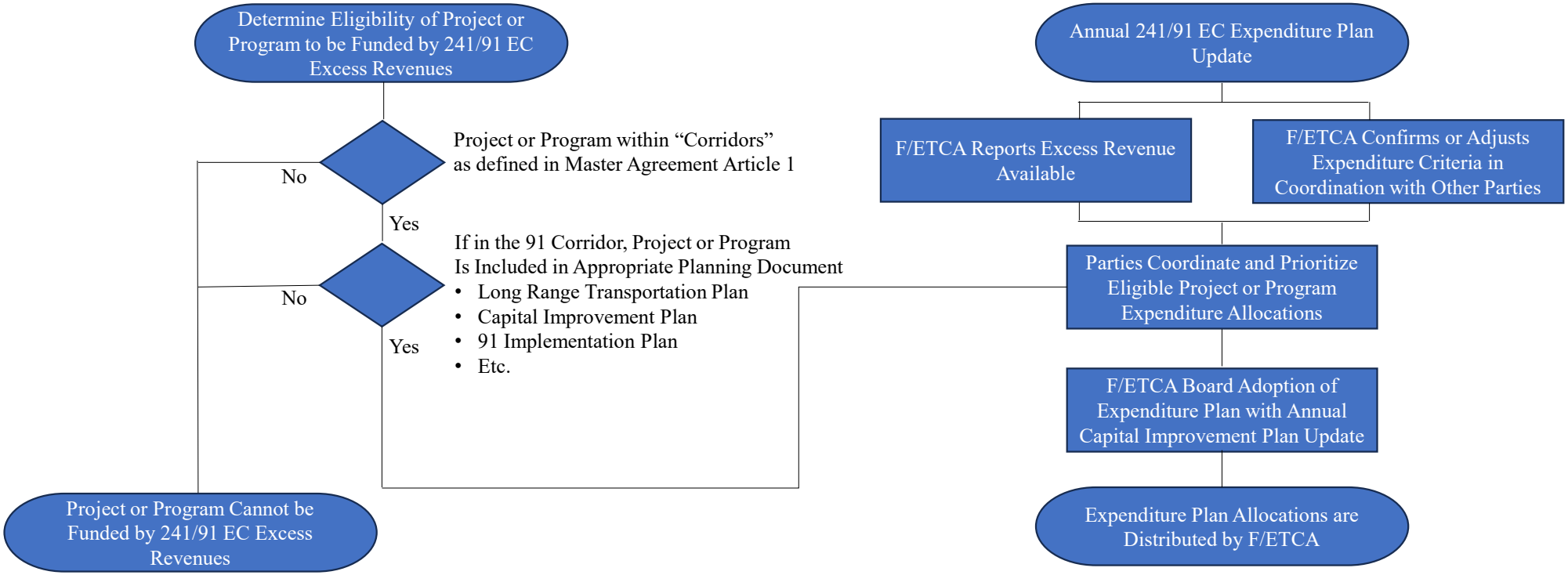

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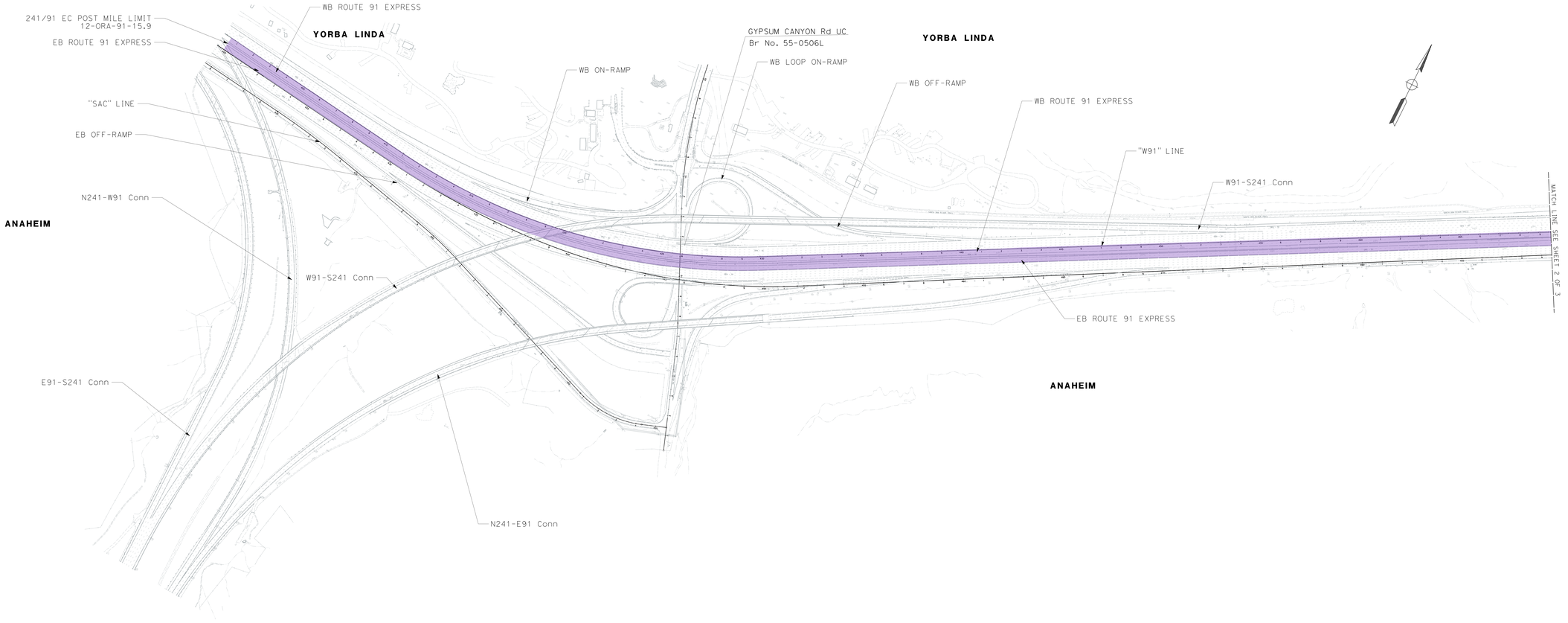
EXHIBIT viii – Existing Express Lanes Maintenance Boundary



LEGEND:

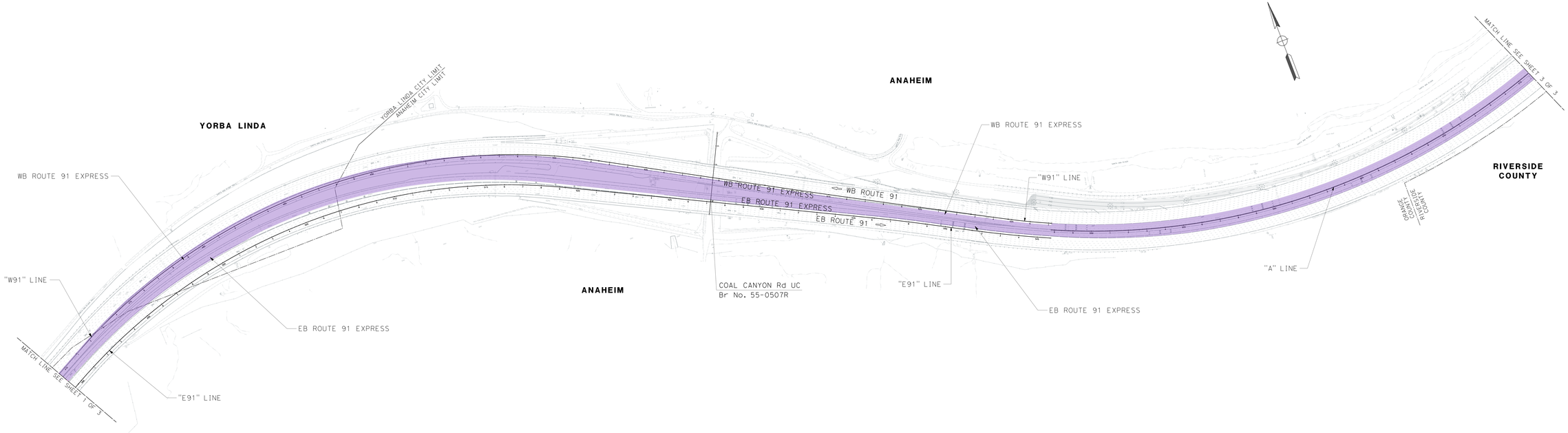
91 EXPRESS LANES PRE-PROJECT MAINTENANCE BOUNDARY

0 100 200
SCALE: 1"=100'

SR 241/SR 91 EXPRESS CONNECTOR PROJECT

APRIL 2025

SHEET 1 OF 3



LEGEND:

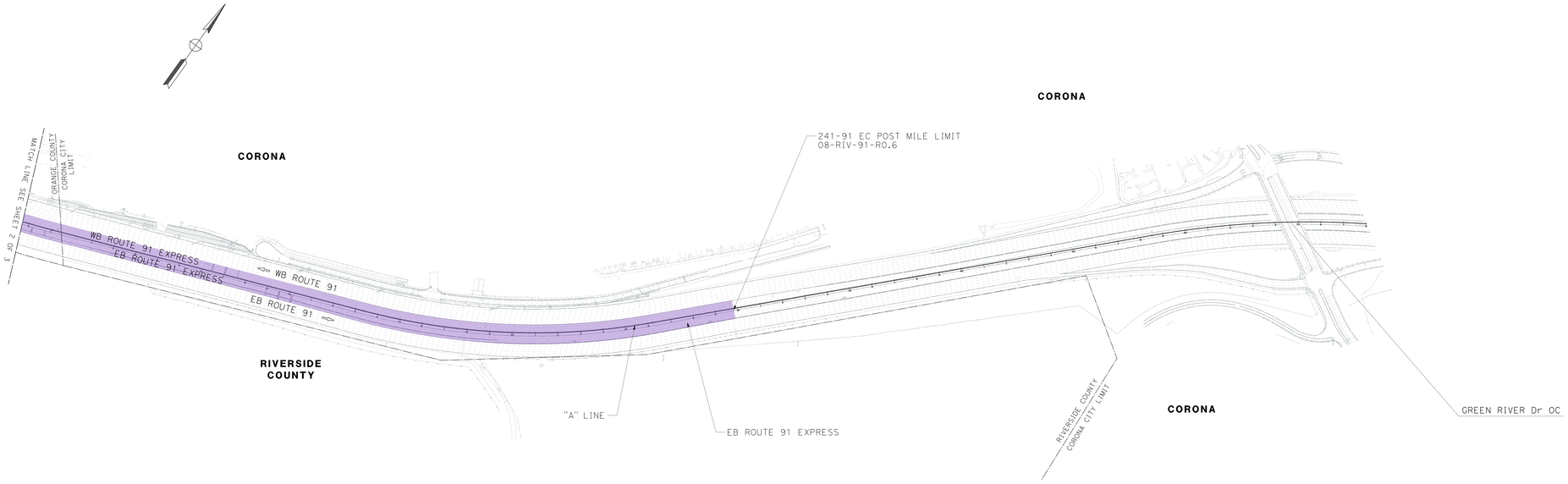
91 EXPRESS LANES PRE-PROJECT MAINTENANCE BOUNDARY

0 100 200
SCALE: 1"=100'

SR 241/SR 91 EXPRESS CONNECTOR PROJECT

APRIL 2025

SHEET 2 OF 3



LEGEND:

91 EXPRESS LANES PRE-PROJECT MAINTENANCE BOUNDARY

0 100 200
SCALE: 1"=100'

SR 241/SR 91 EXPRESS CONNECTOR PROJECT

APRIL 2025

SHEET 3 OF 3

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EXHIBIT ix – Reserve Funding Schedule

241/91 ELC Cash Flow
Reserve Balances

FISCAL YEAR	Total	2029	2030	2031	2032	2033	2034	2035	2036	2037
RESERVE DEPOSITS										
Operating Reserve *	$ 75,882,374	$ -	$ 3,161,766	$ 3,161,766	$ 3,161,766	$ 3,161,766	$ 3,161,766	$ 3,161,766	$ 3,161,766	$ 3,161,766
Capital Replacement Reserve	$ 58,500,000	$ 1,500,000	$ 1,500,000	$ 1,500,000	$ 1,500,000	$ 1,500,000	$ 1,500,000	$ 1,500,000	$ 1,500,000	$ 1,500,000
TOTAL ANNUAL RESERVE DEPOSITS	$ 134,382,374	$ 1,500,000	$ 4,661,766	$ 4,661,766	$ 4,661,766	$ 4,661,766	$ 4,661,766	$ 4,661,766	$ 4,661,766	$ 4,661,766
RESERVE BALANCES										
Operating Reserve										
Beginning Balance		$ -	$ -	$ 3,161,766	$ 6,370,958	$ 9,612,242	$ 12,885,938	$ 16,192,372	$ 19,531,870	$ 22,904,764
Deposit	$ 75,882,374	$ -	$ 3,161,766	$ 3,161,766	$ 3,161,766	$ 3,161,766	$ 3,161,766	$ 3,161,766	$ 3,161,766	$ 3,161,766
Withdrawal *	$ (92,350,854)	$ -		$ -	$ -	$ -	$ -	$ -	$ -	$ -
Interest	$ 16,468,480	$ -	$ -	$ 47,426	$ 79,518	$ 111,931	$ 144,668	$ 177,733	$ 211,128	$ 244,856
Ending Balance		$ -	$ 3,161,766	$ 6,370,958	$ 9,612,242	$ 12,885,938	$ 16,192,372	$ 19,531,870	$ 22,904,764	$ 26,311,386
Capital Replacement Reserve										
Beginning Balance		$ -	$ 851,146	$ 1,614,015	$ 2,360,652	$ 3,090,806	$ 3,804,221	$ 4,337,061	$ 5,014,578	$ 5,674,543
Deposit	$ 58,500,000	$ 1,500,000	$ 1,500,000	$ 1,500,000	$ 1,500,000	$ 1,500,000	$ 1,500,000	$ 1,500,000	$ 1,500,000	$ 1,500,000
Withdrawal for Capital Expenses	$ (60,728,796)	$ (648,854)	$ (756,927)	$ (780,908)	$ (804,978)	$ (829,138)	$ (1,017,791)	$ (877,742)	$ (902,192)	$ (926,743)
Interest	$ 2,894,447	$ -	$ 19,796	$ 27,545	$ 35,131	$ 42,554	$ 50,631	$ 55,259	$ 62,157	$ 68,879
Ending Balance		$ 851,146	$ 1,614,015	$ 2,360,652	$ 3,090,806	$ 3,804,221	$ 4,337,061	$ 5,014,578	$ 5,674,543	$ 6,316,679

ASSUMPTIONS

Operating Reserve Interest Rate	1.00%
Capital Reserve Interest Rate	1.00%

Funds are withdrawn each year from the the Capital Replacement Reserve for annual capital expenditures

* Operating Reserve funding equal to 2054-2067 estimated operating expenses. Usage governed by section 16.02 of the Master Agreement. As an example, this exhibit shows the Operating Reserve funds incl. interest being utilized to pay debt starting in 2054.

241/91 ELC Cash Flow
Reserve Balances

FISCAL YEAR	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047
RESERVE DEPOSITS										
Operating Reserve *	$ 3,161,766	$ 3,161,766	$ 3,161,766	$ 3,161,766	$ 3,161,766	$ 3,161,766	$ 3,161,766	$ 3,161,766	$ 3,161,766	$ 3,161,766
Capital Replacement Reserve	$ 1,500,000	$ 1,500,000	$ 1,500,000	$ 1,500,000	$ 1,500,000	$ 1,500,000	$ 1,500,000	$ 1,500,000	$ 1,500,000	$ 1,500,000
TOTAL ANNUAL RESERVE DEPOSITS	$ 4,661,766	$ 4,661,766	$ 4,661,766	$ 4,661,766	$ 4,661,766	$ 4,661,766	$ 4,661,766	$ 4,661,766	$ 4,661,766	$ 4,661,766
RESERVE BALANCES										
Operating Reserve										
Beginning Balance	$ 26,311,386	$ 29,752,074	$ 33,227,169	$ 36,737,015	$ 40,281,960	$ 43,862,354	$ 47,478,552	$ 51,130,912	$ 54,819,795	$ 58,545,567
Deposit	$ 3,161,766	$ 3,161,766	$ 3,161,766	$ 3,161,766	$ 3,161,766	$ 3,161,766	$ 3,161,766	$ 3,161,766	$ 3,161,766	$ 3,161,766
Withdrawal *	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Interest	$ 278,923	$ 313,330	$ 348,081	$ 383,179	$ 418,628	$ 454,432	$ 490,594	$ 527,118	$ 564,007	$ 601,265
Ending Balance	$ 29,752,074	$ 33,227,169	$ 36,737,015	$ 40,281,960	$ 43,862,354	$ 47,478,552	$ 51,130,912	$ 54,819,795	$ 58,545,567	$ 62,308,597
Capital Replacement Reserve										
Beginning Balance	$ 6,316,679	$ 6,873,879	$ 7,360,621	$ 7,945,691	$ 8,439,822	$ 8,985,832	$ 9,436,874	$ 6,749,606	$ 7,203,018	$ 7,635,471
Deposit	$ 1,500,000	$ 1,500,000	$ 1,500,000	$ 1,500,000	$ 1,500,000	$ 1,500,000	$ 1,500,000	$ 1,500,000	$ 1,500,000	$ 1,500,000
Withdrawal for Capital Expenses	$ (1,018,560)	$ (1,094,971)	$ (1,001,042)	$ (1,098,318)	$ (1,051,144)	$ (1,152,077)	$ (4,310,690)	$ (1,127,221)	$ (1,152,841)	$ (1,178,599)
Interest	$ 75,760	$ 81,714	$ 86,111	$ 92,449	$ 97,154	$ 103,119	$ 123,422	$ 80,632	$ 85,294	$ 89,748
Ending Balance	$ 6,873,879	$ 7,360,621	$ 7,945,691	$ 8,439,822	$ 8,985,832	$ 9,436,874	$ 6,749,606	$ 7,203,018	$ 7,635,471	$ 8,046,619

241/91 ELC Cash Flow
Reserve Balances

FISCAL YEAR	2048	2049	2050	2051	2052	2053	2054	2055	2056	2057
RESERVE DEPOSITS										
Operating Reserve *	$ 3,161,766	$ 3,161,766	$ 3,161,766	$ 3,161,766	$ 3,161,766	$ 3,161,766	$ -	$ -	$ -	$ -
Capital Replacement Reserve	$ 1,500,000	$ 1,500,000	$ 1,500,000	$ 1,500,000	$ 1,500,000	$ 1,500,000	$ 1,500,000	$ 1,500,000	$ 1,500,000	$ 1,500,000
TOTAL ANNUAL RESERVE DEPOSITS	$ 4,661,766	$ 4,661,766	$ 4,661,766	$ 4,661,766	$ 4,661,766	$ 4,661,766	$ 1,500,000	$ 1,500,000	$ 1,500,000	$ 1,500,000
RESERVE BALANCES										
Operating Reserve										
Beginning Balance	$ 62,308,597	$ 66,109,258	$ 69,947,925	$ 73,824,979	$ 77,740,803	$ 81,695,785	$ 85,690,317	$ 71,555,785	$ 67,083,817	$ 62,459,189
Deposit	$ 3,161,766	$ 3,161,766	$ 3,161,766	$ 3,161,766	$ 3,161,766	$ 3,161,766	$ -	$ -	$ -	$ -
Withdrawal *	$ -	$ -	$ -	$ -	$ -	$ -	$ (15,066,769)	$ (5,213,594)	$ (5,322,077)	$ (5,432,262)
Interest	$ 638,895	$ 676,901	$ 715,288	$ 754,059	$ 793,217	$ 832,767	$ 932,237	$ 741,626	$ 697,449	$ 651,753
Ending Balance	$ 66,109,258	$ 69,947,925	$ 73,824,979	$ 77,740,803	$ 81,695,785	$ 85,690,317	$ 71,555,785	$ 67,083,817	$ 62,459,189	$ 57,678,680
Capital Replacement Reserve										
Beginning Balance	$ 8,046,619	$ 8,436,110	$ 8,570,526	$ 8,913,277	$ 9,144,319	$ 9,440,214	$ 9,620,210	$ 5,867,725	$ 6,050,728	$ 6,208,502
Deposit	$ 1,500,000	$ 1,500,000	$ 1,500,000	$ 1,500,000	$ 1,500,000	$ 1,500,000	$ 1,500,000	$ 1,500,000	$ 1,500,000	$ 1,500,000
Withdrawal for Capital Expenses	$ (1,204,498)	$ (1,464,768)	$ (1,256,738)	$ (1,372,454)	$ (1,309,596)	$ (1,429,051)	$ (5,383,103)	$ (1,390,125)	$ (1,417,319)	$ (1,444,698)
Interest	$ 93,989	$ 99,185	$ 99,489	$ 103,495	$ 105,491	$ 109,047	$ 130,618	$ 73,128	$ 75,094	$ 76,809
Ending Balance	$ 8,436,110	$ 8,570,526	$ 8,913,277	$ 9,144,319	$ 9,440,214	$ 9,620,210	$ 5,867,725	$ 6,050,728	$ 6,208,502	$ 6,340,613

241/91 ELC Cash Flow
Reserve Balances

FISCAL YEAR	2058	2059	2060	2061	2062	2063	2064	2065	2066	2067
RESERVE DEPOSITS										
Operating Reserve *	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Capital Replacement Reserve	$ 1,500,000	$ 1,500,000	$ 1,500,000	$ 1,500,000	$ 1,500,000	$ 1,500,000	$ 1,500,000	$ 1,500,000	$ 1,500,000	$ 1,500,000
TOTAL ANNUAL RESERVE DEPOSITS	$ 1,500,000	$ 1,500,000	$ 1,500,000	$ 1,500,000	$ 1,500,000	$ 1,500,000	$ 1,500,000	$ 1,500,000	$ 1,500,000	$ 1,500,000
RESERVE BALANCES										
Operating Reserve										
Beginning Balance	$ 57,678,680	$ 52,737,008	$ 47,628,467	$ 42,347,703	$ 36,886,436	$ 31,241,077	$ 25,403,480	$ 19,367,179	$ 13,125,916	$ 6,673,190
Deposit	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Withdrawal *	$ (5,546,190)	$ (5,664,233)	$ (5,785,978)	$ (5,914,316)	$ (6,044,446)	$ (6,180,912)	$ (6,321,945)	$ (6,467,271)	$ (6,617,070)	$ (6,773,791)
Interest	$ 604,518	$ 555,691	$ 505,215	$ 453,049	$ 399,087	$ 343,315	$ 285,645	$ 226,008	$ 164,345	$ 100,601
Ending Balance	$ 52,737,008	$ 47,628,467	$ 42,347,703	$ 36,886,436	$ 31,241,077	$ 25,403,480	$ 19,367,179	$ 13,125,916	$ 6,673,190	$ (0)
Capital Replacement Reserve										
Beginning Balance	$ 6,340,613	$ 6,446,613	$ 6,246,676	$ 6,296,284	$ 6,212,440	$ 6,205,428	$ 6,060,564	$ 1,188,002	$ 1,044,666	$ 870,733
Deposit	$ 1,500,000	$ 1,500,000	$ 1,500,000	$ 1,500,000	$ 1,500,000	$ 1,500,000	$ 1,500,000	$ 1,500,000	$ 1,500,000	$ 1,500,000
Withdrawal for Capital Expenses	$ (1,472,267)	$ (1,780,808)	$ (1,527,998)	$ (1,662,620)	$ (1,584,560)	$ (1,723,033)	$ (6,473,033)	$ (1,671,072)	$ (1,700,381)	$ (1,729,939)
Interest	$ 78,267	$ 80,870	$ 77,607	$ 78,776	$ 77,547	$ 78,169	$ 100,471	$ 27,735	$ 26,449	$ 24,857
Ending Balance	$ 6,446,613	$ 6,246,676	$ 6,296,284	$ 6,212,440	$ 6,205,428	$ 6,060,564	$ 1,188,002	$ 1,044,666	$ 870,733	$ 665,652

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EXHIBIT x – Loan Amortization Schedule

The amortization schedule presented is an example that is based on the following:

- Current Traffic and Revenue, and operating expenditure/maintenance requirement forecasts
- Funds set aside by the F/ETCA for projects will reduce the outstanding debt balance
- Operating expenditure reserves of approximately $75 million (see Exhibit ix) are funded from 2030 to 2053 thus reducing funds available to pay debt during this time period (Usage of the reserves governed by section 16.02 of the Master agreement)
- The Operating expenditure reserves are not needed to fund operating expenses from 2054 to 2067 and as such are utilized annually (including interest) to pay the debt starting in 2054. (Usage of the reserves governed by section 16.02 of the Master agreement)
- The debt balance is paid by the Term.

Loan Amount	524,200,000	
Annual interest rate	2.5%	estimated rate
Loan period in years	38	

	Total Payment	Principal	Interest	Loan Reduction Equal to Annual Project Funding	Balance
1/15/2029	-	-	-	-	524,200,000
7/15/2029	-	-	-	770,803	531,073,780
1/15/2030	1,116,242	-	1,116,242	-	536,595,961
7/15/2030	1,116,242	-	1,116,242	5,250,000	536,937,168
1/15/2031	603	-	603	-	543,648,279
7/15/2031	603	-	603	5,250,000	545,193,279
1/15/2032	302,485	-	302,485	-	551,705,710
7/15/2032	302,485	-	302,485	5,250,000	553,049,546
1/15/2033	626,879	-	626,879	-	559,335,787
7/15/2033	626,879	-	626,879	5,250,000	560,450,605
1/15/2034	961,765	-	961,765	-	566,494,472
7/15/2034	961,765	-	961,765	5,250,000	567,363,888
1/15/2035	1,322,780	-	1,322,780	-	573,133,157
7/15/2035	1,322,780	-	1,322,780	5,250,000	573,724,542
1/15/2036	1,671,869	-	1,671,869	-	579,224,230
7/15/2036	1,671,869	-	1,671,869	5,250,000	579,542,664
1/15/2037	2,041,374	-	2,041,374	-	584,745,573
7/15/2037	2,041,374	-	2,041,374	5,250,000	584,763,519
1/15/2038	2,430,181	-	2,430,181	-	589,642,881
7/15/2038	2,430,181	-	2,430,181	5,250,000	589,333,236
1/15/2039	2,841,403	-	2,841,403	-	593,858,499
7/15/2039	2,841,403	-	2,841,403	5,250,000	593,190,328
1/15/2040	3,284,409	-	3,284,409	-	597,320,798
7/15/2040	3,284,409	-	3,284,409	5,250,000	596,252,898
1/15/2041	3,737,796	-	3,737,796	-	599,968,264
7/15/2041	3,737,796	-	3,737,796	5,250,000	598,480,072
1/15/2042	4,225,537	-	4,225,537	-	601,735,535
7/15/2042	4,225,537	-	4,225,537	5,250,000	599,781,692
1/15/2043	4,722,047	-	4,722,047	-	602,556,916
7/15/2043	4,722,047	-	4,722,047	5,250,000	600,116,831
1/15/2044	5,270,619	-	5,270,619	-	602,347,673
7/15/2044	5,270,619	-	5,270,619	5,250,000	599,356,400
1/15/2045	5,828,959	-	5,828,959	-	601,019,396
7/15/2045	5,828,959	-	5,828,959	5,250,000	597,453,179
1/15/2046	6,424,186	-	6,424,186	-	598,497,158
7/15/2046	6,424,186	-	6,424,186	5,250,000	594,304,187
1/15/2047	7,059,399	-	7,059,399	-	594,673,590
7/15/2047	7,059,399	-	7,059,399	5,250,000	589,797,610
1/15/2048	7,722,053	-	7,722,053	-	589,448,027
7/15/2048	7,722,053	-	7,722,053	5,250,000	583,844,075
1/15/2049	8,424,652	-	8,424,652	-	582,717,474
7/15/2049	8,424,652	-	8,424,652	5,250,000	576,326,790
1/15/2050	9,169,772	-	9,169,772	-	574,361,103
7/15/2050	9,169,772	-	9,169,772	5,250,000	567,120,844
1/15/2051	9,944,346	-	9,944,346	-	564,265,509
7/15/2051	9,944,346	-	9,944,346	5,250,000	556,124,481
1/15/2052	10,473,918	-	10,473,918	-	552,602,119
7/15/2052	10,473,918	-	10,473,918	5,250,000	543,785,728
1/15/2053	11,039,670	-	11,039,670	-	539,543,380
7/15/2053	11,039,670	-	11,039,670	5,250,000	529,998,002
1/15/2054	20,726,622	-	20,726,622	-	515,896,355
7/15/2054	20,726,622	-	20,726,622	5,250,000	496,368,438
1/15/2055	16,394,752	-	16,394,752	-	486,178,291
7/15/2055	16,394,752	-	16,394,752	5,250,000	470,610,768
1/15/2056	17,080,841	-	17,080,841	-	459,412,561

	Total Payment	Principal	Interest	Loan Reduction Equal to Annual Project Funding	Balance
7/15/2056	17,080,841	-	17,080,841	5,250,000	442,824,377
1/15/2057	17,775,666	-	17,775,666	-	430,584,016
7/15/2057	17,775,666	-	17,775,666	5,250,000	412,940,650
1/15/2058	18,494,295	-	18,494,295	-	399,608,113
7/15/2058	18,494,295	-	18,494,295	5,250,000	380,858,920
1/15/2059	19,239,495	4,799,035	14,440,459	-	366,380,162
7/15/2059	4,579,752	-	4,579,752	5,250,000	361,130,162
1/15/2060	34,667,627	30,153,500	4,514,127	-	330,976,661
7/15/2060	4,137,208	-	4,137,208	5,250,000	325,726,661
1/15/2061	36,691,904	32,620,321	4,071,583	-	293,106,341
7/15/2061	3,663,829	-	3,663,829	5,250,000	287,856,341
1/15/2062	38,800,564	35,202,360	3,598,204	-	252,653,981
7/15/2062	3,158,175	-	3,158,175	5,250,000	247,403,981
1/15/2063	40,992,755	37,900,205	3,092,550	-	209,503,775
7/15/2063	2,618,797	-	2,618,797	5,250,000	204,253,775
1/15/2064	43,290,537	40,737,365	2,553,172	-	163,516,411
7/15/2064	2,043,955	-	2,043,955	5,250,000	158,266,411
1/15/2065	45,679,934	43,701,604	1,978,330	-	114,564,807
7/15/2065	1,432,060	-	1,432,060	5,250,000	109,314,807
1/15/2066	48,161,355	46,794,920	1,366,435	-	62,519,886
7/15/2066	781,499	-	781,499	5,250,000	57,269,886
1/15/2067	50,755,904	50,040,030	715,874	-	7,229,856
7/15/2067	90,373	-	90,373	5,250,000	1,979,856
1/15/2068	2,004,605	1,979,856	24,748	-	-
	785,020,569	323,929,197	461,091,372	200,270,803	

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EXHIBIT xi – Traffic Operations Metrics and Key Operating Agreement Considerations

Traffic Operations Metrics

1. The operational goal of the Project is to utilize available 91 Express Lanes capacity, without negatively impacting 91 Express Lanes operations within established thresholds. Accordingly, as of the Effective Date, the Parties have established the following set of initial performance metrics and thresholds:

    a) Speeds to be maintained at 60 miles per hour or more in the 91 Express Lanes Critical Zones;

    b) Volumes not to exceed 1500 vehicles per hour on the Express Connector in either direction (north-to-east or west-to south);

    c) Volumes not to exceed 200 vehicles per hour at the eastbound County Line egress; and

    d) Queue length not to exceed 100 vehicle storage at the Toll Connector Meter.

Key Provisions of the East End Agreement

1. Through the governance process, the Parties agree to collaborate on monitoring conformance with performance metrics on the 241/91 EC and 91 Express Lanes and work together to optimize performance. Performance will be measured against specific metrics, and adjustments to the Dynamic Pricing Algorithm and the Progressive Demand Management system will be made as needed to accomplish this goal. If all of the conditions outlined below are met then Parties shall review and plan possible actions to be taken, including adjustments to the Progressive Demand Management system.

2. If the following conditions are met for both the NB-to-EB Express Connector and the East End (EB) direction, review is required:

    a) The NB-to-EB Express Connector conditions are any occurrences of more than 370 vehicles per hour during East End super-peak.

    b) The East End super-peak conditions are:

        i. Eastbound McKinley Toll Rate is 25% above baseline; and

        ii. Density across 2-lanes at the mainline toll gantry is 23 vehicles per mile per lane or greater; and

        iii. Average speed across multiple sensors is below 65 miles per hour or queues observed at any location between ingress (approximately at Green River) and terminus (approximately at I-15) is longer than 0.5 miles.

Progressive Demand Management

1. Progressive Demand Management strategies will be applied in the north-to-east direction of the 241/91 EC to effectively manage demand such that the expected performance metrics are achieved. Strategies to be applied include

    a) Dynamic pricing[1];

    b) Toll Connector Meter;

    c) HOV-only mode; and

    d) Bus/Registered Vanpool mode.

[1] In the west-to-south direction, the initial strategy will be dynamic pricing only. Additional PDM strategies may require additional infrastructure components not included in the initial construction of the Project.

DRAFT

EXHIBIT xii – F/ETCA Member Agencies

DRAFT

EXHIBIT xii – F/ETCA Member Cities

The Foothill/Eastern Transportation Corridor Agency, a California joint powers authority comprised of the following member agencies, as of the date first set forth in this Agreement:

- Anaheim
- Dana Point
- Irvine
- Lake Forest
- Mission Viejo
- Orange
- Rancho Santa Margarita
- San Juan Capistrano
- Santa Ana
- Tustin
- Yorba Linda
- County of Orange 3rd District
- County of Orange 4th District
- County of Orange 5th District

Draft July 09, 2025

F/ETCA AGREEMENT NO. ___

OCTA AGREEMENT NO. ___

RCTC AGREEMENT NO. 26-31-007-00

BY AND AMONG

FOOTHILL/EASTERN TRANSPORTATION CORRIDOR AGENCY,

AND

ORANGE COUNTY TRANSPORTATION AUTHORITY,

AND

RIVERSIDE COUNTY TRANSPORTATION COMMISSION,

FOR

THE OPERATION OF THE 241/91 EXPRESS CONNECTOR

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F/ETCA AGREEMENT NO. _____
OCTA AGREEMENT NO. _____
RCTC AGREEMENT NO. _____

BY AND AMONG

FOOTHILL/EASTERN TRANSPORTATION CORRIDOR AGENCY,

AND

ORANGE COUNTY TRANSPORTATION AUTHORITY,

AND

RIVERSIDE COUNTY TRANSPORTATION COMMISSION

This Agreement is effective this ___ day of _____, 2025 (the "Effective Date") by and among the Foothill/Eastern Transportation Corridor Agency, a California joint powers authority (hereinafter referred to as "F/ETCA"); the Orange County Transportation Authority, a public entity of the State of California (hereinafter referred to as "OCTA"); and the Riverside County Transportation Commission, a public entity of the State of California (hereinafter referred to as "RCTC"). F/ETCA, OCTA and RCTC may individually be referred to herein as a "Party" or collectively as the "Parties."

RECITALS

WHEREAS, F/ETCA constructed and operates a tolled highway facility on State Route (SR) 241 between Oso Parkway and SR-91 in Orange County; and

WHEREAS, OCTA operates a toll collection facility on SR-91 between SR-55 and the Orange County/Riverside County line ("OCTA 91 Express Lanes"); and

WHEREAS, RCTC operates a toll collection facility on SR-91 between Interstate 15 (I-15) and the Orange County/Riverside County Line, including express lane connectors between -91 Express Lanes and 15 Express Lanes ("RCTC 91 Express Lanes"); and

WHEREAS, the OCTA 91 Express Lanes and RCTC 91 Express Lanes are referred to, collectively, in this Agreement as the 91 Express Lanes; and

WHEREAS, OCTA and RCTC have entered into various agreements for joint implementation, operation, and maintenance of the 91 Express Lanes; and

WHEREAS, the Parties desire to develop, construct and operate a direct, tolled connector linking the northbound SR-241 toll road to the eastbound 91 Express Lanes and the westbound 91 Express Lanes to the southbound SR-241 toll road and related corridor improvements to improve throughput between Riverside and Orange Counties, relieve traffic congestion, enhance

connectivity between the two tolled systems, improve air quality along the corridor, and promote safety for the traveling public, in a manner that does not negatively impact or compromise the operations of SR-241 or the 91 Express Lanes; and

WHEREAS, the Parties desire to optimize system performance along the corridor between the SR-241 and the SR-91 and adjacent general purpose lanes; and

WHEREAS, the Parties desire to utilize available 91 Express Lanes capacities without negatively impacting the operations of the 91 Express Lanes beyond established capacity thresholds; and

WHEREAS, the State of California, Department of Transportation ("Caltrans") owns the right-of-way ("ROW") on which the Project will be constructed as well as the SR-241 Toll Road and 91 Express Lanes ROW and has agreed to cooperate with the Parties regarding the planning, design, construction and operation of the Project; and

WHEREAS, coordination among the Parties prior to and during planning, development, construction, and operation of the 241/91 EC is crucial to enable the integration of the toll collection and traffic management systems; mitigate potential impacts that construction and operations may have on the SR-241, 91 Express Lanes, and SR-91; and to ultimately provide for the seamless operation of the 241/91 EC into the SR-241 and the 91 Express Lanes in both Riverside and Orange Counties; and

WHEREAS, the Parties, along with Caltrans, entered into an agreement effective _____ that sets forth the roles and responsibilities of the Parties and Caltrans regarding the development, construction, operation and maintenance of the Project (the "Master Agreement"); and

WHEREAS, it is the intent of the Parties in entering into this Agreement to more fully establish the obligations of the Parties with respect to the operation and maintenance of the Project toll systems.

WHEREAS, F/ETCA authorized this Agreement on ___.

WHEREAS, OCTA authorized this Agreement on ___.

WHEREAS, RCTC authorized this Agreement on ___.

NOW, THEREFORE, it is mutually understood and agreed by the Parties as follows:

AGREEMENT

ARTICLE I
DEFINITIONS

The following terms as used in this Agreement are capitalized and shall have the meaning as provided herein:

"**91 Express Lanes**" means the toll collection facility located on SR-91 extending between SR-55 to the west and I-15 to the east and the express connectors from the 91 Express Lanes to the 15 Express Lanes. The 91 Express Lanes consist of the OCTA 91 Express Lanes and the RCTC 91 Express Lanes, collectively. "91 Express Lanes" may also refer to OCTA and RCTC acting collectively as the 91 Express Lanes.

"**Accessory Lanes**" means (a) the lane in the westbound direction of the 91 Express Lanes, beginning at the opening of the leftmost paved approach lane to the EC, and extending approximately 4950 feet to a diverge point; and (b) the lane in the eastbound direction of the 91 Express Lanes, beginning at the EC touch down point for the leftmost paved lane and extending approximately 3910 feet to the end of the merge point. For the avoidance of doubt, the Accessory Lanes do not include the inside shoulder or the roadside infrastructure.

"**Alternative Dispute Resolution**" has the meaning set forth in Section 19.01(c).

"**Bus/Registered Vanpool**" is a mode of 241/91 EC operation whereby only buses and vanpools registered with F/ETCA are permitted to use the 241/91 EC.

"**Caltrans**" means the State of California Department of Transportation.

"**CHP**" means the California Highway Patrol.

"**Claims**" has the meaning set forth in Article XVII.

"**Confidential Data**" has the meaning set forth in Article IX.

"**Critical Zones**" means the portion of the 91 Express Lanes where traffic from both the 91 Express Lanes and the 241/91 EC share the same roadway, and is the focus of density measurement for the purpose of managing Dynamic Pricing and Progressive Demand Management strategy. In the eastbound direction, this zone extends from the touchdown point of the 241/91 EC to the Orange County and Riverside County county line exit. In the westbound direction, it spans from the county line entrance to the location where the connector diverges from the mainline roadway.

"**Cure Activities**" has the meaning set forth in Section 19.03(a).

"**Cure Schedule**" has the meaning set forth in Section 19.03(a).

"**Disclosing Party**" has the meaning set forth in Article IX.

"**Dispute**" has the meaning set forth in Section 19.01.

"**Dynamic Pricing**" means the setting of a toll price in real-time based on level of traffic congestion and other factors.

"**Dynamic Pricing Algorithm**" means a technological capability of the ETC System that calculates toll pricing in real-time within set parameters, based on real-time inputs/factors such as traffic demand, flow rates, speeds, density, with a goal to achieve a particular objective such as free-flow conditions.

"Dynamic Pricing Input Values" shall mean the input factors to the Dynamic Pricing Algorithm.

"**EC**" means the Express Connector.

"**Emergency**" means a circumstance that poses an immediate and grave threat to life or safety, or a serious environmental hazard that cannot be abated except by closure of the 241/91 EC. Closures of or traffic on the general purpose lanes that cause an inconvenience to the public shall not be considered, on their own, an emergency, as used herein.

"**ETC**" means the electronic toll collection.

"**ETC Data**" means all data generated by or accumulated in connection with the operation of the ETC System, including but not limited to traffic volumes, and violation data.

"**ETC Equipment**" means automated vehicle identification systems, video, or other surveillance equipment and enforcement equipment (for Toll Connector Meter, occupancy detection, HOV-Only and Bus/Registered Vanpool enforcement), communications equipment and all other hardware necessary for ETC.

"**ETC Facilities**" means the signs, gantries, and utility connections related to the ETC System.

"**ETC System**" means the ETC Equipment and software, which monitors, controls, or executes the ETC Equipment.

"**FasTrak ™**" means the trademarked electronic toll system that allows motorists to prepay to use any toll road, bridge, or express lane in California.

"**F/ETCA**" means the Foothill/Eastern Transportation Corridor Agency.

"**HOV**" means a High Occupancy Vehicle.

"**HOV ONLY**" means a mode of 241/91 EC operation whereby only vehicles with a minimum number of occupants, as self-declared by their switchable transponder, are permitted to use the 241/91 EC.

"**Incident Management Plan**" means a plan for identifying and responding to impacts to SR-241, SR-91, or the 241/91 EC that have the potential to impact operation of the 241/91 EC and/or the 91 Express Lanes as a result of an incident on the 241/91 EC.

"**Indemnified Parties**" has the meaning set forth in Article XVII.

"**Indemnifying Party**" has the meaning set forth in Article XVII.

"**OCTA**" means the Orange County Transportation Authority.

"**OCTA 91 Express Lanes**" has the meaning set forth in the Recitals.

"**Progressive Demand Management**" means operational control strategies that will be applied to the 241/91 EC to effectively manage demand such that the expected performance metrics are

achieved. Strategies to be applied are dynamic pricing, toll collector meter, HOV-only mode, and Bus/Registered Vanpool mode. In the west-to-south direction, the initial strategy will be dynamic pricing only.

"**Project**" or "**241/91 EC**" has the meaning set forth in Article III.

"**RCTC**" means the Riverside County Transportation Commission.

"**RCTC 91 Express Lanes**" has the meaning set forth in the Recitals.

"**Receiving Party**" has the meaning set forth in Article IX.

"**Revenues**" means toll revenues received from the Project, violation revenues from the Project, and interest earnings on balances from Project bank accounts.

"**Term**" has the meaning set forth in Article XIV.

"**Toll Connector Meter**" (or "TCM") means a traffic control device controlled by the ETC System that regulates the flow of traffic from the 241 EC to the 91 Express Lanes in the north to east direction.

"**Toll Facility**" means the elements comprising the 241/91 EC required for tolled operation, as generally depicted in Exhibit A. Any updates to the Toll Facility, if approved, in writing, by each agency's respective authorized designee, as described in Article XXV, shall be automatically incorporated into Exhibit A of this Agreement without formal amendment.

"**Tolling Infrastructure**" means the ETC Equipment, ETC Facilities, Toll Connector Meter, and all appurtenances necessary for the operation of the 241/91 EC toll collection facility.

"**Traffic Operations Center**" means the facility located in Anaheim, California operated by OCTA and RCTC for the purposes of monitoring traffic and roadway facilities and services on the 91 Express Lanes.

"**Traffic Operations Metrics**" means a set of metrics agreed to by the Parties as a means to measure the performance of the 241/91 EC and 91 Express Lanes traffic conditions. Section 7.03(d) includes the individual metrics. The Dynamic Pricing Algorithm, Progressive Demand Management System and operating policies of the 241/91 EC will be adjusted to meet these Traffic Operations Metrics.

ARTICLE II
PURPOSE

The purpose of this Agreement is to define the responsibilities and obligations of the Parties with regard to the operation, maintenance, and approach to tolling of the 241/91 EC.

ARTICLE III
PROJECT DESCRIPTION

The project shall include the planning, design, construction, operation, and maintenance of the direct, tolled connector linking the northbound SR-241 toll road to the eastbound 91 Express Lanes and the westbound 91 Express Lanes to the southbound SR-241 toll road and related corridor improvements, consistent with the Build Alternative described in the Supplemental Final EIR/EIS and any changes that result from any environmental revalidations or informed by the traffic analysis agreement by the Parties ("241/91 EC" or the "Project").

ARTICLE IV
COMPONENTS OF AGREEMENT AND INTERPRETATION

Section 4.01 **Entire Agreement; Severability; Interpretation of Terms**. This Agreement and Exhibits hereto constitute the expression of the Parties' intent and understanding with respect to the terms discussed herein and supersede all prior representations, understandings, and communications relating to the terms discussed herein. The invalidity in whole or in part of any term or condition of this Agreement shall not affect the validity of other terms or conditions. Terms capitalized herein shall, unless otherwise defined herein, have the same meaning as set forth in Article I, Definitions. Where this Agreement uses the term "including" it shall mean including but not limited to, unless otherwise specifically indicated.

Section 4.02 **Agreement Interpretation**.

(a) This Agreement and each of the exhibits are all an essential part of the Parties' agreement and should be interpreted in a manner that harmonizes their provisions. However, if an actual conflict exists, the following descending order of precedence shall apply:

(i) Agreement Amendments adopted in accordance with this Agreement;

(ii) The terms of this Agreement, excluding any exhibits;

(iii) All Exhibits attached hereto;

Section 4.03 **No Waiver**. A Party's failure to insist in any one or more instances upon any other Party's performance of any terms or conditions of this Agreement shall not be construed as a waiver or relinquishment of that Party's right to such performance by the defaulting Party or to future performance of such terms or conditions, and the defaulting Party's obligation in respect thereto shall continue in full force and effect. This Agreement may be amended or modified only by mutual written agreement of the Parties.

ARTICLE V
RELATIONSHIP TO OTHER AGREEMENTS

Unless otherwise provided for in this Agreement, this Agreement is separate from and does not directly, or by implication, modify or replace any other cooperative agreement or memorandum of understanding among the Parties regarding the Project or any of the adjacent or connected

facilities described herein. If there is a conflict between this Agreement and any prior understanding related to the operation and maintenance of the Project, the terms of this Agreement shall prevail. [Notwithstanding, if there is a conflict between this Agreement and the Master Agreement, then the Master Agreement prevails.]

ARTICLE VI
COOPERATION AMONG PARTIES

Each Party hereto will cooperate with the other Parties and, among other actions and consistent with their role and appropriate exercise of discretion, will promptly consider, execute, and deliver such additional reviews, approvals, agreements, assignments, endorsements, and other documents as the other Parties hereto may reasonably request to carry out the full intents and purposes of this Agreement.

ARTICLE VII
OPERATING GUIDELINES

Section 7.01 **Toll Facilities**.

(a) F/ETCA will procure and install the ETC System and ETC Facilities necessary to operate the Project. The location of the ETC System and Facilities will be as listed in Exhibit A and diagrammed in Exhibit B.

(b) All Parties will provide input into the design of the signage, traffic measurement/monitoring locations, Dynamic Pricing Algorithm, Progressive Demand Management configuration, and considerations for ETC Data. OCTA and RCTC will have final approval of the Dynamic Pricing Algorithm and Progressive Demand Management configuration.

Section 7.02 **Operating Rules**.

(a) F/ETCA will operate and maintain the 241/91 EC 24-hours a day, 7 days a week, including holidays.

(b) F/ETCA will be responsible for processing toll and violation transactions, ensuring enforcement services are provided (see Section 7.06) and establishing customer accounts, providing customer service and collecting the associated revenue.

(c) A valid transponder will be required to use the 241/91 EC. A customer who uses the 241/91 EC without a valid transponder or FasTrak account will be issued a toll violation evasion notice and are not eligible for F/ETCA's five (5) day grace toll payment program.

Section 7.03 **Tolling and Demand Management Approach**.

(a) A Progressive Demand Management strategy will be utilized on the 241/91 EC to control traffic density on the connector and into the eastbound and westbound Critical Zones. The strategy incorporates multiple levels of connector control that are described in Exhibit D.

(b) Dynamic Pricing with no maximum toll rate and Progressive Demand Management will be used on the 241/91 EC to preserve congestion-free conditions on the 241/91 EC and the 91 Express Lanes. Exhibit D "Progressive Demand Management" and Exhibit E "Policies and Operating Rules" provide further detail on these tools and their use.

(c) 91 Express Lanes operating policies shall govern where there is a conflict with other F/ETCA's operating policies.

(d) The following Traffic Operations Metrics have been established to ensure the 91 Express Lanes is not negatively impacted by the 241/91 EC:

(i) maintaining minimum speeds of 60 mph in the 91 Express Lanes eastbound and westbound Critical Zones,

(ii) no more than 1500 vehicles per hour on the 241/91 EC,

(iii) no more than 200 vehicles per hour egressing from the eastbound Critical Zone, and

(iv) no more than 100 vehicles in queue on the 241/91 EC.

(e) For the 91 Express Lanes, it is a goal to utilize available capacity without negatively impacting 91 Express Lanes operations and toll rates beyond established capacity thresholds.

(f) The Dynamic Pricing Algorithm and Progressive Demand Management system shall be developed in partnership with the Parties. F/ETCA shall operate and control the Dynamic Pricing Algorithm and Progressive Demand Management system, while OCTA and RCTC shall have final approval for both.

(g) The Parties shall work jointly to calibrate the Dynamic Pricing Algorithm and Progressive Demand Management system and related policies. The governance process as described in Exhibit F shall guide any changes to the Dynamic Pricing Algorithm and Progressive Demand Management system. F/ETCA shall have the right to propose changes, and OCTA and RCTC have final approval for any proposed changes and shall reasonably assess a request and respond to F/ETCA in accordance with Exhibit F.

Section 7.04 **Toll Rate Setting.**

F/ETCA will be responsible for adoption and implementation of a toll rate policy for the 241/91 EC, consistent with Exhibit E, Attachment 1.

Section 7.05 **Traffic Operations Metrics Monitoring and Governance.**

(a) The Parties agree to collaborate on monitoring conformance with performance metrics on the 241/91 EC and 91 Express Lanes and work together to optimize performance. Performance will be measured against the Traffic Operation Metrics and adjustments to the Dynamic Pricing Algorithm and Progressive Demand Management system will be made as needed

to accomplish this goal. A Traffic Operations Metrics Monitoring and Governance Plan is described in Exhibit F.

(b) Upon commencement of live 241/91 EC operations, operational and performance data will be periodically reviewed by the Parties in accordance with Exhibit F. The frequency of review may be adjusted upon agreement of the Parties.

(c) F/ETCA shall make available operational and performance data for the 241/91 EC, while OCTA and RCTC will make available data for their respective portions of the 91 Express Lanes. The Parties shall agree to the format and frequency of the required data and to facilitate the necessary reviews.

(d) F/ETCA shall reimburse OCTA and RCTC for contractor, consultant and staff costs related to the production of data, analyzing of data and management of the 241/91 EC operation through the term of this Agreement. F/ETCA agrees to pay invoices within 30 days of receipt.

Section 7.06 **Enforcement Approach.**

(a) In order to maximize the effectiveness of the Progressive Demand Management strategy described in Section 7.03, F/ETCA agrees to pursue implementation of a hybrid approach to enforcement, wherein traditional enforcement activities by California Highway Patrol (CHP) are augmented by the use of automated technologies that create additional deterrents.

(b) **California Highway Patrol**. F/ETCA shall be responsible for entering into agreements with California Highway Patrol (CHP) for 241/91 EC related enforcement. The Parties will agree to the hours and level of enforcement required to ensure proper enforcement of the traffic control meter and occupancy policies.

(c) **Toll Connector Meter**. F/ETCA shall confirm the technical feasibility of augmenting the ETC System as needed to detect motorists who proceed past the limit line when the Toll Connector Meter displays a red signal. If technical feasibility is confirmed, F/ETCA will implement the ETC System with this augmentation so that motorists who proceed past a red signal will be charged a higher toll. If technical feasibility is not confirmed, F/ETCA will identify the amount of additional CHP enforcement that will be needed to meet the performance metrics identified in Section 7.03(d).

(d) **HOV-Occupancy**. F/ETCA shall implement an automated system to detect HOV violators whose declared occupancy exceeds actual occupancy. Non-compliant vehicles will be charged a higher toll.

(e) **HOV-Only Mode**. F/ETCA shall augment the ETC System as needed to detect vehicles that proceed onto the 241/91 EC while the 241/91 EC is in HOV-only mode and do not meet the occupancy requirement. F/ETCA will implement the ETC System with this augmentation so that motorists who proceed onto the 241-91 EC while it is in HOV- only mode will be charged a higher toll.

(f) **Bus/Registered Vanpool Mode**. F/ETCA shall augment the ETC System as needed to detect ineligible vehicles that proceed onto the 241/91 EC while the 241/91 EC is in

Bus/Registered Vanpool mode. F/ETCA will implement the ETC System with this augmentation so that ineligible motorists who proceed onto the 241-91 EC while it is in Bus/Registered Vanpool will be charged a higher toll.

Section 7.07 **Emergencies.**

(a) The Parties agree to share resources in cases of Emergencies in the area of the 241/91 EC, and to provide mutual aid as needed. The parties agree to coordinate the suspension of tolling when the safety of the motoring public is at risk and the Parties' respective policies allow for such suspension.

(b) Closures due to Emergencies shall be limited to the shortest reasonable time to address the emergency situation and each Party shall act with all due diligence to address such emergency.

Section 7.08 **Incident Management.**

(a) The Parties agree to cooperate on the timely, safe, and effective management and response to vehicle collisions and other incidents occurring on the 241/91 EC or affecting the Tolling Infrastructure. Roles, responsibilities, and procedures will be documented in an Incident Management Plan that will be agreed to by the Parties.

(b) F/ETCA shall be responsible for entering into an agreement for freeway service patrol (FSP) services for the 241/91 EC, which may be accomplished by F/ETCA being added to OCTA's FSP agreement with its FSP provider.

Section 7.09 **Additional Operational Agreements**

The Parties agree to meet and confer and enter into additional operating agreements related to the operational support of the 241/91 EC. Operating agreements and a high-level scope of work identified and agreed upon as needed are as follows. Additional operating agreements other than those identified in this section may be necessary, which the Parties will agree to add. F/ETCA agrees to reimburse OCTA and RCTC for consultant and staff costs related to the management of such operating agreements.

(a) Traffic Operations Center

(i) The Parties agree to enter into a Traffic Operations Center Services Agreement whereby the 91 Express Lanes Traffic Operations Center observes the 241/91 EC traffic and coordinates incident response and closures, monitors the 241/91 EC variable signage for accuracy of information, and retains logs of incidents and closures and the 91 Express Lanes Traffic Operations Center System is upgraded to include the 241/91 EC data.

(ii) F/ETCA agrees that these services will be performed by the contractor(s) that performs the services for the 91 Express Lanes and that the scope of services, performance measures and reporting requirements will be consistent with those

in the existing OCTA/RCTC contract(s). Any damages paid by the contractor directly related to the 241/91 EC will be remitted to F/ECTA.

(iii) F/ETCA agrees that OCTA and RCTC will negotiate the cost of these services with their existing and future contractor and provide F/ETCA with a proposal for their review and comment.

(iv) F/ETCA agrees to reimburse OCTA and RCTC when invoiced for all one-time costs incurred to incorporate the 241/91 EC into the Traffic Operations Center. Costs are anticipated to include the configuration of the 241/91 ELC signs, cameras, and other hardware costs to manage these components. These costs include, but are not limited to, updating training, hardware purchases, and software changes. F/ETCA agrees to pay invoices within 30 days of receipt.

(v) F/ETCA agrees to reimburse OCTA and RCTC when invoiced for any ongoing incremental costs due to the inclusion of the 241/91 EC. Incremental costs are expected to manage the additional responsibilities and incorporate the additional cameras and data feeds from the 241/91 EC. If the existing contractor(s) are replaced at any time in the future, F/ETCA agrees to pay additional costs when invoiced for the inclusion of the 241/91 EC in the new contracts. The methodology for calculating additional costs will be provided by the contractor(s) or agreed upon by the Parties. F/ETCA agrees to pay invoices within 30 days of receipt.

(vi) F/ETCA agrees that OCTA and RCTC will manage the TOC services and that any requests or direction to the contractors should be made through OCTA and RCTC.

(b) Freeway Service Patrol

(i) OCTA and F/ETCA agree to enter into an agreement whereby Freeway Service Patrol is provided for the 241/91 ELC under OCTA Freeway Service Patrol Contracts.

(ii) OCTA agrees to incorporate the Freeway Service Patrol for the 241/91 EC in its current and future 91 Express Lanes Freeway Service Patrol Contracts.

(iii) F/ETCA agrees that the Freeway Service Patrol will be overseen and managed by the OCTA and California Highway Patrol and that all FSP service will be deployed using standard FSP program methodologies and operating guidelines.

(iv) OCTA, F/ETCA, and California Highway Patrol program managers will work together to determine the best option for expanding the OCTA Freeway Services Patrol to include the 241/91 EC. OCTA and California Highway Patrol reserve the right to modify FSP deployment plans as necessary to ensure adequate coverage.

(v) F/ETCA agrees to reimburse OCTA for the hourly cost of FSP tow trucks added to service the 241/91 EC as well as ongoing expenses related to the expanded services for the 241/91 EC. Ongoing expenses include the procurement, installation, and

maintenance of vehicle tracking, data collection, and communications hardware, as well as associated monthly and periodic costs (e.g., cellular data, voice services, and equipment repairs). All expenses will be billed at OCTA-contracted or approved rates for equipment and services.

(vi) F/ETCA agrees to pay OCTA invoices for FSP services within 30 days of receipt.

(c) Shared Costs Reimbursement

(i) OCTA agrees to allow F/ETCA to utilize a portion of the OCTA 91 westbound price sign located west of Green River Road to display the 241/91 EC price. OCTA shall be responsible for providing maintenance and electrical power to the sign. F/ETCA shall reimburse OCTA for 50% of the cost of these services.

(ii) OCTA will make its best efforts to minimize any malfunctions and outages by performing routine maintenance and taking appropriate action to conduct repairs. All maintenance and outages for the 91 westbound price sign will be communicated to F/ETCA promptly.

(iii) F/ETCA agrees that OCTA is not responsible for any damages or lost toll revenue due to the 91 westbound price sign being unavailable or malfunctioning.

(iv)

F/ETCA shall be responsible for the OCTA 91 westbound price sign controller and any fiber feeds related to the 241/91 EC.

(v) OCTA agrees to maintain a contractor to provide oversight of the Express Lanes roadside services. F/ETCA agrees to reimburse OCTA for any costs associated with the oversight of the 241/91 ELC incurred by the roadside contractor.

(vi) F/ETCA agrees to reimburse OCTA for half of the cost to replace the shared westbound changeable message sign. The sign will be replaced by OCTA at its discretion along with the other 91 Express Lanes signs.

(vii) The methodology for calculating additional costs related to the 241/91 EC will be provided by the contractor(s) or agreed upon by the Parties.

(viii) F/ETCA agrees to reimburse OCTA for any shared maintenance and incremental infrastructure costs as defined in this Section 7.09 and in the Master Agreement [Section 7.01(a)(xx)].

Section 7.10 **Facility Maintenance, Improvements, and Projects.**

(a) F/ETCA will collaborate with Caltrans on maintaining the 241/91 EC roadway and will coordinate maintenance activities with OCTA and RCTC as needed.

(b) F/ETCA will maintain ETC Equipment and ETC Facilities for the Project in a state of good repair and will coordinate with OCTA and RCTC as needed.

(c) All Toll Facility related maintenance activities and responsibilities are described in the 241/91 Express Connector Maintenance Plan in Exhibit H.

(d) Each Party will perform maintenance related activities and future improvements in a manner which minimizes disruption to the toll facilities. The Parties agree to follow the advance communication processes outlined in Exhibit H.

(e) F/ETCA agrees to adhere to the permitted closure windows provided in Exhibit H.

(f) In all instances of F/ETCA requested and approved closures, F/ETCA agrees to reimburse OCTA and RCTC for lost toll revenue related to closures that require a closure of the 91 Express Lanes or otherwise reduce the capacity of the 91 Express Lanes. OCTA and RCTC will not reimburse F/ETCA for lost toll revenue related to closures of the 91 Express Lanes which impact the 241/91 EC. OCTA and RCTC will provide F/ETCA with toll revenue amounts for reimbursement based on historical gross potential toll revenue for the same day and time period, as described in Exhibit H.

Section 7.11 **Customer Messaging.**

(a) The Parties agree to coordinate on-road messages, customer communication and marketing messages to ensure clear and consistent messaging to motorists.

(b) **Signage**. F/ETCA shall provide and maintain on-road signage on northbound SR241 approaching the 241/91 EC that clearly indicates availability and pricing for the northbound to eastbound 241/91 EC. OCTA agrees to share its existing on-road Changeable Messaging Sign (CMS) west of Green River Road with F/ETCA for purposes of displaying availability and pricing information for the westbound to southbound 241/91 EC. Any costs necessary to modify and maintain the existing CMS to serve that purpose will be paid by F/ETCA.

(c) **Website**. F/ETCA will provide information on its website regarding the 241/91 EC and contact information for resolving any matters related to the 241/91 EC. F/ETCA will provide RCTC and OCTA with agreed upon web ready information for inclusion on the 91 Express Lanes website.

(d) **Marketing and Public Education**. F/ETCA shall be responsible for the marketing and public education and will coordinate marketing content and activities with OCTA and RCTC. Six months prior to commencement of revenue service, F/ETCA will draft a Marketing and Public Education plan that includes information such as:

- How the 241/91 EC works, with details on Progressive Demand Management
- How to use the express connector during super-peak periods (HOV only and Bus/Registered Vanpool modes)
- The difference between HOV only access versus the HOV discount
- What happens if customers do not comply with the different progressive

demand management modes, including the toll connector meter, HOV only mode, and Bus/Registered Vanpool mode.

- FAQs about 241/91 EC Operations and why the 241/91 EC is restricted to HOV/carpools only during the super-peak

Materials shall be provided for review and comment by OCTA and RCTC, and F/ETCA shall resolve comments in good faith and in a timely manner. .F/ETCA shall provide 30 days advance notice of marketing efforts so that OCTA and RCTC can prepare their customer service staff to address any inquiries related to the marketing and public education campaign.

(e) **91 Express Lanes Customer Service Impact**. OCTA and RCTC shall provide F/ETCA with aggregated de-identified data regarding customer inquiries and issues related to the 241/91 EC in compliance with SHC § 31490. F/ETCA will evaluate such data and prepare additional public education to address any issues or confusion due to the 241/91 EC. F/ETCA agrees to compensate the 91 Express Lanes for documented increases in effort within the 91 Express Lanes customer service center due to the 241/91 EC up to one year following the opening of the 241/91 EC.

ARTICLE VIII
PAYMENT AGREEMENT

The parties will enter into a reciprocal agreement whereby the mechanism and approval for payment of costs attributable to this Agreement and complimentary agreements is approved by each of the Parties. In January of each year the Parties will establish the annual budget for reimbursement under this Agreement.

ARTICLE IX
CONFIDENTIAL INFORMATION

The Parties understand and agree that certain information and data related to each Party's respective toll facilities (i.e., OCTA 91 Express Lanes, RCTA 91 Express Lanes, and SR-241), including data listed in Exhibit H (hereinafter referred to as "Confidential Data"), may be shared with the other Parties for purposes consistent with this Agreement. A Party that receives Confidential Data related to another Party's toll facilities (the "Receiving Party") agrees to use said Confidential Data only for purposes specified in this Agreement, which may include sharing Confidential Data with employees, agents, and/or consultants who require access for a purpose specified in this Agreement and who agree not to use or disclose the information other than for such purpose.

If a Receiving Party receives a request to disclose another party's ("Disclosing Party") Confidential Data, pursuant to the California Public Records Act (CPRA) or otherwise, the Receiving Party shall promptly notify the Disclosing Party within five (5) days of receiving the request. If the Disclosing Party promptly notifies the Receiving Party of its intent to seek legal relief to protect its Confidential Data from disclosure, then the Receiving Party will afford the Disclosing Party a reasonable opportunity to seek appropriate legal relief, at the Disclosing Party's sole cost and expense, to protect its Confidential Data, unless the Receiving Party believes, in good

faith, that it must disclose the Confidential Data to comply with the CPRA or applicable law.

Notwithstanding the above, the Parties agree to comply with Streets and Highways Code Section 31490 as it relates to the disclosure of personally identifiable information.

ARTICLE X
WRITTEN AMENDMENTS

Any changes in the character, agreement, terms and/or responsibilities of the Parties must be enacted through an amendment in writing and executed by the Parties.

ARTICLE XI
OWNERSHIP OF DOCUMENTS, MAINTENANCE OF, AND ACCESS TO RECORDS

Each Party shall maintain records associated with its responsibilities under this Agreement. Upon reasonable notice, each Party shall permit the authorized representatives of the other Parties and the State of California such access to the Party's accounting books, records, payroll documents and facilities of the Party which are directly pertinent to this Agreement for the purposes of examining, auditing and inspecting them in connection with the Party's performance of this Agreement. The Parties shall make available the books and records of their subcontractors and consultants which are directly pertinent to this Agreement for audit and inspection upon the request of another Party. Each Party shall maintain such books, records, data, and documents in accordance with generally accepted accounting principles and shall clearly identify and make such items readily accessible to such parties during the Party's performance hereunder and for a period of four (4) years from their date of creation, except in the event of litigation or settlement of claims arising from the performance of this Agreement, in which case the Party agrees to maintain same until the disposal of all such litigation, appeals, claims, or other exceptions related thereto. Each Party shall permit any of the foregoing parties to reproduce documents by any means whatsoever or to copy excerpts and transcriptions as reasonably necessary. Each Party agrees to include these requirements in all subcontracts at any tier.

ARTICLE XII
FINANCIAL ACCOUNTING, REPORTING, AND AUDITING

F/ETCA shall have overall responsibility for financial accounting, reporting, and auditing of all Project activities. F/ETCA shall maintain accounting records such that financial information for the 241/91 EC is identifiable separately from other F/ETCA facilities. OCTA and RCTC shall have responsibility for financial accounting, reporting, and auditing as may be required under separate agreement(s) with F/ETCA.

ARTICLE XIII
COMMUNICATIONS AND NOTICES

All Notices hereunder and communications regarding the interpretation of the terms of this Agreement, or changes thereto, shall be effected by delivery of said Notices (a) in person or by courier; (b) by depositing said Notices in the U.S. mail, registered or certified mail, returned receipt requested, postage prepaid; or (c) sent by electronic mail, provided that the recipient of the electronic Notice acknowledges receipt of such transmission by electronic mail. Personal or

courier delivery shall be deemed given upon actual delivery to the intended recipient at the designated address. Mailed Notices shall be deemed given upon the date of the actual receipt as evidenced by the return receipt. Electronic mail Notice shall be deemed given upon the date the email is acknowledged as received by the recipient; provided that if acknowledgement is received after 5 p.m., Pacific Time, delivery shall be deemed received as of 8 a.m., Pacific Time, the following business day. Any Notice shall be sent, transmitted, or delivered, as applicable, to the applicable Party or Parties at the following addresses:

To: Orange County Transportation Authority 550 South Main Street P.O. Box 14184 Orange, CA 92863-1584 ATTENTION: Kirk Avila, General Manager of Express Lanes Programs Phone: (714) 560-5674 Email: Kavila@octa.net	To: Riverside County Transportation Commission 4080 Lemon Street P.O. Box 12008 Riverside, CA 92502 ATTENTION: David Thomas, Toll Project Delivery Director Phone: (951) 787-7141 Email: dthomas@rctc.org	To: Foothill/Eastern Transportation Corridor Agency 125 Pacifica Irvine, CA 92618 ATTENTION: Stephanie Blanco, Chief Capital Programs Officer Phone: (949) 754-3454 Email: sblanco@thetollroads.com

ARTICLE XIV
TERM OF AGREEMENT

The term of this Agreement ("Term") shall begin on the Effective Date and end upon termination of the Master Agreement.

ARTICLE XV
ASSIGNMENT

The provisions of this Agreement shall be binding upon and inure to the benefit of the Parties and their successors and permitted assigns; provided, that no Party may assign, delegate or otherwise transfer any of its rights or obligations under this Agreement without prior written consent of all non-assigning parties. Any purported assignment in violation of this Article XV shall be treated as invalid from the outset.

In the event the authority of F/ETCA to operate the SR 241 toll road or the authority of OCTA or RCTC to operate the 91 Express Lanes expires or the entity authorized to operate such toll roads changes, the other Parties will amend this Agreement to reflect such changes. [Tolling, as described in Article XVIII, shall continue until the end of the Term; provided that if F/ETCA's authority to operate the SR 241 toll road expires and is not extended prior to the end of the Term, then the parties will meet and confer [no later than five (5) years] before such expiration to

designate a party to be responsible for the continued tolling. Any resulting agreement shall ensure the continued operation of the 241/91 EC in accordance with the terms of this Agreement.]

ARTICLE XVI
CONFLICTS OF INTEREST

Each Party agrees to avoid organizational conflicts of interest. An organizational conflict of interest means that due to other activities, relationships, or contracts, the Party is unable, or potentially unable, to render impartial assistance or advice to another Party(ies) or the Party's objectivity in performing the work required herein is or might be otherwise impaired. Operation of the 91 Express Lanes, or F/ETCA tolled facilities, or operation or construction of any other project specifically identified in this Agreement, shall not be considered an organizational conflict of interest under this section.

ARTICLE XVII
INDEMNIFICATION

Section 17.01 **General Indemnification**. To the fullest extent permitted by law, each Party (the "Indemnifying Party") shall defend (at the Indemnifying Party's sole cost and expense with legal counsel reasonably acceptable to the other Parties), indemnify, protect, and hold harmless the other Parties, their officers, directors, employees, and agents (collectively the "Indemnified Parties"), from and against any and all liabilities, actions, suits, claims, demands, losses, costs, judgments, arbitration awards, settlements, damages, demands, orders, penalties, and expenses, including legal costs and attorney fees (collectively, the "Claims"), including Claims arising from injuries to or death of persons (Indemnifying Party's employees included), for damage to property, including inverse condemnation or for property owned by any of the Indemnified Parties arising from any violation of federal, state, or local law or ordinance or the negligent acts, omissions, or willful misconduct of the Indemnifying Party, its officers, directors, employees, agents, consultants, or contractors arising out of the performance of this Agreement. Any dispute relating to this Article XVII or concerning any indemnification obligation described in this Agreement shall be subject to the dispute resolution process set forth in Section 19.01 of this Agreement.

Section 17.02 **Additional Indemnification**. In addition to the above, F/ETCA agrees to indemnify, defend, and hold harmless OCTA and RCTC from any Claims arising out of or related to F/ETCA's obligations under this Agreement, including operations and maintenance of the 241/91 EC. This includes Claims made by customers while traveling on the 241/91 EC or the Accessory Lanes within the 91 Express Lanes; provided that any such customer Claims arising out of OCTA's or RCTC's failure to maintain their respective portions of the 91 Express Lanes shall be the responsibility of OCTA or RCTC, as applicable, in accordance with existing agreements. F/ETCA shall promptly respond to all Claims related to F/ETCA's failure to properly maintain the 241/91 Express Connector Toll Assets (as identified in Exhibit B) according to its procedures and resolve all liabilities related to such Claims.

ARTICLE XVIII
RESOLUTION OF CLAIMS WHEN ONE OR MORE PARTY ARE NAMED AS JOINT DEFENDANTS

If one or more Parties are named joint defendants pursuant to a Claim arising under or related to this Agreement, the legal issues between the plaintiff(s) bringing forth such claim and the joint defendants shall be resolved first without consideration as to the allocation or apportionment of liability or damages between the defendant Parties, if any liability or damages can be allocated or apportioned between them. A determination regarding allocation or apportionment of liability or damages between the defendant Parties shall be made following final resolution of the Claim. Any Party that is not a named defendant shall have the right, at its sole cost and expense, to intervene in the action and to participate in the defense and resolution of the Claim. Any dispute relating to this Article XVIII or concerning allocation or apportionment of liability or damages between Parties for a Claim shall be subject to the dispute resolution process set forth in of this Agreement.

ARTICLE XIX
DISPUTE RESOLUTION, DEFAULT, REMEDIES, AND TERMINATION

Section 19.01 Dispute Resolution. Unless otherwise specified herein, the Parties shall comply with the following procedures in the case of a dispute, claim, or controversy arising under or in relation to this Agreement including, without limitation, the enforcement of any provision of this Agreement, or the existence, validity, interpretation, performance or breach of this Agreement (a "Dispute").

(a) 1st Level Review: Submission to Agency Representatives. It is the parties' intent to resolve disputes at the lowest level and as early as possible. Within ten (10) business days after a Party has notified any other Party of the existence of a Dispute pursuant to the Notice procedure provided in Section 19.03, each party shall designate an agency representative to review the Dispute. Within ten (10) business days after each party has designated their agency representative, the designated agency representatives shall meet to resolve the Dispute. The Parties may mutually agree to extend the timeframes.

(b) 2nd Level Review: Submission to Executive Director, District Director, and Chief Executive Officers (CEO's). If the Dispute is unable to be resolved at the agency representative level, such Dispute shall be referred for negotiation to the Executive Director of RCTC, and the respective CEO's of F/ETCA and OCTA. These individuals agree to undertake good faith attempts to resolve said Dispute within ten (10) business days, or other agreed-upon timeframe, after the receipt of written notice from the Party alleging that a Dispute exists. The Parties additionally agree to cooperate with the other Party in the scheduling of negotiation sessions. However, if the Dispute is not resolved within thirty (30) calendar days after conducting the first negotiating session, any Party may then request that the matter be submitted to further dispute resolution procedures, as may be agreed upon by the Parties.

(c) Alternative Dispute Resolution. If a Dispute is not resolved at the 2nd Level Review, the parties may agree to submit the Dispute to non-binding arbitration, or other form of alternative dispute resolution ("Alternative Dispute Resolution"). Each party to bear its own attorney fees and costs. The costs of any Alternative Dispute Resolution to be shared equally among the parties participating in the Alternative Dispute Resolution process.

(d) Remaining Legal Remedies: If the parties do not agree to submit a Dispute for Alternative Dispute Resolution, or the Dispute remains unresolved following Alternative Dispute Resolution, any party may seek any other legal remedies available, including but without limitation, injunctive relief, equitable relief, specific performance, and/or termination (in whole or in part).

(e) Preliminary Injunctive Relief Pending Dispute Resolution. [During the pendency of Alternative Dispute Resolution, pursuant to Section 19.01(c),] any Party may bring a proceeding seeking only preliminary injunctive relief in any state court located in San Diego County, California until the Dispute is resolved. [A Party may seek preliminary injunctive relief on an expedited basis prior to the pendency of Alternative Dispute Resolution if (i) the Party seeking the preliminary injunctive relief first provides written notice to the other Parties of its intent to seek preliminary injunctive relief, and (ii) 48 hours have passed since the other Parties have received such written notice, such that the Parties may have an opportunity to discuss resolving the underlying reason for seeking preliminary injunctive relief.]

Section 19.02 Default. Subject to the extensions of time set forth in this Agreement and/or any extensions agreed upon by the Parties, failure by any Party to perform any material term or provision of this Agreement constitutes a default under this Agreement. Except as otherwise expressly provided in this Agreement, any failures or delays by any Party in asserting any of its rights or remedies with respect to a default shall not operate as a waiver of any default or of any such rights or remedies. Delays by any Party in asserting any of its rights and remedies shall not deprive any Party of its right to institute and maintain any actions or proceedings which it may deem necessary to protect, assert, or enforce any such rights or remedies.

Section 19.03 Notice of Default. A non-defaulting Party shall give written notice of any alleged default to the Party in default, specifying the alleged default. The defaulting Party shall attempt to cure the default within sixty (60) calendar days following written notice of default. If the alleged default is not reasonably capable of cure within the sixty (60) day period specified above, then:

(a) The defaulting Party shall, within sixty (60) calendar days following receipt of the notice of default, provide a written response to the non-defaulting Parties that (i) identifies the actions to be undertaken to cure the default (the "Cure Activities") and (ii) identifies a schedule of performance for implementation and completion of the Cure Activities (the "Cure Schedule");

(b) The non-defaulting Parties shall review the proposed Cure Activities and Schedule for purposes of confirming the reasonableness thereof;

(c) At the request of the non-defaulting Party, representatives of the Parties shall meet and confer for purposes of addressing any questions or concerns with respect to the Cure Activities and the Schedule; and

(d) Provided that the defaulting Party is diligently pursuing implementation of the Cure Activities in accordance with the Schedule, the defaulting Party may request reasonable extensions

of the Schedule, and the non-defaulting Parties shall not unreasonably withhold their consent to such requests.

Section 19.04 Failure to Cure. In the event that the defaulting Party fails to complete the cure or remedy of a default within sixty (60) calendar days following receipt of written notice, or within such time as the non-defaulting Parties otherwise agree to in writing, the non-defaulting parties may pursue a Termination for Cause pursuant to Section 19.05.

Section 19.05 [Termination for Cause. If the default is not timely cured in accordance with Section 19.03, the non-defaulting party may terminate this Agreement through a written notice of termination, the effective date of which shall be no less than sixty (60) days from the date of the notice; provided that such termination has first been authorized by a majority vote of the respective board of directors of the non-defaulting party.]

Section 19.06 Rights and Remedies. In the event of a default that is not timely cured, the non-defaulting Parties may exercise the right to seek damages, specific performance, or injunctive, or equitable relief. The exercise of a Party's rights and remedies shall be cumulative with the exercise of other rights and remedies. No Party shall be liable for special, punitive, indirect, incidental or consequential damages arising out of this Agreement or the exercise of its rights hereunder.

Section 19.07 Cooperation Prior to Termination. Prior to the effective date of a termination for cause, the Parties shall cooperate in good faith to facilitate the transfer of services, agreements, materials, software, excluding any computer software or hardware for which a license may be required, equipment, and information as necessary for modification to the Project as needed so as not to impede the operation of the SR-241 toll road and 91 Express Lanes in the event the 241/91 EC is no longer operating.

ARTICLE XX
SEVERABILITY

In the event that any one or more of the phrases, sentences, clauses, paragraphs, or sections contained in this Agreement shall be declared invalid or unenforceable by a valid judgment or decree of a court of competent jurisdiction, such invalidity or unenforceability shall not affect any of the remaining phrases, sentences, clauses, paragraphs, or sections of this Agreement, which shall be interpreted to carry out the intent of the Parties hereunder.

ARTICLE XXI
INTERPRETATION, GOVERNING LAW, AND COMPLIANCE WITH LAWS

Each Party warrants that, in the performance of this Agreement, it shall comply with all applicable federal, state, and local laws, statutes, and ordinances and all lawful orders, rules, and regulations promulgated thereunder.

This Agreement shall be construed and interpreted both as to validity and to performance in accordance with the laws of the State of California. Legal actions arising out of or in relation to this Agreement, subject to the Parties first exhausting the dispute resolution procedures in Article XIX, shall be instituted in the Superior Court of the County of San Diego, State of California, and

the Parties covenant and agree to submit to the personal jurisdiction of the court in the event of any action.

ARTICLE XXII
AUTHORITY TO ENTER INTO AGREEMENT

Each Party hereto consents that it is authorized to execute this Agreement on behalf of said Party and that, by so executing this Agreement, the Parties hereto are formally bound to the provisions of this Agreement.

ARTICLE XXIII
NO THIRD-PARTY BENEFICIARIES

This Agreement is for the benefit of the Parties only. No third-party beneficiary is intended.

ARTICLE XXIV
DRAFTING AMBIGUITIES

The Parties agree that they are aware that they have the right to be advised by counsel with respect to the negotiations, terms, and conditions of this Agreement, and the decision of whether or not to seek advice of counsel with respect to this Agreement is a decision which is the sole responsibility of each Party. This Agreement shall not be construed in favor of or against either Party by reason of the extent to which each Party participated in the drafting of the Agreement.

ARTICLE XXV
AUTHORIZED DESIGNEES

The Chief Executive Officer of F/ETCA, or designee, shall have the authority to act for and exercise any of the rights of F/ETCA under this Agreement.

The Chief Executive Officer of OCTA, or designee, shall have the authority to act for and exercise any of the rights of OCTA under this Agreement.

The Executive Director of RCTC, or designee, shall have the authority to act for and exercise any of the rights of RCTC under this Agreement.

ARTICLE XXVI
COORDINATION WITH OTHER CONTRACTORS

During the course of this Agreement, the Parties, collectively or individually, may undertake or award other agreements for additional work, including separate agreements with different contractors. It is critical that close coordination with interfacing contractors occurs throughout the Term. Each Party shall fully cooperate with the other Parties and their contractors and take reasonable measures to coordinate its own work with said contractors. Should problems in coordination with other contractor(s) occur, Parties shall be made aware of these problems immediately and shall take steps to address the problems and mitigate any delays or additional costs. Parties shall cooperate with other contractors or forces performing construction or work of any other nature within or adjacent to sites specified in order to avoid any delay or hindrance to

such other contractors or forces. Parties reserve the right to perform other or additional work at or near the Project site (including material sources) at any time, by the use of other forces.

ARTICLE XXVII
FORCE MAJEURE

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

ARTICLE XXVIII
COUNTERPARTS OF AGREEMENT

This Agreement may be executed and delivered in any number of counterparts, each of which, when executed and delivered shall be deemed an original and all of which together shall constitute the same agreement. Facsimile signatures will be permitted. This Agreement may be signed using an electronic signature. A validly executed copy of this Agreement delivered by facsimile, e-mail or other means of electronic transmission shall be deemed to have the same legal effect as delivery of an original validly executed copy of this Agreement.

[signatures next page]

IN WITNESS WHEREOF, the PARTIES hereto have caused this Agreement to be executed on the date first written above.

FOOTHILL/EASTERN TRANSPORTATION CORRIDOR AGENCY By: _____ Ryan Chamberlain Chief Executive Officer **APPROVED AS TO FORM:** By: _____ Ben Rubin, Nossaman General Counsel Dated: _____	**RIVERSIDE TRANSPORTATION COMMISSION** By: _____ Aaron Hake Executive Director **APPROVED AS TO FORM:** By: _____ [Name] [Title] Dated: _____
ORANGE COUNTY TRANSPORTATION AUTHORITY By: _____ Darrell E. Johnson Chief Executive Officer **APPROVED AS TO FORM:** By: _____ [Name] [Title] Dated: _____	

EXHIBIT A
241/91 EXPRESS CONNECTOR
TOLL FACILITIES

Exhibit A includes all the facilities that will be installed and maintained throughout operations of the 241/91 Express Connector.

Refer to Exhibit B for visual depiction of facilities listed in table below. Notes:

1. All equipment is owned, operated, and maintained by F/ETCA unless otherwise noted.
2. Responsibility Assignment Legend
   - P – Primary Responsibility
   - C – Coordination Responsibility Only
   - N – No Responsibility

Element/Task/Component / Sub-system (Approximate Location)	RCTC	OCTA	F/ETCA	Comments Other Responsibility/Information	RCTC 91 EL Closure	OCTA 91 EL Closure	F/ETCA EC Closure
BI-DIRECTIONAL TOLL POINT ("EC" LINE STATION 38+25)							
Overhead Lane Equipment – NB/EB	**N**	**N**	**P**		No	No	Yes
In Pavement Loop System – NB/EB	**N**	**N**	**P**		No	No	Yes
Overhead Lane Equipment – WB/SB	**N**	**N**	**P**		No	No	Yes
In Pavement Loop System – WB/SB	**N**	**N**	**P**		No	No	Yes
Roadside Cabinet and Controller	**N**	**N**	**P**		No	No	No
Network Communication Equipment	**N**	**N**	**P**		No	No	No
Backup Generator and Enclosure	**N**	**N**	**P**		No	No	No
Gantry Structure and Foundation	**N**	**N**	**P**		No	No	Yes
Maintenance Vehicle Path and Pad	**N**	**N**	**P**	Maintained by Caltrans, refer to the ECMA.	No	No	No

Element/Task/Component / Sub-system (Approximate Location)	RCTC	OCTA	F/ETC A	Comments Other Responsibility/Information	RCTC 91 EL Closure	OCTA 91 EL Closure	F/ETC A EC Closure
TOLL COLLECTION OVERHEAD ELECTRONIC SIGNS (NORTH-TO-EAST MOVEMENT)							
Changeable Message Sign (CMS) ("B" Line Station 730+80) – Overhead Electronic Sign and Static Border – Roadside Cabinet and Sign Controller – Electrical Transformer and Electrical Sub-Panel – Network Communication Equipment – Sign Structure and Foundation	**N**	**N**	**P**		No	No	No
Variable Toll Message Sign (VTMS) ("B" Line Station 749+00) – Overhead Static Sign – Electronic Insert (toll rate display) – Lower CMS Panel (mode display one line) – Roadside Cabinet and Sign Controller – Electrical Transformer and Electrical Sub-Panel – Network Communication Equipment – Sign Structure and Foundation	**N**	**N**	**P**		No	No	No

Element/Task/Component / Sub-system (Approximate Location)	RCTC	OCTA	F/ETC A	Comments Other Responsibility/Information	RCTC 91 EL Closure	OCTA 91 EL Closure	F/ETC A EC Closure
Lane Operational Sign (LOS) #1 (CMS Panel under static guide sign) ("B" Line Station 866+80) – Electronic Insert – Roadside Cabinet and Sign Controller – Electrical Transformer and Electrical Sub-Panel – Network Communication – Equipment	**N**	**N**	**P**	Co-located on Caltrans-owned and maintained overhead sign structure.	No	No	No
Lane Operational Sign (LOS) #2 (Enforcement "X" / arrow) ("B" Line Station 892+80) – Overhead Static Sign with Electronic Insert – Roadside Cabinet and Sign Controller – Electrical Transformer and Electrical Sub-Panel – Network Communication Equipment – Sign Structure and Foundation	**N**	**N**	**P**	Co-located on Caltrans-owned and maintained overhead sign structure.	No	No	No
TOLL COLLECTION OVERHEAD ELECTRONIC SIGNS (WEST-TO-SOUTH MOVEMENT) OCTA ELECTRONIC SIGN (WB PRICING SIGN Sta 567+79)							
Sign Structure and Foundation	**N**	**P**	**C**	Refer to Ops Agreement for shared financial responsibility.	Yes	Yes	Yes
Electrical Power Service and Feed	**N**	**P**	**C**	Refer to Ops Agreement for shared financial responsibility.	Yes	Yes	Yes
Replacement Parts	**N**	**P**	**C**	Refer to Ops Agreement for shared financial responsibility.	Yes	Yes	Yes

Element/Task/Component / Sub-system (Approximate Location)	RCTC	OCTA	F/ETCA	Comments Other Responsibility/Information	RCTC 91 EL Closure	OCTA 91 EL Closure	F/ETCA EC Closure
Sign Warranty	**N**	**P**	**C**	Existing Warranty and Daktronics support through OCTA. Refer to Ops Agreement for shared financial responsibility.	Yes	Yes	Yes
F/ETCA Sign Controller	**N**	**C**	**P**	Daktronics provided and installed F/ETCA Controller, Light Sensor and VCB board will be maintained by F/ETCA for the F/ETCA portion of the sign	Yes	Yes	Yes
OCTA Sign Controller	**N**	**P**	**C**	Daktronics provided and installed OCTA Controller, Light Sensor and VCB board will be maintained by OCTA for the OCTA portion of the sign.	Yes	Yes	Yes
F/ETCA Network Communication Equipment	**N**	**C**	**P**		Yes	Yes	Yes
TOLL CONNECTOR METER (TCM) ("EC" LINE STATION 37+50, NORTH-TO-EAST MOVEMENT)							
Roadside Cabinet and Controller	**N**	**N**	**P**		No	No	Yes
Overhead Signal, Enforcement Signal and Pole	**C**	**C**	**P**	The 91 TOC may identify equipment that is not functioning properly for repair by F/ETCA.	No	No	Yes
Roadside Signal and Pole	**C**	**C**	**P**	The 91 TOC may identify equipment that is not functioning properly for repair by F/ETCA.	No	No	Yes
Toll Connector Meter Camera Detection System	**N**	**N**	**P**	Used to Augment CHP Enforcement	No	No	Yes
Occupancy Detection System	**N**	**N**	**P**	Used to Augment CHP Enforcement	No	No	Yes
In-Pavement Loops	**N**	**N**	**P**		No	No	Yes

Element/Task/Component / Sub-system (Approximate Location)	RCTC	OCTA	F/ETCA	Comments Other Responsibility/Information	RCTC 91 EL Closure	OCTA 91 EL Closure	F/ETCA EC Closure
Roadside Metering Signage	**N**	**N**	**P**		No	No	Yes
Network Communication Equipment	**N**	**N**	**P**		No	No	Yes
TCM SIGNS (QTY 5) ("EC" Line Station 31+50 and 23+00, "EC1" Line Station 22+20, "B" Line Station 884+80 and 875+80)							
Overhead Flashing Beacons	**N**	**N**	**P**		No	No	Yes
Overhead Blank-Out Sign	**N**	**N**	**P**		No	No	Yes
Overhead Sign Structure	**N**	**N**	**P**		No	No	Yes
Electrical Transformer and Electrical Sub-Power	**N**	**N**	**P**		No	No	Yes
Roadside Cabinet and Controller	**N**	**N**	**P**		No	No	Yes
Network Communication to TCM Controller	**N**	**N**	**P**		No	No	Yes
TCM QUEUE DETECTION LOOPS (QTY 3) ("EC" Line Station 33+00 and 22+20, "B" Line Station 892+80)							
In-Pavement Loops	**N**	**N**	**P**		No	No	Yes
Network Communication to TCM Controller	**N**	**N**	**P**		No	No	Yes
ELECTRICAL SERVICE							
EC and TCM ("SAC" Line Station 445+30)	**N**	**N**	**P**	Repairs of electrical service do not require closures due to back up power options.	No	No	No
TDS Locations ("E91" Line Station TBD)	**N**	**N**	**P**	Repairs of electrical service do not require closures due to back up power options.	No	No	No

Element/Task/Component / Sub-system (Approximate Location)	RCTC	OCTA	F/ETCA	Comments Other Responsibility/Information	RCTC 91 EL Closure	OCTA 91 EL Closure	F/ETCA EC Closure
CLOSED CIRCUIT TELEVISION (CCTV) (QTY 9) ("B" LINE STATION 730+00, 748+00, 865+50, 874+00, AND 891+50, "EC" LINE STATION 22+00 AND 38+20, "E91" LINE 498+00 AND 534+50)							
Pole Mounted Camera Equipment with Pan-Tilt-Zoom (PZT) functionality	**C**	**C**	**P**	The 91 TOC may identify cameras that are not functioning properly for repair by F/ETCA.	No	Yes	No
Cabling Equipment	**N**	**N**	**P**		No	Yes	No
Pole Mounted Cabinet	**N**	**N**	**P**	CCTV #1-6, #8-9.	No	Yes	No
EC Gantry Mounted Cabinet	**N**	**N**	**P**	CCTV #7.	No	No	No
Network Communication Equipment	**N**	**N**	**P**		No	Yes	No
Vehicle Detection System (VDS) Pole and Foundation	**N**	**N**	**P**	CCTV #8 shared pole with TDS #4 and #5. CCTV #9 shared pole with TDS #10.	No	Yes	No
TOLL DETECTION SYSTEM (TDS) (QTY 10) – **NORTH-TO-EAST MOVEMENT ("E91" LINE STATION 453+00, 483+00, 498+00, 509+00, AND 522+00)** – **WEST-TO-SOUTH MOVEMENT ("E91" LINE STATION 483+00, 498+00, 509+00, 522+00, AND 534+50)**							
Structure Mounted Microwave Detectors	**N**	**N**	**P**	TDS #1.	No	Yes	Yes
Ground Mounted Cabinet	**N**	**N**	**P**	TDS #1.	No	No	No
Pole Mounted Microwave Detector	**N**	**N**	**P**	TDS #2 and #3 shared pole. TDS #4 and #5 shared with CCTV #8. TDS #6 and #7 shared pole. TDS #8 and #9 shared pole. TDS #10 shared pole with CCTV #9.	No	Yes	Yes

Element/Task/Component / Sub-system (Approximate Location)	RCTC	OCTA	F/ETCA	Comments Other Responsibility/Information	RCTC 91 EL Closure	OCTA 91 EL Closure	F/ETCA EC Closure
Vehicle Detection System (VDS) Pole and Foundation	**N**	**N**	**P**	TDS #2 and #3 shared pole. TDS #4 and #5 shared with CCTV #8. TDS #6 and #7 shared pole. TDS #8 and #9 shared pole. TDS #10 shared pole with CCTV #9.	No	Yes	Yes
Network Communication Equipment	**N**	**N**	**P**		No	Yes	Yes
AUTOMATED VEHICLE IDENTIFICATION (AVI) SYSTEM							
AVI Reader #1 – NB 241 (“B” Line Station 749+00)	**N**	**N**	**P**	Co-located with F/ETCA VTMS.	No	No	Yes
AVI Reader # 2 – EB Egress (“E91” Line Station 523+90)	**C**	**C**	**P**	Co-located on Caltrans-owned and maintained overhead sign structure.	No	Yes	Yes
DATA AND COMMUNICATIONS							
Pacifica Location Data Center – Data Servers – Communication Equipment – Equipment Software Configurations	**N**	**N**	**P**		No	No	No
Irvine Ranch Location Data Center – Servers – Communication Equipment – Equipment Software Configurations	**N**	**N**	**P**		No	No	No

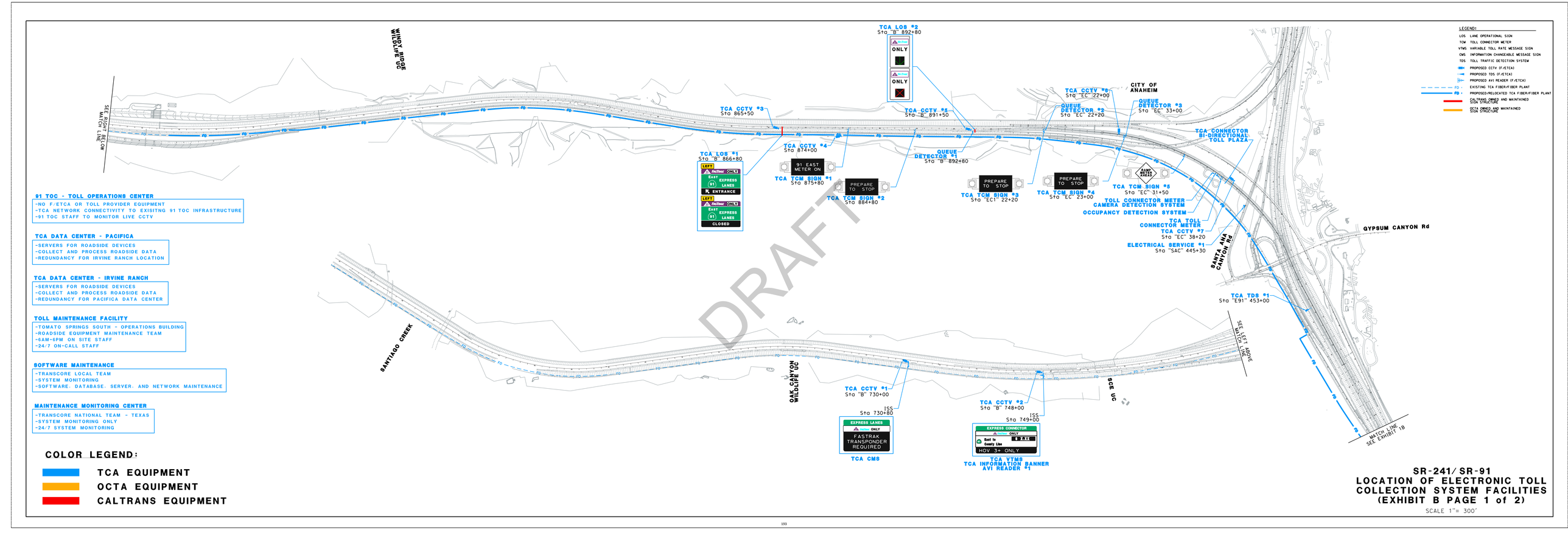
Element/Task/Component / Sub-system (Approximate Location)	RCTC	OCTA	F/ETCA	Comments Other Responsibility/Information	RCTC 91 EL Closure	OCTA 91 EL Closure	F/ETCA EC Closure
Texas Monitoring Center – 24/7 System Monitoring	**N**	**N**	**P**		No	No	No
Fiber Plant Infrastructure NB 241 from "B" Line 783+50 to "B" Line 897+50 – Fiber Cable, splice enclosures and, fiber distribution units. – Network Communication equipment	**N**	**N**	**P**		No	No	No
Fiber Plant Infrastructure NB to EB 241 from "CNW" Line 97+50 to "CNW" Line 103+00 – Fiber Cable, Splice Enclosures and, Fiber Distribution Units. – Network Communication Equipment	**N**	**N**	**P**		No	No	No
Fiber Plant Infrastructure NB to EB 241 from "CNE" Line 103+00 to "CNE" Line 171+00 – Fiber Cable, Splice Enclosures and, Fiber Distribution Units. – Network Communication Equipment	**N**	**N**	**P**		No	No	No

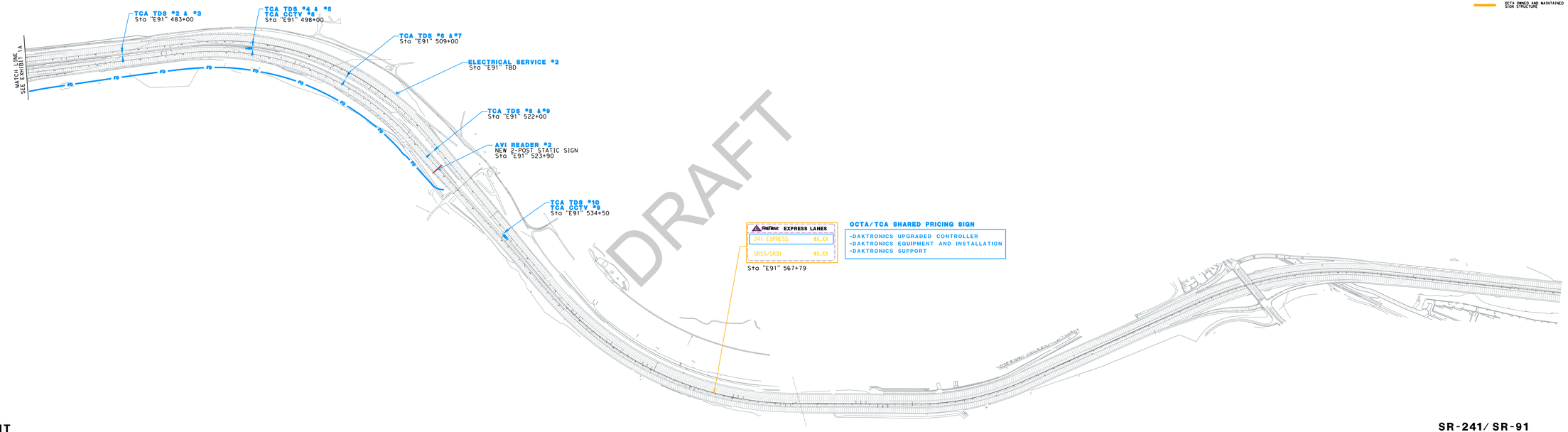
Element/Task/Component / Sub-system (Approximate Location)	RCTC	OCTA	F/ETCA	Comments Other Responsibility/Information	RCTC 91 EL Closure	OCTA 91 EL Closure	F/ETCA EC Closure
Fiber Plant Infrastructure EB 91 from "E91" Line 477+00 to "E91" Line 527+00 – Fiber Cable, Splice Enclosures and, Fiber Distribution Units. – Network Communication Equipment	**N**	**N**	**P**		No	No	No
91 EXPRESS LANES TOLL OPERATIONS CENTER (TOC)							
91 EL TOC Advanced Traffic Management System (ATMS) Software and Configuration System Updates.	**P-Joint Operation with OCTA**	**P-Joint Operation with RCTC**	**N**	Data Sharing Configurations between 91 TOC Advanced Traffic Management System (ATMS) and F/ETCA Toll Service Provider.	No	No	No
F/ETCA System Software and Configuration	**C**	**C**	**P**	Data Sharing Configurations between 91 TOC Advanced Traffic Management System (ATMS) and F/ETCA Toll Service Provider.	No	No	No
91 EL TOC Hardware. Switches, network communication equipment, Computers, Video Wall, etc.	**P-Joint Operation with OCTA**	**P-Joint Operation with RCTC**	**P**	F/ETCA will provide requirements as additions to the existing ViaPlus contract for the purposes of the 241/91 Express Connector. All three agencies have primary responsibility, F/ETCA will be responsible for payment of additional hardware required for the 241/91 EC.	No	No	No
91 EL TOC Labor and Personnel	**P-Joint Operation with OCTA**	**P-Joint Operation with RCTC**	**P**	F/ETCA will provide requirements as additions to the existing ViaPlus contract for the purposes of the 241/91 Express Connector. All three agencies have primary responsibility, F/ETCA will be responsible for payment monthly expenses of personnel as it relates to monitoring the 241/91 EC.	No	No	No

EXHIBIT B

241/91 EXPRESS CONNECTOR

LOCATION OF ELECTRONIC TOLL COLLECTION SYSTEM FACILITIES


WINDY RIDGE WILDLIFE UC
SEE LEFT MATCH LINE
TCA LOS #2
Sta "B" 892+80
ONLY
ONLY
TCA CCTV #3
Sta 865+50
TCA CCTV #5
Sta "B" 891+50
TCA CCTV #6
Sta "EC" 22+00
CITY OF ANAHEIM
QUEUE DETECTOR #3
Sta "EC" 33+00
QUEUE DETECTOR #2
Sta "EC" 22+20
TCA LOS #1
Sta "B" 866+80
LEFT
FasTrac ONLY
EAST 91 EXPRESS LANES
ENTRANCE
LEFT
FasTrac ONLY
EAST 91 EXPRESS LANES
CLOSED
TCA CCTV #4
Sta 874+00
91 EAST METER ON
TCA TCM SIGN #1
Sta 875+80
PREPARE TO STOP
TCA TCM SIGN #2
Sta 884+80
QUEUE DETECTOR #1
Sta "B" 892+80
PREPARE TO STOP
TCA TCM SIGN #3
Sta "EC1" 22+20
PREPARE TO STOP
TCA TCM SIGN #4
Sta "EC" 23+00
SANTA ANA CANYON Rd
TCA TCM SIGN #5
Sta "EC" 31+50
TCA CONNECTOR BI-DIRECTIONAL TOLL PLAZA
TOLL CONNECTOR METER
CAMERA DETECTION SYSTEM
OCCUPANCY DETECTION SYSTEM
TCA TOLL CONNECTOR METER
TCA CCTV #7
Sta "EC" 38+20
ELECTRICAL SERVICE #1
Sta "SAC" 445+30
GYPSUM CANYON Rd
TCA TDS #1
Sta "E91" 453+00
SEE LEFT ABOVE MATCH LINE
SANTIAGO CREEK
OAK CANYON WILDLIFE UC
TCA CCTV #1
Sta "B" 730+00
ISS
Sta 730+80
EXPRESS LANES
FasTrac ONLY
FASTRAK TRANSPONDER REQUIRED
TCA CMS
TCA CCTV #2
Sta "B" 748+00
ISS
Sta 749+00
EXPRESS CONNECTOR
FasTrac ONLY
Seat to County Line
2 PAX
HOV 3+ ONLY
TCA VTMS
TCA INFORMATION BANNER
AVI READER #1
SCE UC
MATCH LINE SEE EXHIBIT 1B
LEGEND:
LOS LANE OPERATIONAL SIGN
TCM TOLL CONNECTOR METER
VTMS VARIABLE TOLL RATE MESSAGE SIGN
CMS INFORMATION CHANGEABLE MESSAGE SIGN
TDS TOLL TRAFFIC DETECTION SYSTEM
PROPOSED CCTV (F/ETCA)
PROPOSED TDS (F/ETCA)
PROPOSED AVI READER (F/ETCA)
EXISTING TCA FIBER/FIBER PLANT
PROPOSED/RELOCATED TCA FIBER/FIBER PLANT
CALTRANS OWNED AND MAINTAINED SIGN STRUCTURE
OCTA OWNED AND MAINTAINED SIGN STRUCTURE
91 TOC - TOLL OPERATIONS CENTER
-NO F/ETCA OR TOLL PROVIDER EQUIPMENT
-TCA NETWORK CONNECTIVITY TO EXISITNG 91 TOC INFRASTRUCTURE
-91 TOC STAFF TO MONITOR LIVE CCTV
TCA DATA CENTER - PACIFICA
-SERVERS FOR ROADSIDE DEVICES
-COLLECT AND PROCESS ROADSIDE DATA
-REDUNDANCY FOR IRVINE RANCH LOCATION
TCA DATA CENTER - IRVINE RANCH
-SERVERS FOR ROADSIDE DEVICES
-COLLECT AND PROCESS ROADSIDE DATA
-REDUNDANCY FOR PACIFICA DATA CENTER
TOLL MAINTENANCE FACILITY
-TOMATO SPRINGS SOUTH - OPERATIONS BUILDING
-ROADSIDE EQUIPMENT MAINTENANCE TEAM
-6AM-6PM ON SITE STAFF
-24/7 ON-CALL STAFF
SOFTWARE MAINTENANCE
-TRANSCORE LOCAL TEAM
-SYSTEM MONITORING
-SOFTWARE, DATABASE, SERVER, AND NETWORK MAINTENANCE
MAINTENANCE MONITORING CENTER
-TRANSCORE NATIONAL TEAM - TEXAS
-SYSTEM MONITORING ONLY
-24/7 SYSTEM MONITORING
COLOR LEGEND:
TCA EQUIPMENT
OCTA EQUIPMENT
CALTRANS EQUIPMENT
DRAFT
SR-241/SR-91
LOCATION OF ELECTRONIC TOLL COLLECTION SYSTEM FACILITIES
(EXHIBIT B PAGE 1 of 2)
SCALE 1"= 300'



LEGEND:

LOS	LANE OPERATIONAL SIGN
TCM	TOLL CONNECTOR METER
VTMS	VARIABLE TOLL RATE MESSAGE SIGN
CMS	INFORMATION CHANGEABLE MESSAGE SIGN
TDS	TOLL TRAFFIC DETECTION SYSTEM
	PROPOSED CCTV I/F/ETCA)
	PROPOSED TDS I/F/ETCA)
	PROPOSED TDS I/F/ETCA)
FO	EXISTING TCA FIBER/FIBER PLANT
FO	PROPOSED/RELOCATED TCA FIBER/FIBER PLANT
	CALTRANS OWNED AND MAINTAINED SIGN STRUCTURE
	OCTA OWNED AND MAINTAINED SIGN STRUCTURE

COLOR LEGEND:

- TCA EQUIPMENT
- OCTA EQUIPMENT
- CALTRANS EQUIPMENT

SR-241/SR-91
LOCATION OF ELECTRONIC TOLL COLLECTION SYSTEM FACILITIES
(EXHIBIT B PAGE 2 of 2)

SCALE 1"= 300'

EXHIBIT D

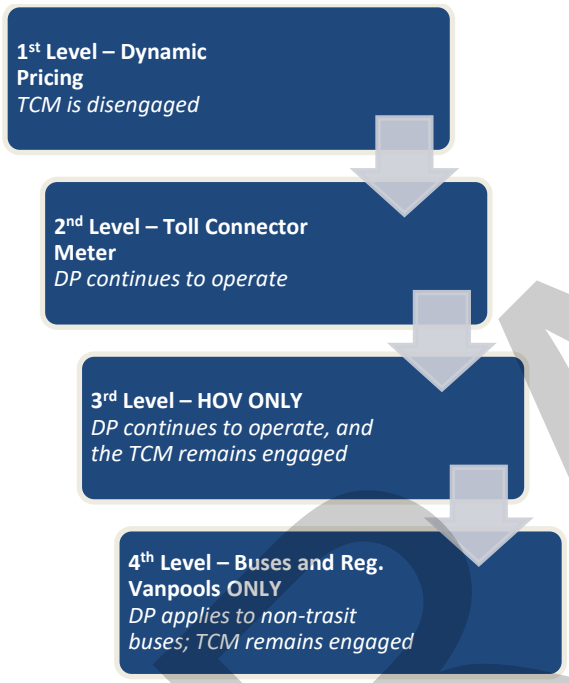
PROGRESSIVE DEMAND MANAGEMENT PROCESS

This exhibit will lay out, at a conceptual level, how progressive demand management (PDM) will be structured on the Express Connector. Section 1 will discuss how PDM will be applied to the NB-to-EB Express Connector, while Section 2 will focus on the WB-to-SB Connector.

1. Progressive Demand Management on the Northbound-to-Eastbound Connector

The NB-to-EB Express Connector will employ four levels of PDM. These levels are summarized Figure 1.

Figure 1 – Four Levels of Progressive Demand Management on the NB-to-EB Express Connector



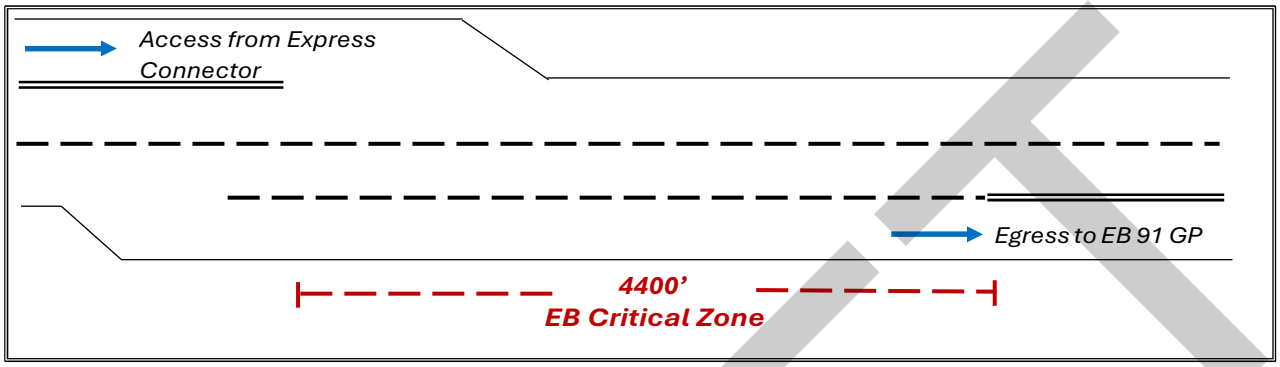
This section will provide a detailed description of the PDM approach for the NB-to-EB Express Connector. It will provide an overview of the approach, followed by details regarding how this approach will be implemented.

1.1. NB-to-EB Approach Overview

In general terms, the proposed PDM approach for the NB-to-EB Express Connector can be described as follows:

- The PDM approach will be primarily oriented toward operations on the 4400' EB critical zone depicted in Figure 2. The goal of progressive demand management is to ensure that this segment of roadway operates *at or better than* agreed-to performance metrics. A detailed discussion of performance metrics is presented in Exhibit F of the Operating Agreement (Traffic Operations Metrics Monitoring and Governance).

Figure 2 – Configuration of EB 91 Express Lanes at On-Ramp from Express Connector

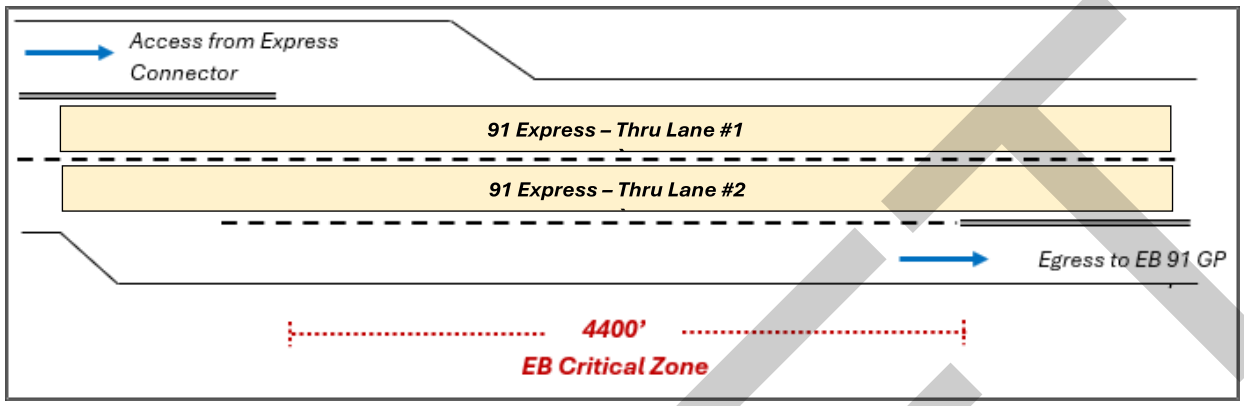


- The primary goal for PDM should be to maintain conditions such that they are at or below a configurable density level in the EB critical zone. Density is a comprehensive metric that incorporates traffic flow (in vehicles per hour) and speed (in miles per hour). High densities can be caused by high traffic volumes, by traffic incidents, and by high volumes of traffic changing lanes. A high value of density almost always indicates congested traffic conditions. By contrast, neither speed nor volume *on their own* necessarily indicate adverse traffic conditions. Low speeds don't always indicate congestion; they could be the result of inclement weather or police activity. Neither do high volumes always indicate congestion; sometimes, freeway lanes serving local drivers can serve a high volume of traffic very efficiently.

- The price to use the NB-to-EB Express Connector shall be directly related to the density observed in the EB critical zone. Density shall be calculated by taking the flow rate in the EB critical zone (measured in terms of vehicles per hour) and dividing by the average speed in the EB critical zone (in miles per hour). This value shall then be divided by the number of lanes to yield a density expressed as vehicles per lane per mile (vplpm).

- The calculation of density in the EB critical zone will focus on data collected from the two thru lanes that continuously serve the 91 Express lanes. These are illustrated by the shaded lanes depicted in Figure 3. The calculation of density will not consider speeds and volumes collected from the egress lane to the 91 General Purpose lanes, nor will it consider speeds and volumes collected from the access lane from the Express Connector prior to its merge onto the 91 Express Lanes.

Figure 3 – Designated Lanes for Measuring Density in the EB Critical Zone



Traffic conditions should be monitored, densities calculated, and prices adjusted at frequent intervals. The intervals should be no shorter than two minutes in length and no longer than fifteen minutes in length. The duration of the interval should be configurable; the initial assumed interval length is [5] minutes.

1.2. Formula Governing Density-Price Relationship

The graphic depicted in Figure 4 illustrates the proposed relationship between density and price for the NB- to-EB Express Connector. The graphic is followed by a description of each of its components, including a discussion of the formula governing the relationship between density and price.

Figure 4 – Conceptual Relationship Between Density and Price, NB-to-EB Express Connector

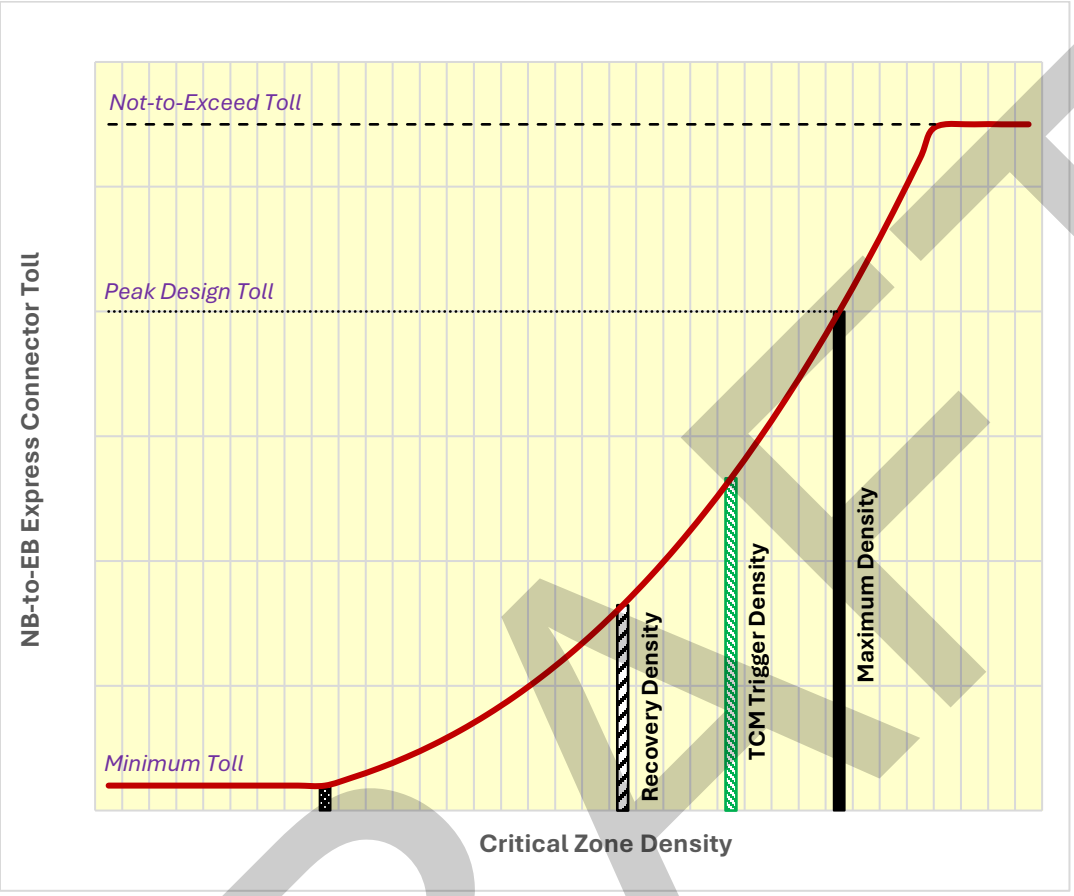


Figure 4 depicts four distinct density levels, each of which is defined below:

- **Minimum Density**. This is the density level in the critical zone above which the toll rate begins to rise. If the density in the critical zone is at or below this level, the minimum toll will apply. Stated another way, the "minimum density" represents the highest density level at which the minimum toll will apply.
- **TCM Trigger Density**. This is the density level that triggers the initiation of the TCM. When the density in the EB critical zone exceeds the TCM Trigger Density for **[3]** consecutive intervals, the TCM will be engaged.
- **Maximum Density**. This represents the maximum density that would be considered acceptable in the EB critical zone. The toll rate corresponding to this density is known as the **peak design toll**. Surpassing this density level will be a trigger to enacting successive levels of progressive demand management.
- **Recovery Density**. This represents the density level that will trigger an unraveling of progressive demand management. It is relevant only if the TCM has been engaged. Once the TCM has been engaged (and any other progressive demand management strategies, such as HOV ONLY, have been employed), it will remain engaged until the density in the EB critical zone has fallen below the recovery density for [3] consecutive intervals.

Figure 4 also highlights three distinct pricing levels:

- **Minimum Toll**. This represents the lowest toll that would ever be charged for the Express Connector. It applies whenever the density in the EB critical zone is at or below the minimum density.
- **Peak Design Toll**. This represents the highest toll rate that F/ETCA would normally desire to charge its customers to use the Express Connector. This toll rate would apply when the density in the EB critical zone reaches the maximum density.
- **Not-to-Exceed Toll**. This represents the maximum toll rate that would be charged. A Not-to Exceed Toll may be used to prevent the dynamic pricing system from producing an unexpectedly high toll rate, but is not permitted to be used as a price cap. The Parties will establish a Not-to-Exceed Toll for purposes of controlling and monitoring the dynamic pricing algorithm.

The basic formula (governing the curved portion of the density-price graph above) is as follows:

$$Toll = k * (\theta * D)^{\beta}$$

Where:

k = minimum toll

D = density in the EB critical zone

Θ = multiplier, calibrated such that "Θ * D" = 1.0 at the point of minimum density (as defined above)

ß = rate escalation factor

- To ensure that tolls escalate at an ever-increasing rate as density increases, ß should be set at a value greater than 1.0
- The value of ß should be calibrated such that the toll rate reaches the peak design toll when density reaches the maximum density level described above

To illustrate, consider the following hypothetical situation in which the following parameters are defined:

- The minimum toll rate is $2.00
- The minimum toll rate applies to all densities up to 9 vplpm
- The peak design toll is $40
- The maximum density is 30 vplpm
- The not-to-exceed toll is $75

The formula in this instance would be:

Toll = $2.00 * (0.1111 * D)$^{2.4882}$

where D = density in the EB critical zone

*subject to a minimum toll of **$2.00** and a not-to-exceed toll of **$75.00***

The formula described above translates density into price in the following manner:

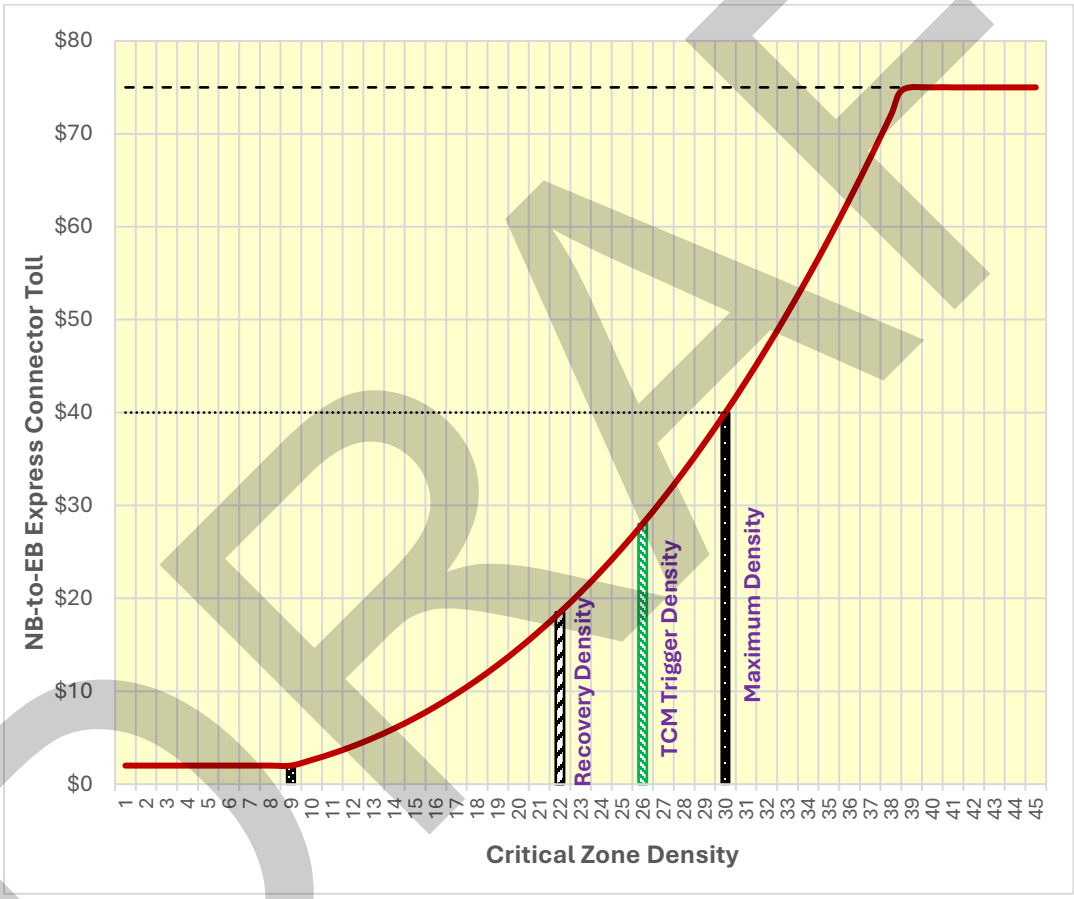
- When the density in the EB critical zone is at or below the minimum density, the toll is equal to the minimum toll.
- When the density in the EB critical zone is at the maximum density, the toll is equal to the peak design toll.
- When the toll reaches the not-to-exceed toll, the price holds regardless of the recorded density. Under the parameters of the formula noted above, the not-to-exceed toll of $75 is reached when the density in the critical zone is roughly 39 vehicles per lane per mile (vplpm). Any density

above that level would still trigger a toll of $75.

- All values should be configurable to enable an appropriate pricing response to actual conditions. The values to be deployed when the system goes live will be informed by simulation modeling and testing.

Figure 5 depicts the density-price curve corresponding to the parameters identified above. To help reveal how this alternative tolling approach will work, Figure 5 includes illustrative values for all components previously identified in Figure 4. This includes a vertical bar designating the **TCM trigger density** (which in this example will be set at 26 vplpm) as well as a vertical bar designating the **Recovery density** (which in this example will be set at 22 vplpm). All values are provided for illustrative purposes only.

Figure 5 – Illustrative Example of Possible Density-Price Curve, NB-to-EB Express Connector



It is important to note that the formula described above (Toll = k * (Θ * D)$^{\beta}$) governs the *real-time* adjustments to the toll rate. However, the process outlined by Exhibit F (Traffic Operations Metrics Monitoring and Governance) outlines a process by which operational conditions in two select areas are monitored on a regular basis. In doing so, it facilitates periodic adjustments to the variables in the formula based on regular reviews of operational data. The conditions to be regularly reviewed in the **NB-to-EB** direction include:

- Weaving through the EB criticalzone.
- Eastbound traffic operations (including the toll rate) at the East End of the RCTC Express Lanes.

Based on the operational review at these areas, the parameters governing the rate-setting process can be adjusted to manage the demand more efficiently.

1.3. Progressive Demand Management Framework, NB-to-EB Express Connector

The proposed pricing framework for the NB-to-EB Express Connector encompasses four possible levels of control, known collectively as "progressive demand management" (PDM). This framework is discussed in more detail below.

1st Level of Control – Price

- The first and primary level of control is price. Unless manually overridden in special circumstances, the price to use the NB-to-EB Express Connector will be tethered to the density in the EB critical zone. The relationship between density and price is governed by the density-price curve depicted in Figure 4. Note that density is on the x-axis. Price, which is a function of density, is on the y-axis.
- Below a configurable minimum density (initial recommended value: **9 vplpm**), a configurable minimum toll for the Express Connectorapplies.
- Once the density in the EB critical zone exceeds the minimum density, then the price increases above the minimum toll. The increase should be modest at low densities and should increase more dramatically as density increases. Note that the shape of the demand-price curve is consistent with the way speeds on a roadway respond to growing levels of traffic. At low levels of traffic, an increase in traffic volume has a minimal impact on prevailing speeds. However, as traffic volumes approach capacity, prevailing speeds tend to decline much more rapidly. The price will continue to rise as the density increases until the price reaches the "not-to-exceed toll."
- If the density in the EB critical zone exceeds the TCM trigger density for **[3]** consecutive intervals (configurable), then the Toll Connector Meter (TCM) will be engaged.
- Please note that, even after the TCM is engaged, the posted price for the Express Connector will continue to change as the density in the EB critical zone changes.

2nd Level of Control – Toll Connector Meter + Pricing

- When the maximum density has been reached or exceeded for **[3]** consecutive intervals (configurable), the algorithm advances to the second level of control. For the NB-to-EB Express Connector, the second level of control is the **engagement of the TCM**. The requirement to meet or exceed the maximum density for multiple consecutive intervals is intended to serve as a safeguard against triggering the TCM prematurely in response to a temporary (as opposed to a sustained) surge in traffic.
- Once conditions are met for the TCM to be engaged, the following sequence should be followed:
    - Advanced signage south of the decision point on SR-241 will immediately be used to inform drivers that the meter isON.
    - Speeds on the roadway between the advanced signage and the TCM will be monitored to provide a reasonable estimate of the current travel time between the advanced signage and the TCM. Travel times may be monitored directly by tracking transponder transactions. A running comparison of transponder reads at Windy Ridge (or from the

readers at the SR-241 VTMS) and at the Express Connector toll point can provide current travel time information in the corridor.

- The engagement of the TCM will be delayed until this "travel time" lag has passed. The purpose is to avoid a situation in which the TCM stops drivers who passed the CMS **before** the "METER ON" message was posted. To illustrate, let's assume that, at 4:00:00pm, the conditions are met for the TCM to be engaged. And let's assume that, based on speed data monitored in the corridor, the current travel time from the last advanced sign to the TCM is 4:05. That means that the TCM should be engaged no earlier than 4:04:05pm. If a 20% buffer is incorporated to ensure that slower-than-average drivers aren't surprised by the activation of the meter, then the TCM should be engaged at 4:04:54pm.

- The TCM will employ a variable discharge rate to govern the hourly flow rate at which vehicles pass through the TCM. This variable discharge rate will be employed for as long as the TCM is engaged. The general principle is that as density in the EB critical zone increases, the discharge rate will decrease. The discharge rate should be configurable. An initial set of guidelines for the TCM discharge rate is presented in Table 1.

Table 1 – Relationship between Critical Zone Density and TCM Discharge Rate

Density of EB Critical Zone (vehicles/lane/mile)	TCM Discharge Rate (vehicles/hour)
<27 vplpm	900 (1 green per 4 sec.)
27.0 – 28.9 vplpm	800 (1 green per 4.5 sec.)
29.0 – 30.9 vplpm	720 (1 green per 5 sec.)
31 – 32.9 vplpm	600 (1 green per 6 sec.)
33 – 35.9 vplpm	450 (1 green per 8 sec.)
36 – 39.9 vplpm	400 (1 green per 9 sec.)
40+ vplpm	360 (1 green per 10 sec.)

- Once the TCM is engaged, this 2nd level of control (TCM + Pricing) will remain in effect until one of the following conditions is met:
  - **Condition #1**: *The density in the EB critical zone reaches or exceeds the maximum density for **[3]** consecutive intervals (configurable)*. If this condition occurs, it suggests that the TCM has not been successful at restraining the density such that it stays at or below the maximum acceptable level. Therefore, it will be necessary to further manage demand by advancing to the 3rd level of control (e.g., HOV3+ ONLY).
  - **Condition #2**: *The queue at the TCM reaches or exceeds **[3400 feet]**[1] (configurable)*. If this condition occurs, it suggests that the demand for the Express Connector is exceeding the ability of the TCM to adequately handle it. As a result, it will be necessary to restrict access to the Express Connector by advancing to the 3rd level of control (e.g., HOV3+ ONLY).
  - **Condition #3**: *The density in the EB critical zone dips below the recovery density for **[3]** consecutive intervals (configurable)*. If this condition occurs, it suggests that the TCM has successfully managed demand and thereby reduced the density in the EB critical zone. As a result, it will be appropriate to shift to the recovery phase.
- Until one of the three above-listed conditions is met, the TCM will remain engaged, and the price

[1] Alternatively, this could be expressed in terms of vehicles (e.g., "The queue at the TCM does not exceed **[100]** vehicles").

for the Express Connector will continue to rise or fall in response to the density in the EB critical zone.

3rd Level of Control – Pricing + TCM + HOV ONLY

- When the 3rd level of control is activated, the controls from the first two levels (pricing and engagement of the TCM) continue to operate. In addition, access to the Express Connector is restricted to HOVs.
- The third level of control is designed to engage when one of two conditions has been met after the 2nd level of control (Pricing + TCM) has been engaged:
    - The density in the EB critical zone has exceeded maximum density for [3] consecutive intervals; or,
    - The queue at the TCM has met or exceeded its configurable threshold length.
- When HOV ONLY is in effect, a message will be posted in two places: (1) at the CMS located 0.6 miles prior to the decision point, and (2) on the LED banner positioned on the VTMS located 0.26 miles from the decision point.
- Whenever HOV ONLY messaging is posted, its enforcement will be delayed so that enforcement is only applied to drivers who would have seen the message on the advanced signing. If a non-HOV vehicle passed the advanced signage before the "HOV ONLY" message was posted, then no enforcement action should be taken if it were to continue onto the Express Connector. This will require that average speeds between the advanced signing and the Express Connector be monitored.
- When HOV ONLY is in effect, the TCM will continue to be engaged with a discharge rate that is tied to the density in the critical zone (see Table 1). The price to be posted on advanced signage will be as follows:
    - During peak periods (as defined for periods of HOV pricing), HOVs are required to pay the same rate as all other vehicles.[2] Therefore, the posted price will be determined by the density in the EB critical zone, using the density-price curve described in Figure 4. The posted price may rise or fall during the time in which HOV ONLY is in effect.
    - During off-peak periods (that is, all time periods not otherwise designated as "peak period"), HOV3+ vehicles are allowed to travel for free. Therefore, no price will be posted.
- The Express Connector will continue to operate as HOV ONLY for a minimum of [3] intervals (configurable). During this time, the queue at the TCM will continue to be monitored, and the density in the EB critical zone will continue to be measured. HOV ONLY mode will continue until one of the following occurs:
    - **Condition #1**: The density in the EB critical zone exceeds the maximum density for [3] consecutive intervals (configurable). This condition would indicate that HOV ONLY was not successful in restricting density within an acceptable range. Therefore, it would be necessary to further reduce demand by advancing to the 4th level of control (e.g., BUS/REGISTERED VANPOOLS ONLY).
    - **Condition #2**: The queue at the TCM exceeds [3400 feet] (configurable). This condition would suggest that, even with an HOV ONLY restriction in place, the demand for the Express Connector was still too high for the TCM to adequately handle. As a result, it would be necessary to restrict access to the Express Connector by advancing to the 4th

[2] Eastbound peak periods defined for HOV pricing are Mon-Thu, 2pm-6pm; and Friday, 1pm-7pm. Westbound peak periods defined for HOV pricing are Mon-Thu, 5-9am. On Fridays in the WB direction, HOV3+ vehicles can travel toll-free all day.

level of control (e.g., BUS/REGISTERED VANPOOLS ONLY).

- **Condition #3**: The density in the EB critical zone dips below the recovery density for [3] consecutive intervals (configurable). If this condition occurs, it suggests that the HOV ONLY restriction has successfully managed demand and thereby reduced the density in the EB critical zone. As a result, it will be appropriate to shift to the recovery phase.

4th Level of Control – TCM + Bus/Registered Vanpools Only

- The fourth level of control is designed to engage when congestion in the EB critical zone (as measured in terms of density) remains stubbornly high (that is, above the maximum density level for **[3]** consecutive intervals) despite the imposition of pricing, metering, and a restriction to HOV ONLY.
- This is the most restrictive and final level of control to be imposed on the NB-to-EB Express Connector. No additional means of restricting traffic on the Express Connector is available.
- When the BUS/REGISTERED VANPOOLS ONLY stage is reached, prices will continue to be posted. However, only non-transit buses will be assessed a toll. Transit buses and registered vanpools may travel for free at any time, even during periods in which progressive demand management is engaged.[3]
- The TCM will continue to be engaged with a discharge rate that is tied to the density in the critical zone (see Table 1).
- Once engaged, the BUS/REGISTERED VANPOOLS ONLY stage will remain in effect for a minimum of **[3]** consecutive intervals. During this time, the density in the EB critical zone will continue to be monitored.
- The message of BUS/REGISTERED VANPOOLS ONLY will be communicated to drivers in the same manner (on the same signs) as the message of HOV ONLY. Those signs are (1) at the CMS located 0.6 miles prior to the decision point, and (2) on the LED banner positioned on the VTMS located 0.26 miles from the decision point.
- Whenever BUS/REGISTERED VANPOOLS ONLY messaging is posted, its enforcement will account for the travel time lag from the advanced signage to the toll point. This will ensure that enforcement is only applied to drivers who would have seen the message on the advanced signage. If a qualified HOV passed the advanced signage **before** the "BUS/REGISTERED VANPOOLS ONLY"[4] message was posted, then no enforcement action should be taken if it were to continue onto the Express Connector.[5] To incorporate an appropriate time lag, average speeds between the advanced signing and the Express Connector will need to be monitored.
- After the minimum duration of the BUS/REGISTERED VANPOOLS ONLY stage has been fulfilled, conditions in the EB critical zone will be reviewed.
- When the density in the EB critical zone dips below the recovery density for **[3]** consecutive intervals, then the pricing framework will shift to the recovery phase. Otherwise, the BUS/REGISTERED VANPOOLS ONLY stage will remain ineffect.

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[3] To qualify for toll-free travel on the Express Connector, vanpools must be registered with RCTC and/or OCTA and must be carrying three or more occupants. If a vanpool is not (a) registered with RCTC and/or OCTA, and (b) carrying 3+ occupants, it will not have access to the Express Connector during the BUS/REGISTERED VANPOOLS ONLY stage.

[4] Please note that the actual messages to be posted on advanced signage are still being refined. The concurrence of all parties will be obtained as the messages are finalized.

[5] The TRANSIT & REGISTERED VANPOOLS ONLY level of control will be preceded by HOV ONLY. Therefore, if an HOV is caught between the advanced signage and the entry to the Express Connector when the "BUS/REGISTERED VANPOOLS ONLY" message is posted, then that HOV should not be subject to enforcement. However, all other non-HOVs should still be subject to enforcement.

Recovery Phase

- The recovery phase represents the gradual transition back to the first level of control, in which demand is managed by price alone. The recovery phase is triggered when the density in the EB critical zone remains below the recovery density for a duration of **[3]** consecutive intervals (configurable). The trigger is consistent regardless of which level of progressive demand management is currently in place.
- In the recovery phase, all restrictions are lifted in reverse order of implementation.
- If progressive demand management has only advanced to **Level 2 (TCM)**, then the recovery phase simply consists of disengaging the TCM. Advanced signage will be changed to eliminate all warnings of "METER ON." Normal Level 1 operations will resume.
- If progressive demand management has advanced to **Level 3 (TCM + HOV ONLY)**, then the recovery phase will have two stages. The recovery phase will proceed as follows:
    - **Stage 1** – All advanced signage indicating the HOV ONLY restriction will be removed, and all vehicles will be permitted to use the Express Connector. Meanwhile, the TCM will remain engaged. This stage will remain in effect until one of the following conditions are met:
        - **Condition #1:** The density in the EB critical zone rises and exceeds the maximum density for **[3]** consecutive intervals (configurable). This would indicate that congestion remains a problem. Consequently, the HOV ONLY restriction would be restored, and the 3rd level of control would be reinstated.
        - **Condition #2:** The queue at the TCM exceeds **[3400 feet]** or **[100 vehicles]** (both values of which are configurable). This would indicate that the TCM is not yet able to handle the demand resulting from the lifting of the HOV ONLY restriction. As a result, the HOV ONLY restriction would be restored, and the 3rd level of control would be reinstated.
        - **Condition #3:** The density in the EB critical zone stays below the recovery density for **[3]** consecutive intervals. This would indicate that conditions continue to be acceptable despite the removal of the restriction. As a result, the recovery phase would advance to Stage 2.
    - **Stage 2 –** The second stage in recovery is to disengage the TCM. Advanced signage will be changed to eliminate all warnings of "METER ON," and normal Level 1 operations will resume.
- If progressive demand management has advanced to **Level 4 (TCM + BUS/REGISTERED VANPOOLS ONLY)**, then the recovery phase will have three stages, proceeding as follows:
    - **Stage 1** – All advanced signage indicating the BUS/REGISTERED VANPOOLS ONLY restriction will be removed and replaced with HOV ONLY. All HOVs will be permitted to use the Express Connector. The TCM will remain engaged. Stage 1 will remain in effect until one of the following conditions are met:
        - **Condition #1:** The density in the EB critical zone rises and exceeds the maximum density for **[3]** consecutive intervals (configurable). This would indicate that congestion remains a problem. Consequently, the BUS/REGISTERED VANPOOLS ONLY restriction would be restored, and the 4th level of control would be reinstated.
        - **Condition #2:** The queue at the TCM exceeds **[3400 feet]** or **[100 vehicles]** (both values of which are configurable). This would indicate that the TCM is not yet able to handle the demand resulting from the lifting of the restriction. As a

result, the BUS/REGISTERED VANPOOLS ONLY restriction would be restored, and the 4th level of control would be reinstated.

- **Condition #3:** The density in the EB critical zone stays below the recovery density for **[3]** consecutive intervals. This would indicate that conditions continue to be acceptable despite the removal of the restriction. As a result, the recovery phase would advance to Stage 2.

- **Stage 2** – If conditions remain acceptable at the end of Stage 1, then stage 2 will consist of removing the HOV ONLY restriction from all advanced signage. During this stage, all vehicles will be permitted to use the Express Connector. Meanwhile, the TCM will remain engaged. This stage will remain in effect until one of the following conditions are met:
  - **Condition #1:** The density in the EB critical zone rises and exceeds the maximum density for **[3]** consecutive intervals (configurable). This would indicate that congestion is threatening to return. Consequently, the HOV ONLY restriction would be re-imposed, and the 3rd level of control would be reinstated.
  - **Condition #2:** The queue at the TCM exceeds **[3400 feet]** or **[100 vehicles]** (both values of which are configurable). This would indicate that the TCM is not able to handle the demand resulting from the lifting of the HOV ONLY restriction. To relieve the queuing problem, the HOV ONLY restriction would be restored, and the 3rd level of control would be reinstated.
  - **Condition #3:** The density in the EB critical zone stays below the recovery density for **[3]** consecutive intervals. This would indicate that conditions continue to be acceptable despite the lifting of the HOV ONLY restriction. As a result, the recovery phase would advance to Stage 3.
- **Stage 3** – The third stage in recovery is to disengage the TCM. Advanced signage will be changed to eliminate all warnings of "METER ON," and normal Level 1 operations will resume.

In short, the recovery phase represents the gradual return, in stages, to level 1 (pricing only) operations. During each stage, traffic conditions are monitored to ensure that unraveling the restrictions doesn't result in a deterioration of conditions to unacceptable levels.

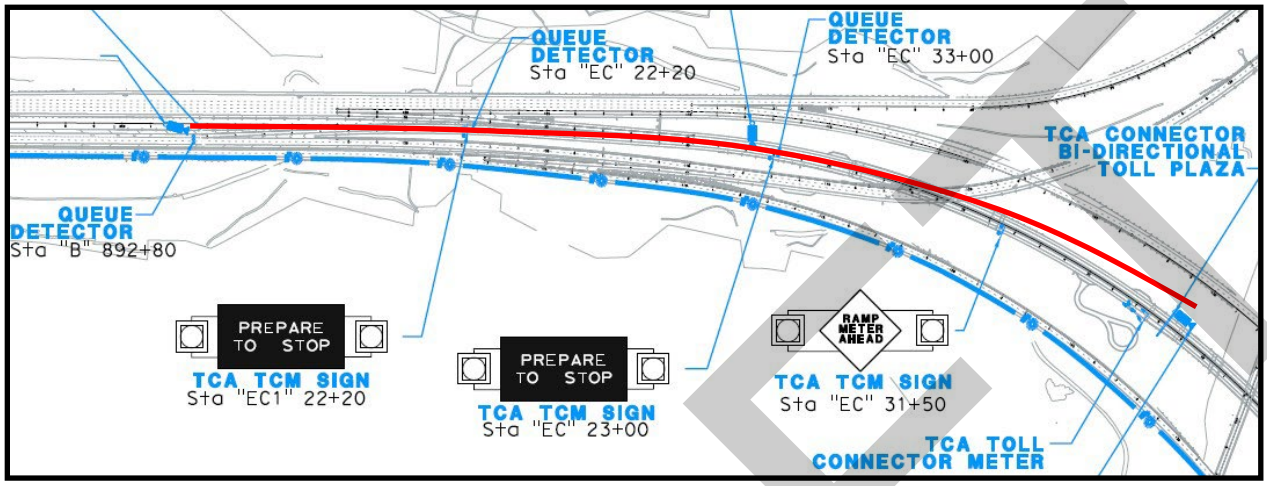
1.4. Toll Connector Meter

As noted in the previous section, the toll connector meter (TCM) is a critical component of the proposed pricing framework. Whenever the density in the EB critical zone is operating at an unacceptable level, the TCM may be engaged to better manage demand and to control access to the 91 Express Lanes.

The TCM is located 0.65 miles beyond the point at which the Express Connector diverges from SR-241. This positions the TCM about 0.93 miles before the point at which the Express Connector connects to the 91 Express Lanes. The TCM will provide access for a single lane of traffic. Unlike some ramp meters, the TCM will not include a separate lane for High Occupancy Vehicles (HOVs).

Whenever the TCM is engaged, it is important to monitor the queue length upstream of the meter. To perform this function, three queue detectors (labeled in bold blue font on the diagram) will be positioned at approximately 1000' intervals between the TCM signal and the point at which the NB-to-EB Express Connector diverges from SR-241. An excerpt from the plans is depicted in Figure 6 below.

Figure 6 – Layout of TCM and associated Queue Detectors



The bold, red line in Figure 6 depicts the maximum length of the queue at the TCM—currently set at approximately 3400' (0.65 miles). This space can accommodate approximately 95-115 vehicles, depending on vehicle length and car-following behavior. If the queue detectors determine that the queue has exceeded its maximum length, then the next level of PDM will be engaged. This could mean converting to HOV ONLY (if the Express Connector is currently open to all vehicles), or it could mean converting to BUS/REGISTERED VANPOOLS ONLY (if the Express Connector is currently operating as HOV ONLY).

Because of the integral role that these queue detectors will play in managing demand as part of progressive demand management, and because of their relationship to dynamic pricing, it will be critical that the toll system integrator regularly maintain them.

1.5. Summary

To summarize, the proposed tolling concept for the NB-to-EB Express Connector employs four progressive levels of demand management. The intent of these levels is to introduce increasingly aggressive strategies for restricting the flow of traffic on the Express Connector as a means of supporting congestion-free conditions on the 91 Express Lanes.

Throughout the 2nd, 3rd, and 4th levels of demand management, the queue at the TCM and the density in the EB critical zone are both monitored. The framework continually escalates to higher levels of demand management when either (a) the density in the EB critical zone remains stubbornly high (i.e., at or above maximum density), or (b) the queue at the TCM becomes excessively long. The framework gradually transitions back to the 1st level of demand management once the density in the EB critical zone consistently operates below the recovery density. The reversion to the 1st level of demand management occurs in the reverse order of the way the restrictions were imposed.

Appendix B depicts how the corridor's electronic signs in the NB-to-EB corridor will be configured to support the various levels of progressive demand management. The graphics in Appendix B show the following:

- How the signs will be arrayed (1) under normal (free-flow conditions), (2) when the TCM is engaged, (3) when the facility converts to HOV ONLY, and (4) when the facility converts to Bus/Registered Vanpool Only (see Figure 11 through Figure 17).
- How the signs will be arrayed if the NB-to-EB Express Connector needs to be closed because of an incident or due to maintenance activity (see Figure 18).

1.6. Dynamic Pricing Day 1 Plan

The progressive demand management framework presented in the preceding subsections (1.1 through 1.5) represents the baseline approach for ensuring efficient traffic operations in the NB-to-EB direction It provides an overview of the array of tools available for enabling the Express Connector to meet its operational goals. In short, it presents the "full toolbox" at the disposal of the facility operator.

Stantec applied this toolbox to its traffic modeling efforts to help anticipate how traffic operations would respond in the opening year. Stantec made the following key observations:

- For the first part of the week (**Mon-Wed**), an Express Connector toll of $9 or less would be sufficient to manage demand in the EB critical zone. No additional PDM measures would be necessary to appropriately manage either the EB critical zone or conditions on the East End.
- However, **Thursdays and Fridays** would be more problematic. To manage conditions at the East End, the Express Connector toll would need to be in the $20-$30 range, and the discharge rate at the TCM would need to be lowered to 240 vehicles per hour (one vehicle every 15 seconds). F/ETCA considered this to be an unsustainably low discharge rate that would likely trigger many violations.
- **Weekends** were not modeled but Stantec's expectation was that demand would generally be less than the first part of the week (Mon-Wed).

In short, the application of the "full toolbox" on Thursdays and Fridays would likely create a situation

requiring the engagement of the TCM at a very low discharge rate. This, in turn, would lead to either a significant number of violations (potentially compromising conditions at the East End) or an extensive building of queues (which would inevitably lead to HOV ONLY mode).

As a means of avoiding operational disruptions on Thursday and Friday afternoons, it was decided to modify the approach to PDM. This approach would take the following two steps during "Peak Density periods" on Thursday and Friday afternoons:[6]

- Skip the 2nd level of control (TCM) entirely, since it will be ineffective during periods of extremely high demand.
- Preemptively implement the 3rd level of control, HOV ONLY, at the front end of the peak travel time. As an option, the TCM can be implemented concurrently with HOV ONLY mode to break up platooning and help with enforcement. This approach will help avert operational problems in the EB critical zone and at the East End.

The preemptive implementation of HOV ONLY would best be done on a *scheduled* basis, based on regularly- observed travel patterns in the corridor. This will introduce a degree of predictability to demand management, making it easier for regular drivers through the corridor to adjust their travel accordingly.

Stantec's modeling of the above approach indicated the following:

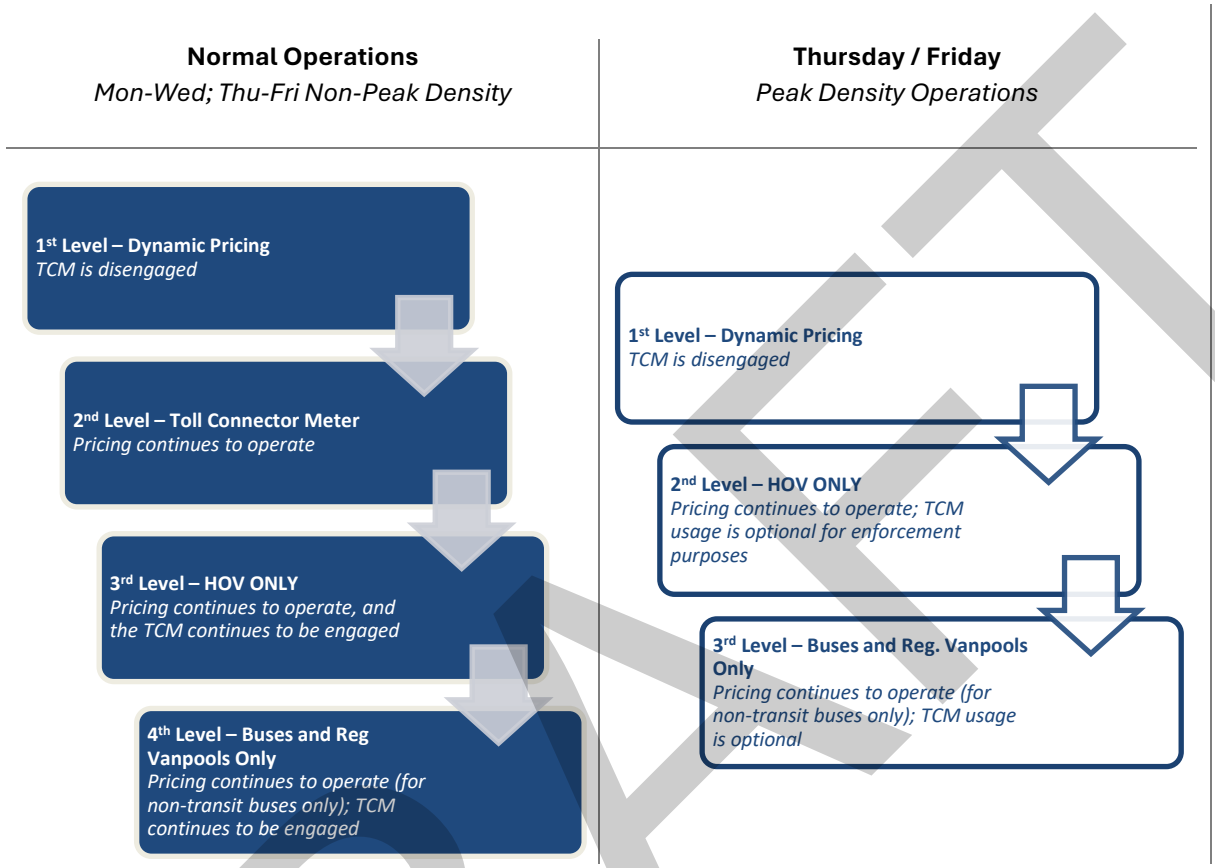
- A **$20 toll** on the Express Connector, accompanied by an access restriction lasting **2 hours and 15 minutes**, would be sufficient to manage demand in both the EB critical zone and the East End.
- A **$30 toll** on the Express Connector, accompanied by an access restriction lasting **1 hour and 15 minutes**, would be sufficient to manage demand in both the EB critical zone and the East End.

In other words, skipping the TCM level and preemptively implementing HOV ONLY should provide a consistent and effective strategy for managing demand during Peak Density periods on Thursdays and Fridays. During the remainder of the week, the normal progression presented graphically in Figure 1 will apply.

The basic framework for the Dynamic Pricing Day 1 Plan is presented in Figure 7.

[6] The term "Peak Density period" is used in the Exhibit to refer to a period of extremely high demand. Peak Density periods are a subset of peak periods, and they are only observed in the eastbound direction. A detailed review of traffic data has indicated that Peak Density periods occur on Thursday afternoons (2-3pm) and Friday afternoons (1-3pm). Traffic modeling has indicated that, outside of Peak Density periods, pricing alone should be sufficient to manage demand on the Express Connector. However, during Peak Density periods, the additional measures provided by the progressive demand management (PDM) framework will likely be necessary. The strategy presented in Section 1.6 outlines a unique application of PDM to be deployed during Thursday and Friday Peak Density periods in the initial (Day 1) stages of dynamic pricing.

Figure 7 – Dynamic Pricing Day 1 Plan



For a detailed summary of the results of Stantec's traffic modeling of the NB-to-EB Express Connector, please see the matrix in Appendix A.[7]

1.7. Flexible Deployment of Progressive Demand Management

The previous section laid out an alternative implementation of progressive demand management (PDM), to be deployed during Thursday and Friday Peak Density periods. This alternative differs from the "Full Toolbox" approach to PDM in two important ways:

- First, one level of PDM—the "Toll Connector Meter" level—is avoided entirely.
- Second, the second level of PDM is triggered by a schedule rather than by operational conditions.

This variation of PDM in the context of Thursday and Friday Peak Density periods highlights an important point: Final implementation of dynamic pricing on the NB-to-EB approach should support flexible alterations of the progressive demand management structure initially presented in Figure 1.

[7] The framework developed for Normal Operations and for Peak Density Operations was based on information available at the time of this Agreement. Please note that framework will be re-evaluated (and adjusted if needed) prior to opening as more recent data becomes available.

Specifically, any final implementation of dynamic pricing should be able to accommodate the following:

- **Enabling the various levels of PDM to be engaged in a different order**. This would include, for example, the ability to engage the HOV-related access restrictions before engaging the toll connector meter.
- **Enabling various levels of PDM to be bypassed entirely**. This would include, for example, the ability to completely skip the Toll Connector Meter.
- **Facilitating the option to use either HOV2+ ONLY and HOV3+ ONLY**. There is considerable uncertainty regarding the relative volume of traffic that would use the Express Connector under an HOV2+ restriction as compared to an HOV3+ restriction. It would be helpful to have the flexibility to enable a less-onerous HOV2+ restriction prior to any subsequent restrictions. In other words, in the ultimate implementation of PDM, it would be helpful if Level 3 (HOV ONLY) were subdivided into Level 3a (HOV2+ ONLY) and Level 3b (HOV3+ ONLY). Moreover, the PDM framework should have the flexibility to prefer one over the other, or alternatively to deploy both in sequence.
- **Supporting multiple methods of transition from one level of PDM to another**. The "Full Toolbox" approach to PDM, as outlined in Sections 1.1 through 1.5, presented a detailed plan for moving from one level of PDM to another in an automated fashion, based on evolving traffic conditions. However, the ultimate implementation of PDM should also support both *scheduled* and *manual* transitions between levels. For example, the success of the Dynamic Pricing Day 1 plan depends on the ability to preempt the normal functioning of dynamic pricing by scheduling a transition to HOV ONLY.

Another feature of the "flexible deployment" approach to PDM would be the ability to use the toll connector meter as a traffic control device. For example, consider the "Thursday/Friday Operations" framework depicted in Figure 7. During the period in which the HOV ONLY restriction is engaged, the TCM will not be operating as a meter. However, it may be helpful to have the TCM activated, with short cycle lengths, during the HOV ONLY restriction. Its effect would be to slow traffic and break up platoons, which in turn could support HOV enforcement efforts.

The process of implementing alterations to the baseline PDM framework is discussed in Section 5.2 of Exhibit F (*Traffic Operations Metrics Monitoring and Governance*).

2. Progress Demand Management on the Westbound-to-Southbound Connector

The proposed approach for the WB-to-SB Express Connector will focus on managing demand through price alone. There are at least three obstacles to effective implementation of the full "progressive demand management toolbox" (as laid out in Section 1) in the WB-to-SB direction:

- First, since the Express Connector lies downstream of the WB critical zone, there is no way to effectively implement a tollconnector meter.
- Second, the existing signage is insufficient to support the implementation of progressive demand management (PDM). An entirely new array of signs would be required to communicate restrictions such as HOV ONLY or BUS/REGISTERED VANPOOLS ONLY.
- Third, even if signage were available, the implementation of PDM would have tremendous potential to confuse drivers. To illustrate, consider a situation in which F/ETCA sought to impose an HOV ONLY restriction on the WB-to-SB Express Connector. To do so, F/ETCA would

need to post an HOV ONLY message prior to the entrance to the WB Express Lanes. This sign would necessarily be placed in view of **all** drivers accessing the OCTA 91 Express Lanes in the WB direction. Therefore, the sign would need to clearly communicate that the restriction only applied to drivers destined for the WB-to-SB Express Connector. There would be a high risk that OCTA customers who were planning to travel the full length of the 91 Express Lanes could be confused and therefore avoid using the Express Lanes, when in fact the HOV restriction did not apply to them.

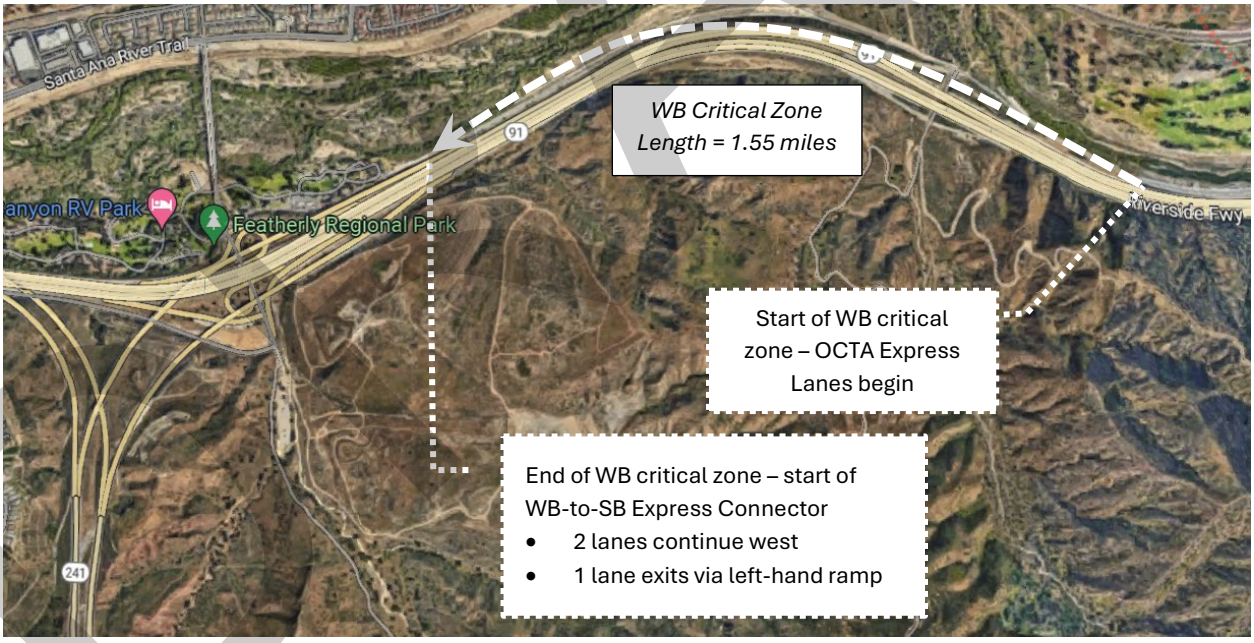
For these reasons, it has been determined that demand for the WB-to-SB Express Connector will be managed through Level 1 (price alone). Subsequent levels may be implemented in the future as traffic volumes increase and density rises.

2.1. WB-to-SB Approach Overview

In general terms, the proposed tolling approach for the WB-to-SB Express Connector can be described as follows:

- The tolling approach will focus on the 1.55-mile WB critical zone depicted in Figure 8. Tolling operations will be designed to ensure that this segment of roadway operates *at or above* agreed-to performance metrics. Please see Exhibit F of the Operating Agreement for a detailed discussion of traffic operations metrics.

Figure 8 – WB Critical Zone of the 91 Express Lanes

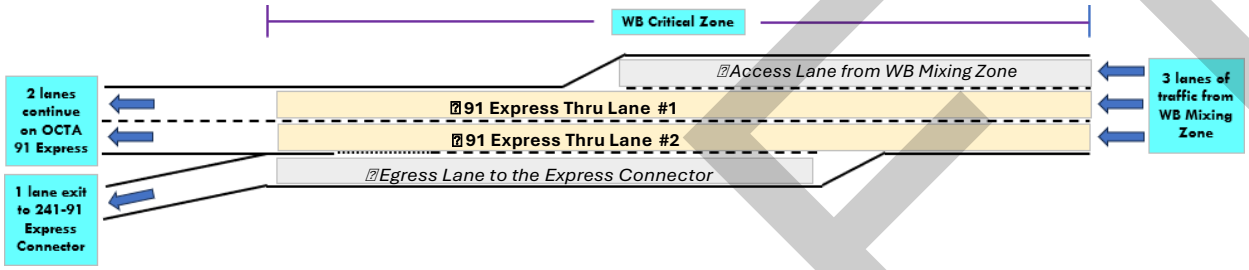


- The goal for tolling operations should be to maintain conditions such that they are at or below a configurable density level in the WB critical zone. The desired density level for the WB critical zone need not be identical to the desired density level for the EB critical zone.

- The price to use the WB-to-SB Express Connector shall be related to the density observed in the WB critical zone. The calculation of density in the WB critical zone will focus on data collected

from the two thru lanes that continuously serve the 91 Express lanes. These are illustrated by the shaded lanes depicted in Figure 9. The calculation of density will not consider speeds and volumes collected from the egress lane to the Express Connector, nor will it consider speeds and volumes collected from the access lane from the WB mixing zone prior to its merge onto the 91 Express Lanes. The purpose of this restriction is to ensure that traffic being served by the 91 Express Lanes receives congestion-free service, regardless of what is going on in the adjoining lanes.

Figure 9 – Designated Lanes for Measuring Density in the WB Critical Zone

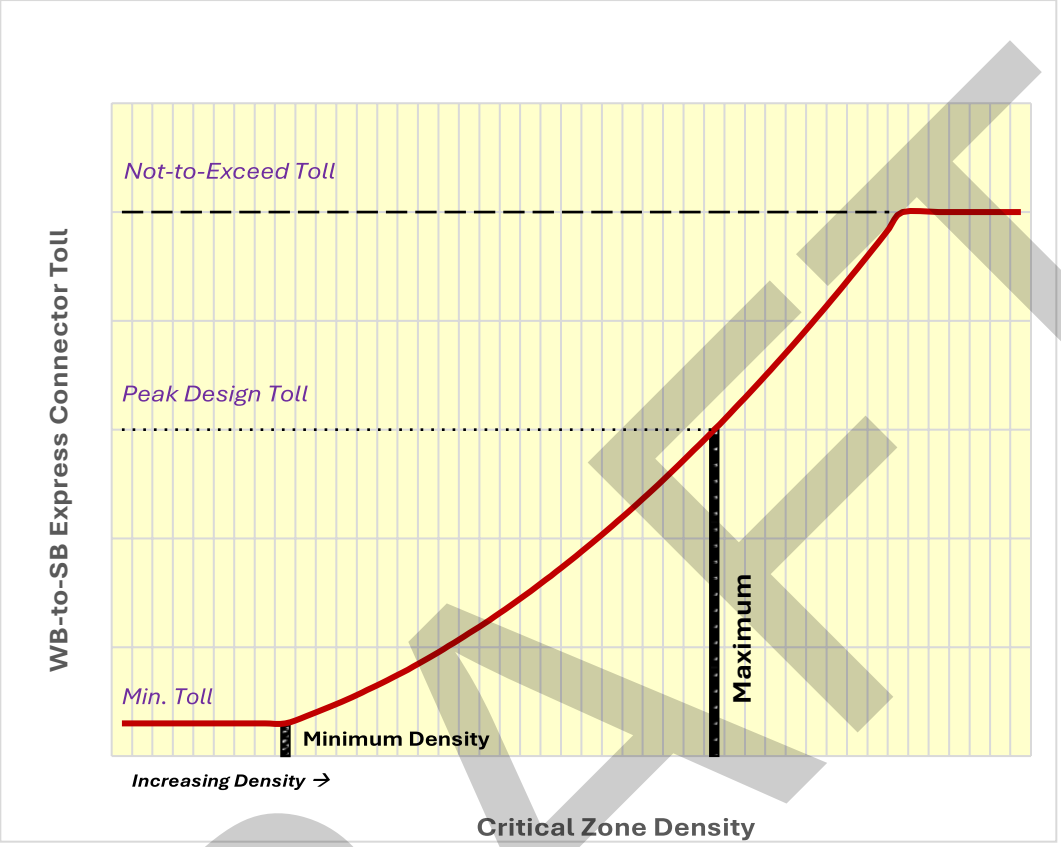


- As noted in the discussion of the EB critical zone, traffic conditions in the WB critical zone will be monitored, densities calculated, and prices adjusted at frequent intervals. The intervals should be no shorter than two minutes in length and no longer than fifteen minutes in length, with a recommended duration of **[5]** minutes. The duration of the interval should be configurable and should be the same in eachdirection.

2.2. Formula Governing Density-Price Relationship

The graphic depicted in Figure 10 illustrates the proposed relationship between density and price for the WB- to-SB Express Connector. The basic parameters of the graphic are similar to those that were presented for the NB-to-EB Express Connector. However, the actual values underlying the graphic may differ in each direction.

Figure 10 – Conceptual Relationship between Density and Price, WB-to-SB Express Connector



The components of Figure 10 are very similar to those of Figure 4. They are defined below.

- **Minimum Density**. This is the density level in the critical zone above which the toll rate begins to rise. If the density in the critical zone is at or below this level, the minimum toll will apply. Stated another way, the "minimum density" represents the highest density level at which the minimum toll will apply.
- **Minimum Toll**. This is the toll rate that would be assessed whenever the density in the WB critical zone is at or below the "minimum density" level. It is the lowest toll that would be charged for the Express Connector.
- **Maximum Density**. This represents the maximum density that would be considered acceptable in the WB critical zone. Toll rates would escalate very quickly when the density exceeds this level.
- **Peak Design Toll**. This represents the highest toll rate that would normally be charged to customers to use the Express Connector. This toll rate would apply when the density in the EB critical zone reaches the maximum density.
- **Not-to-Exceed Toll**. This represents the maximum toll rate that would be charged. A Not-to Exceed Toll may be used to prevent the dynamic pricing system from producing an unexpectedly high toll rate, but is not permitted to be used as a price cap. The Parties will establish a Non-to-Exceed Toll for purposes of controlling and monitoring the dynamic pricing algorithm.

The general formula governing the **curved portion** of the density-price graph is essentially the same as

the formula governing the NB-to-EB Express Connector. The formula is described below.

$$Toll = k * (\theta * D)^{\beta}$$

Where:

k = minimum toll

D = density in the EB critical zone

Θ = multiplier, calibrated such that "Θ * D" = 1.0 at the point of minimum density

ß = rate escalation factor

- To ensure that tolls escalate at an ever-increasing rate as density increases, ß should be set at a value greater than 1.0
- The value of ß should be calibrated such that the toll rate reaches the peak design toll when density reaches the maximum density level described above

To illustrate, consider the following hypothetical situation in which the following parameters are defined:

- The minimum toll rate is $3.00
- The minimum toll rate applies to all densities up to 9 vplpm
- The peak design toll is $30
- The maximum density is 30 vplpm
- The not-to-exceed toll is $50

The formula in this instance would be:

Toll = $3.00 * (0.1111 * D)$^{1.9125}$

where D = density in the WB critical zone

*subject to a minimum toll of **$3.00** and a not-to-exceed toll of **$50.00***

The formula described above translates density into price in the following manner:

- When the density in the WB critical zone is at or below the minimum density of 9 vplpm, the toll is equal to the minimum toll of $3.00.
- When the density in the WB critical zone is at the maximum density of 30 vplpm, the toll is equal to the peak design toll.
- When the toll reaches the not-to-exceed toll, the price holds regardless of the recorded density. Under the parameters of the formula noted above, the not-to-exceed toll of $50 is reached when the density in the critical zone is nearly 39 vehicles per lane per mile (vplpm). Any density above that level would still trigger a toll of $50.
- All values should be configurable to enable an appropriate pricing response to actual conditions. The values to be deployed when the system goes live will be determined in consultation with all Partner agencies. This process will be informed by simulation modeling and testing.

As noted earlier, the key parameters (e.g., minimum toll rate, minimum density, peak design toll rate, maximum density) may be different in each direction. The process of determining these key parameters will be informed by simulation modeling and testing. The values to be deployed when the system goes live will be determined in consultation with all Partner agencies.

2.3. Benefits and Risks of Demand Management by Price Alone

The proposed pricing framework for the WB-to-SB Express Connector implicitly assumes that price alone will be sufficient to both (a) manage demand for the Express Connector, and (b) maintain acceptable conditions within the WB critical zone. No additional control measures will be employed in the WB-to-SB direction. This approach, which contrasts with the "progressive demand management" approach recommended for the NB- to-EB direction, carries both benefits and risks.

- Benefits of the "Price Alone" approach
    - **Simplicity**. The price to use the Express Connector is a function of density, with no other layers of control required.
    - **Clarity**. This approach avoids potential confusion for OCTA customers.
    - **Cost**. This approach is cheaper to implement (by avoiding the need for new signage) and operate (less TOC support required).
- Risks of the "Price Alone" approach
    - **Acceptable cost.** This approach requires that a price that is lower than the "not-to-exceed toll" will be sufficient to manage conditions in the WB critical zone.
    - **Fewer tools**. If price alone fails to manage the demand in the WB critical zone, there is no backstop (such as a meter or an access restriction).

Initial traffic modeling has indicated that peak-period conditions in the WB critical zone can be sustained with an Express Connector toll of $11. In other words, traffic modeling to date does not support the need for progressive demand management (PDM); pricing alone should be sufficient to sustain acceptable traffic operations. However, in the future, the governance team (discussed in Exhibit F of the Operating Agreement), through continuous operational monitoring and oversight, will have the opportunity to incorporate additional PDM tools beyond price (as needed) to satisfy the corridor's performance metrics.

Appendix A. Stantec Modeling Summary

Stantec modeled six scenarios as part of its detailed analysis of progressive demand management for the NB-to-EB Express Connector. These scenarios are described below:

- **Scenario 0 – Baseline**. This scenario assesses the no-build condition.
- **Scenario 1 – Dynamic Pricing Only**. This scenario considers the toll rate that would need to be charged on the Express Connector if *pricing alone* were required to satisfy the performance metrics. The key outcome of this scenario was that the EC price would need to be very high to manage demand by itself.
- **Scenario 2 – Dynamic Pricing + TCM**. This scenario considers how the toll connector meter (TCM) would need to operate (in terms of discharge rate and length of operation) if it were engaged once the Express Connector toll hit a certain level. The key outcome of this scenario was that, if the EC toll were held to a reasonable level, then the discharge rate would need to be extremely (and perhaps unmanageably) low to manage demand appropriately.
- **Scenario 3 – Dynamic Pricing + TCM + HOV3+ Only**. This scenario considers the combined implementation of dynamic pricing (held to $20 or less), the TCM (held to a discharge rate of no less than 600 vehicles per hour), and HOV ONLY (defined as 3 or more occupants). The key outcome of this scenario was that the TCM would need to be engaged for 2 hours and 45 minutes during Friday peak periods. For most of that time (2:15), the HOV ONLY restriction would also need to be engaged.
- **Scenario 4 – Dynamic Pricing + HOV3+ Only**. This scenario considers bypassing the TCM stage and going directly from "Dynamic Pricing Only" to "Dynamic Pricing + HOV ONLY." The rationale is that bypassing the TCM eliminates a very short-lived stage of PDM and, in doing so, avoids any potential queuing issues at the TCM. The key outcome of this scenario is the discovery that this strategy, coupled with a toll rate of $30 at the Express Connector, yields a situation in which access restrictions are only required for 1:15 of the peak period on Friday afternoons.
- **Scenario 5 – Dynamic Pricing + HOV2+ Only**. This scenario is nearly identical to Scenario 4, except that the HOV restriction is 2+ instead of 3+. The analysis indicates a very similar result to Scenario 4. A toll rate of $30, coupled with an HOV2+ restriction of 1:15 during peak periods, is sufficient to manage the demand.

Table 2 (on the following page) provides a detailed summary of the modeling results.

Table 2 – Summary Results of Stantec's Modeling of the NB-to-EB Corridor

EB 2028 EC Scenarios & Results Peak Hour (2-3pm)		Toll Rates		Toll Connector Meter				HOV Active Time	ELC Volume	241 GP queue	EC vs GP Time Savings (*No Build shows GP TT*)	Comments / Additional Information
		RC 91 EL	241/91 EC	Active Time	time b/t green	Queue	Delay					
0. 2028 No Build	Fri 0	$10	Not Applicable							6.4 mi	*63 min*	• Expect 241 GP to worsen over next several years
1. Dynamic Pricing Only	M-W 1a	$10	$9	Not Triggered					700	<1.0 mi	~2 min	• Demand requires high tolls on Thurs for 1 hr. and Fri for 3 hrs. Not required Mon-Wed. • EC tolls of $10 or less using Dynamic Pricing is sufficient to manage Critical Zone, but elevated tolls are needed to manage the East End 91 EL within 3000 vph. • A higher RC 91 EL toll reduces the ELC toll • Using other PDM tools may reduce high EC tolls to help manage east end
	Thurs 1a		$46						460	1.6 mi	14 min	
	Fri 1a		$59						255	2.1 mi	21 min	
	Fri 1b	$12	$53						325	2.0 mi	19 min	
	Fri 1c	$15	$43						435	1.8 mi	16 min	
2. Trigger Toll Connector Meter at $20 or $30	Thurs 2a	$10	$20	1:30	8 sec	0.3 mi	5 min	Not Triggered	505	1.5 mi	8 min	• TCM queues within storage limit for <3 hours. Max of 15 sec b/t green signals (avg hourly) • $30 vs $20 trigger results in shorter TCM queues and less activation time but does not reduce time b/t green signals. • Changes in RC 91 EL tolls may reduce TCM queue, reduce time b/t green signals, and reduce the duration the TCM is active. • Metering during peak periods with long wait times may result in customer frustration and unwanted driver behavior
	Fri 2a			2:30	15 sec	0.3 mi	11 min		295	1.8 mi	6 min	
	Fri 2b		$30	1:45	15 sec	0.3 mi	9 min		300	1.9 mi	9 min	
	Fri 2c	$12		1:15	12 sec	0.2 mi	6 min		370	1.7 mi	9 min	
	Fri 2d	$15		1:00	9 sec	0.2 mi	4 min		460	1.6 mi	10 min	
3. TCM at $20 limited to 6s, HOV 3+ Only	Fri 3a	$10	$20	2:45	6 sec	0.3 mi	2 min	2:15	550	3.8 mi	50 min	• Limiting time b/t green signals to 6 sec requires HOV 3+ Only mode to reduce EC demand. TCM queues are shorter, but GP queues are longer.
4. Trigger HOV 3+ Only at $20 or $30 (assumes 25% HOV3+)	Fri 4a	$10	$20	Assumes TCM not active in managing demand. Activating TCM when in HOV ONLY may improve HOV enforcement to help manage demand.				2:15	150-160 vph	3.5 mi	43 min	• HOV 3+ Only mode reduces EC demand and eliminates TCM queues. EC demand may shrink more than needed to manage Critical Zone and East End. • 241 GP queues are longer since demand is pushed from EC to GP connector. • Higher RC 91 EL tolls allows for less HOV Only active time and decreases GP queues. • $30 vs $20 trigger results in less HOV Only time at $10 RC 91 EL toll and less GP queues. Otherwise, $30 vs $20 trigger reduces EC demand and extends GP queues
	Fri 4b	$12						1:15		2.0 mi	19 min	
	Fri 4c	$15						1:00		1.8 mi	17 min	
	Fri 4d	$10	$30					1:15	130-140 vph	2.2 mi	21 min	
	Fri 4e	$12						1:15		2.1 mi	20 min	
	Fri 4f	$15						1:00		2.0 mi	19 min	
5. Trigger HOV 2+ Only at $20 or $30 (assumes 60% HOV2+)	Fri 5a	$10	$20	Assumes TCM not active in managing demand. Activating TCM when in HOV ONLY may improve HOV enforcement to help manage demand.				2:15	370-380 vph	1.8 mi	17 min	• More EC demand and shorter GP queues versus HOV3+ scenarios • $30 vs $20 trigger results in less HOV Only time at $10 RC 91 EL toll and less GP queues. Otherwise, $30 vs $20 trigger reduces EC demand and extends GP queues • Higher RC 91 EL tolls allows for less HOV Only active time and decreases GP queues. • In scenarios with $10 or $12 RC 91 EL toll, east end volume exceeds 3000 vph at 60% HOV Share, so improved HOV enforcement and/or other PDM tools needed.
	Fri 5b	$12						1:15		0.9 mi	8 min	
	Fri 5c	$15						1:00		0.6 mi	5 min	
	Fri 5d	$10	$30					1:15	320-330 vph	1.5 mi	13 min	
	Fri 5e	$12						1:15		1.3 mi	11 min	
	Fri 5f	$15						1:00		1.0 mi	8 min	

Appendix B. Electronic Signage Scenarios

The nine graphics in this appendix depict how the corridor's electronic signs will be configured to support the various levels of progressive demand management. The graphics are laid out in the following order:

- Figure 11 (off-peak) and Figure 12 (peak) depict the array of signage that supports **normal operations** on the NB-to-EB Express Connector.
- Figure 13 (off-peak) and Figure 14 (peak) depict the array of signage that supports operations when the **TCM is engaged** on the NB-to-EB Express Connector.
- Figure 15 (off-peak) and Figure 16 (peak) depict the array of signage that supports operations when the NB-to-EB Express Connector transitions to **HOV ONLY** mode.
- Figure 17 depicts the array of signage that supports operations when the NB-to-EB Express Connector transitions to **Transit and Vanpool Only** mode.
- Figure 18 depicts the array of signage informing the public if the NB-to-EB Express Connector is **closed** (e.g., because of an incident or due to maintenance requirements).
- Lastly, Figure 19 depicts the array of signage that supports traffic operations for the WB-to-SB Express Connector.

Figure 11 – NB-to-EB Sign Configuration, Dynamic Pricing in Free-Flow Conditions (Off-Peak)

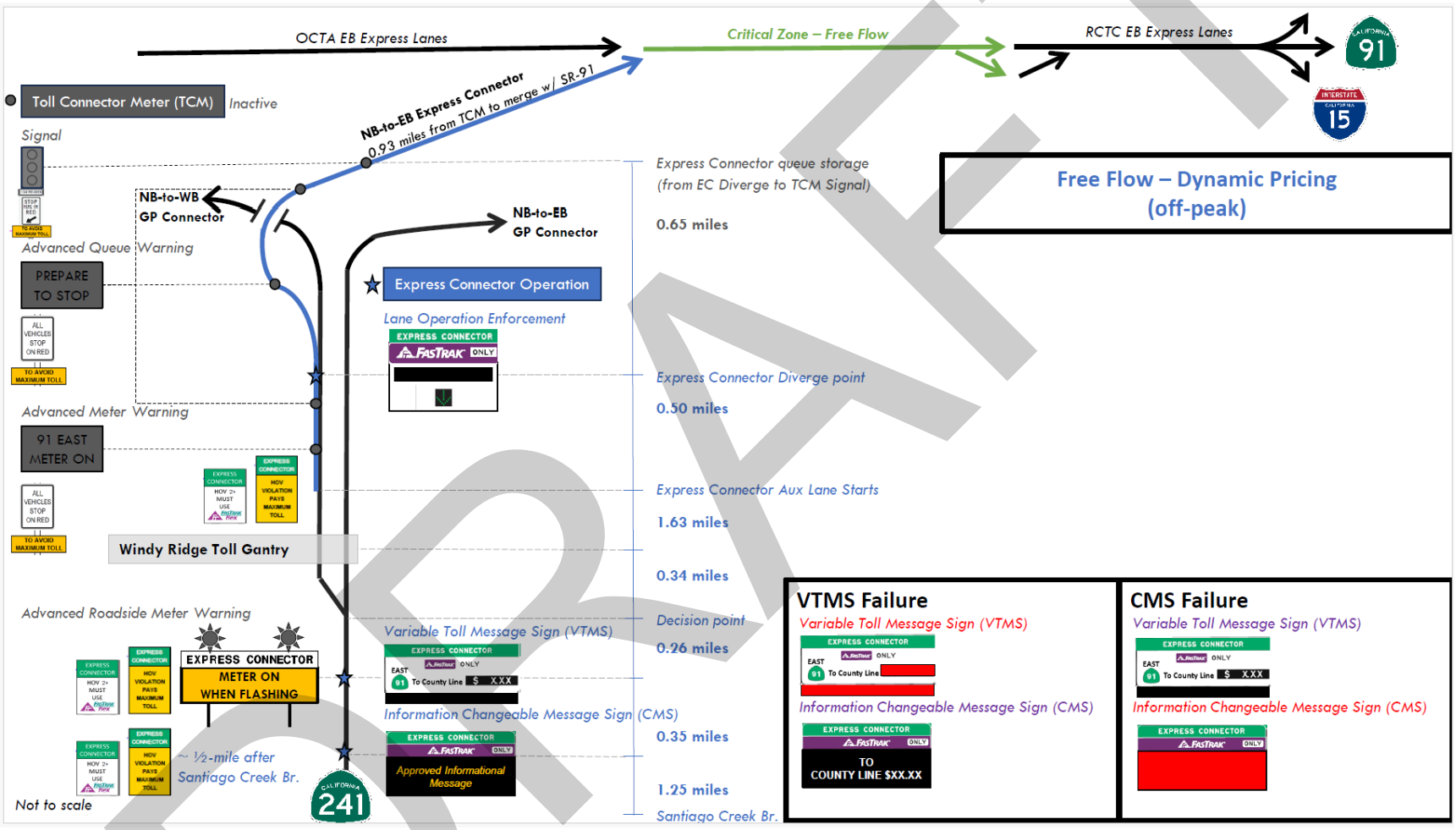


Figure 12 – NB-to-EB Sign Configuration, Dynamic Pricing in Free-Flow Conditions (Peak)

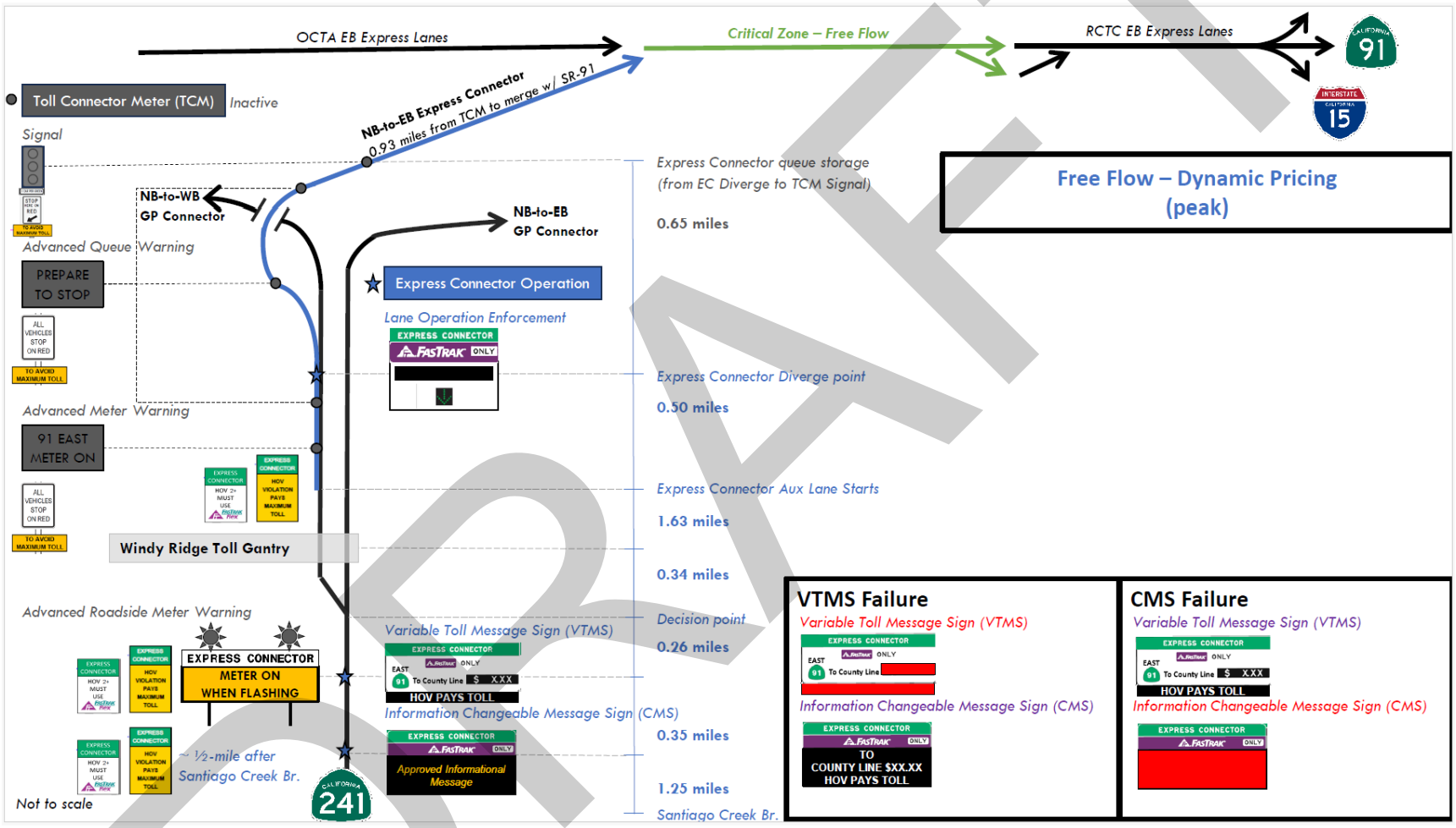


Figure 13 – NB-to-EB Sign Configuration, TCM Engaged (Off-Peak)

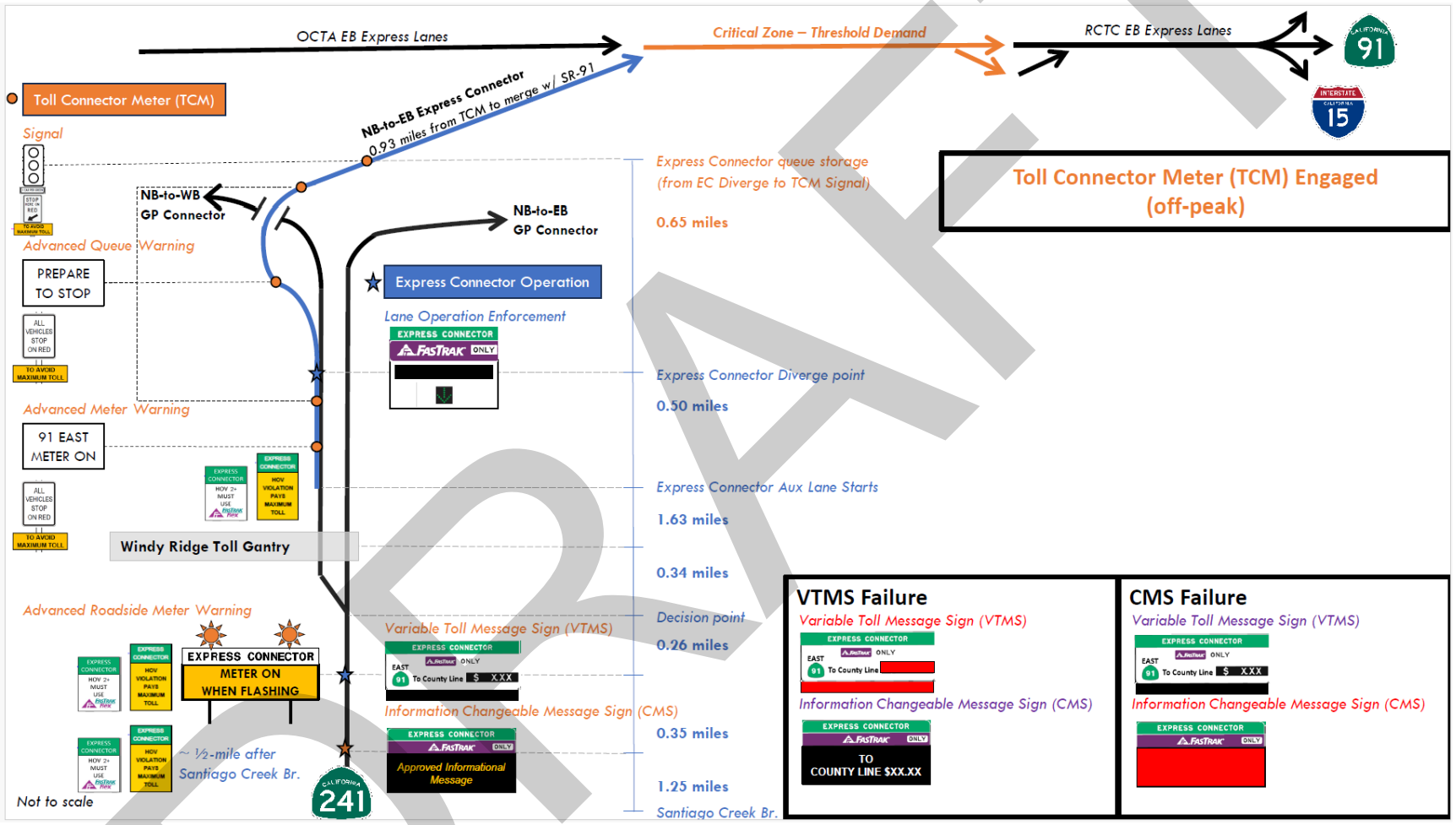


Figure 14 – NB-to-EB Sign Configuration, TCM Engaged (Peak)

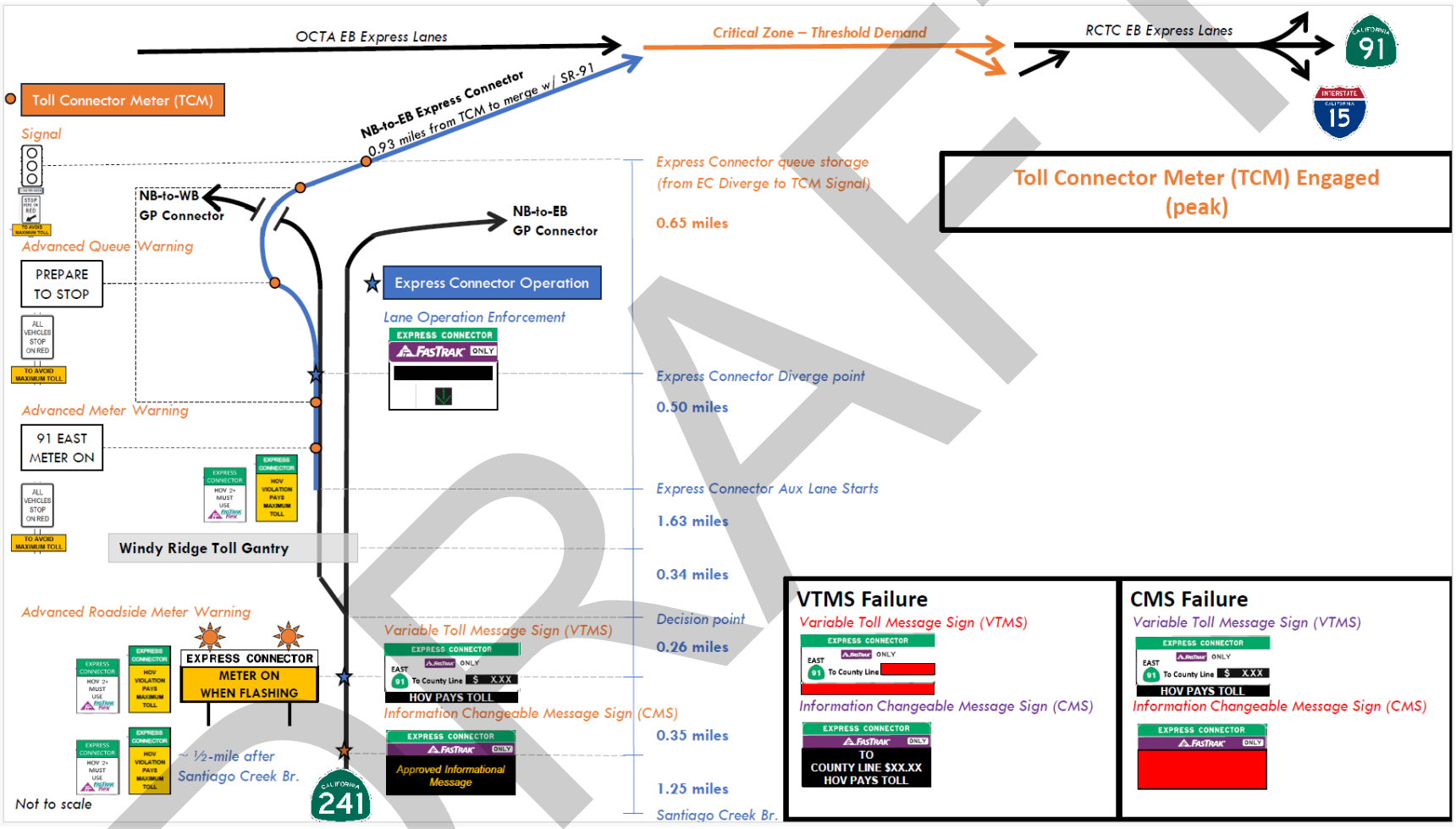


Figure 15 – NB-to-EB Sign Configuration, HOV ONLY Mode (Off-Peak)

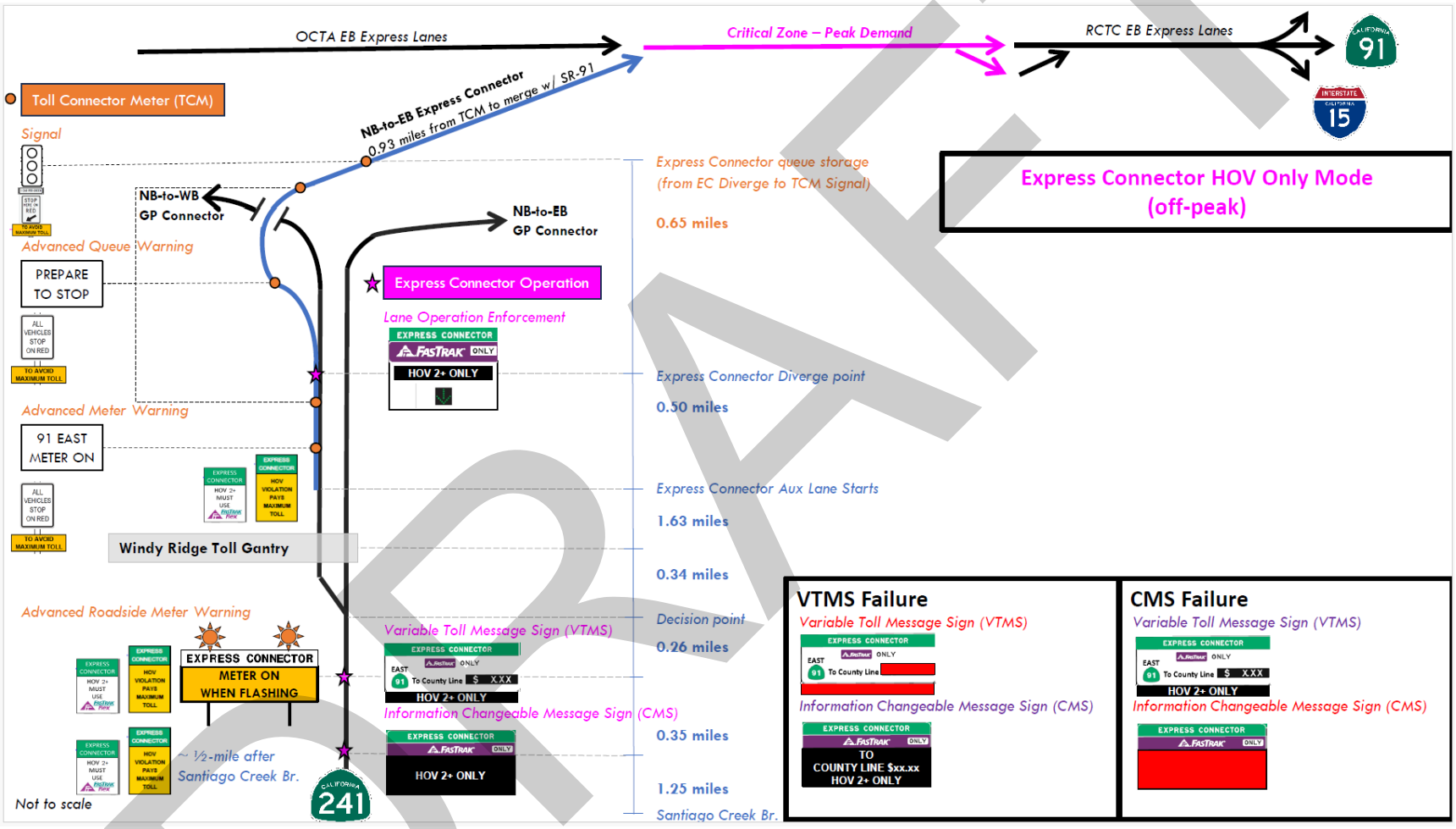


Figure 16 – NB -to-EB Sign Configuration, HOV ONLY Mode (Peak)

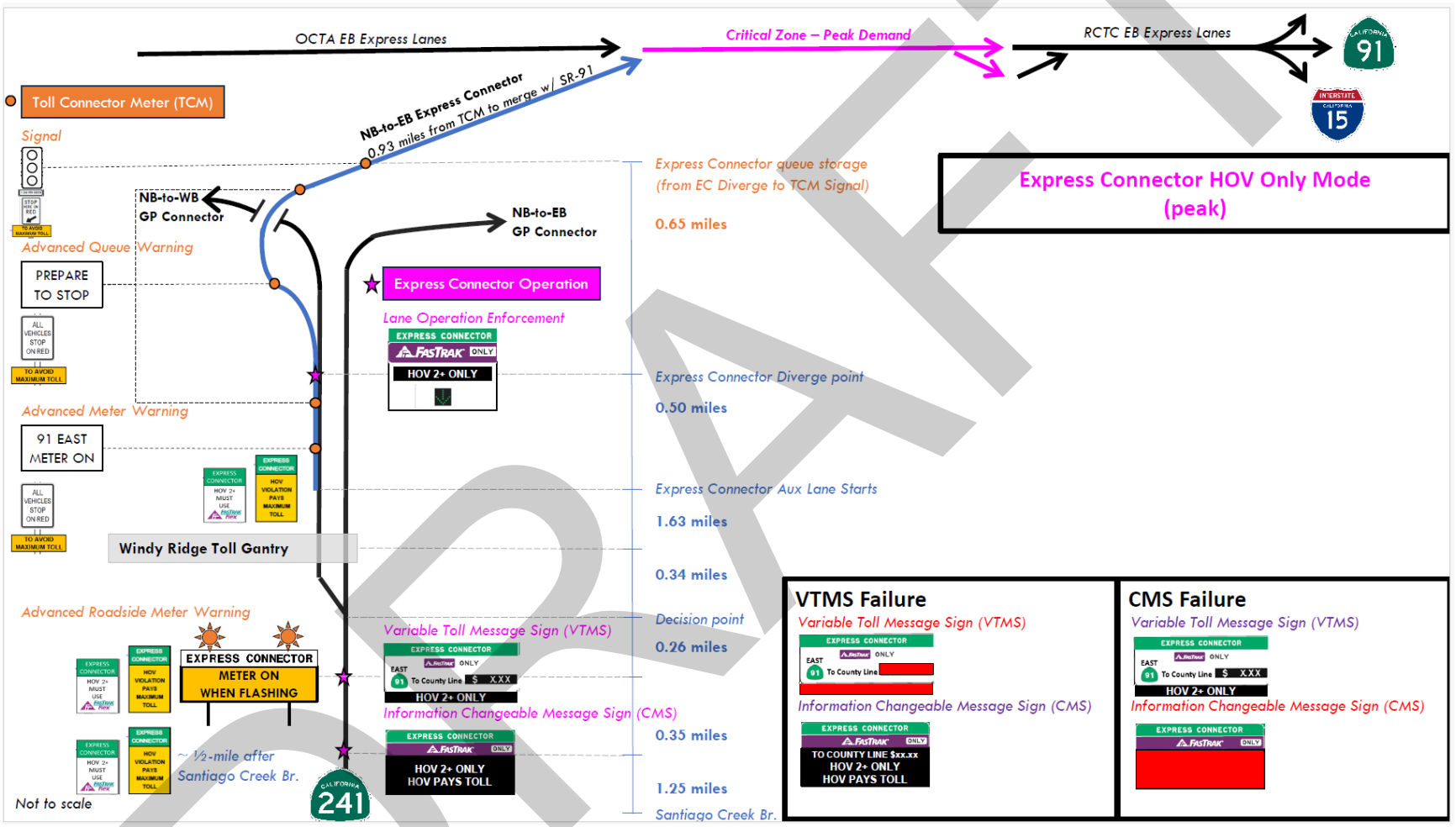


Figure 17 – NB-to-EB Sign Configuration, BUS/REGISTERED VANPOOLS ONLY Mode

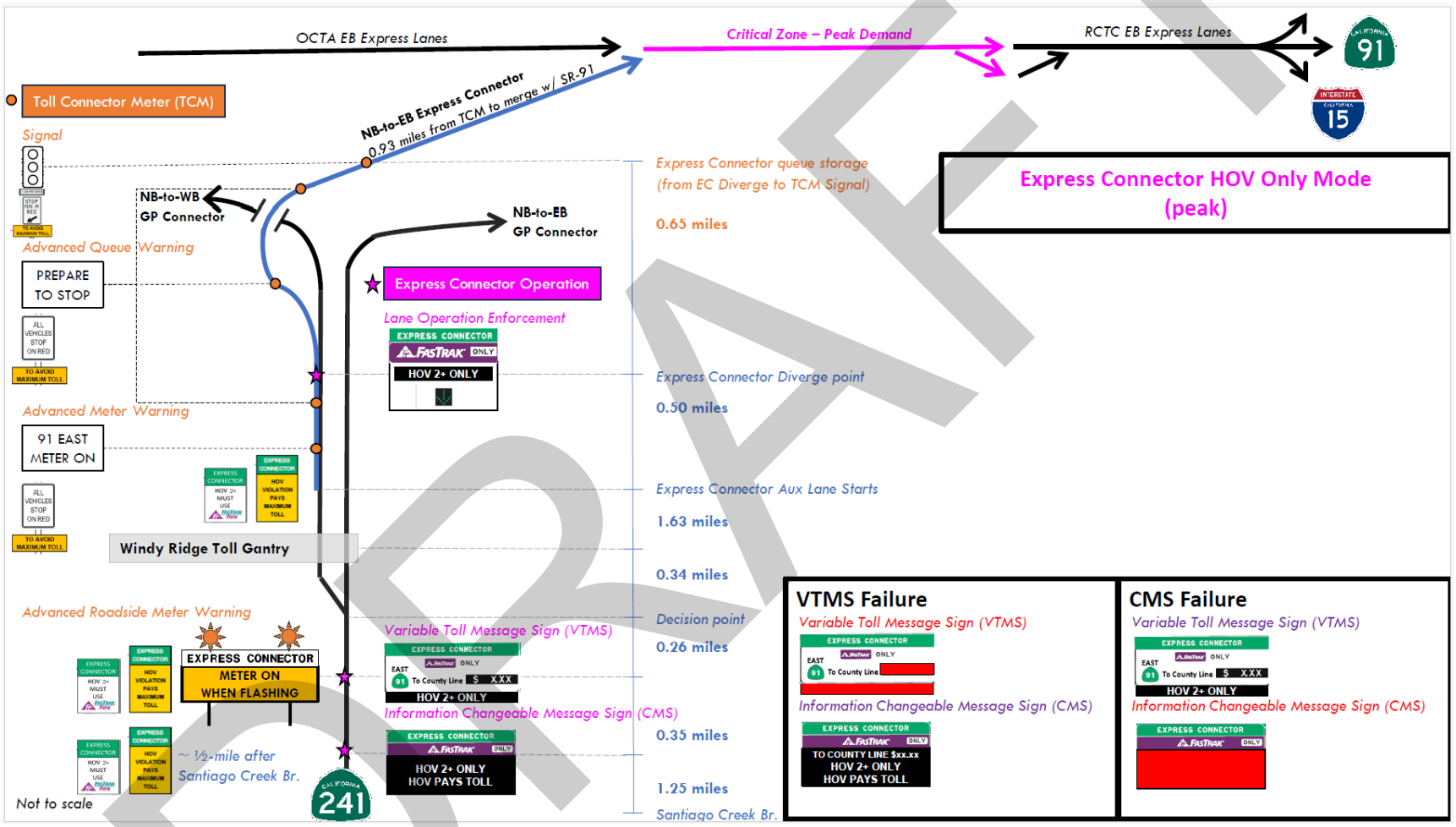


Figure 18 – NB-to-EB Sign Configuration, CLOSED Mode

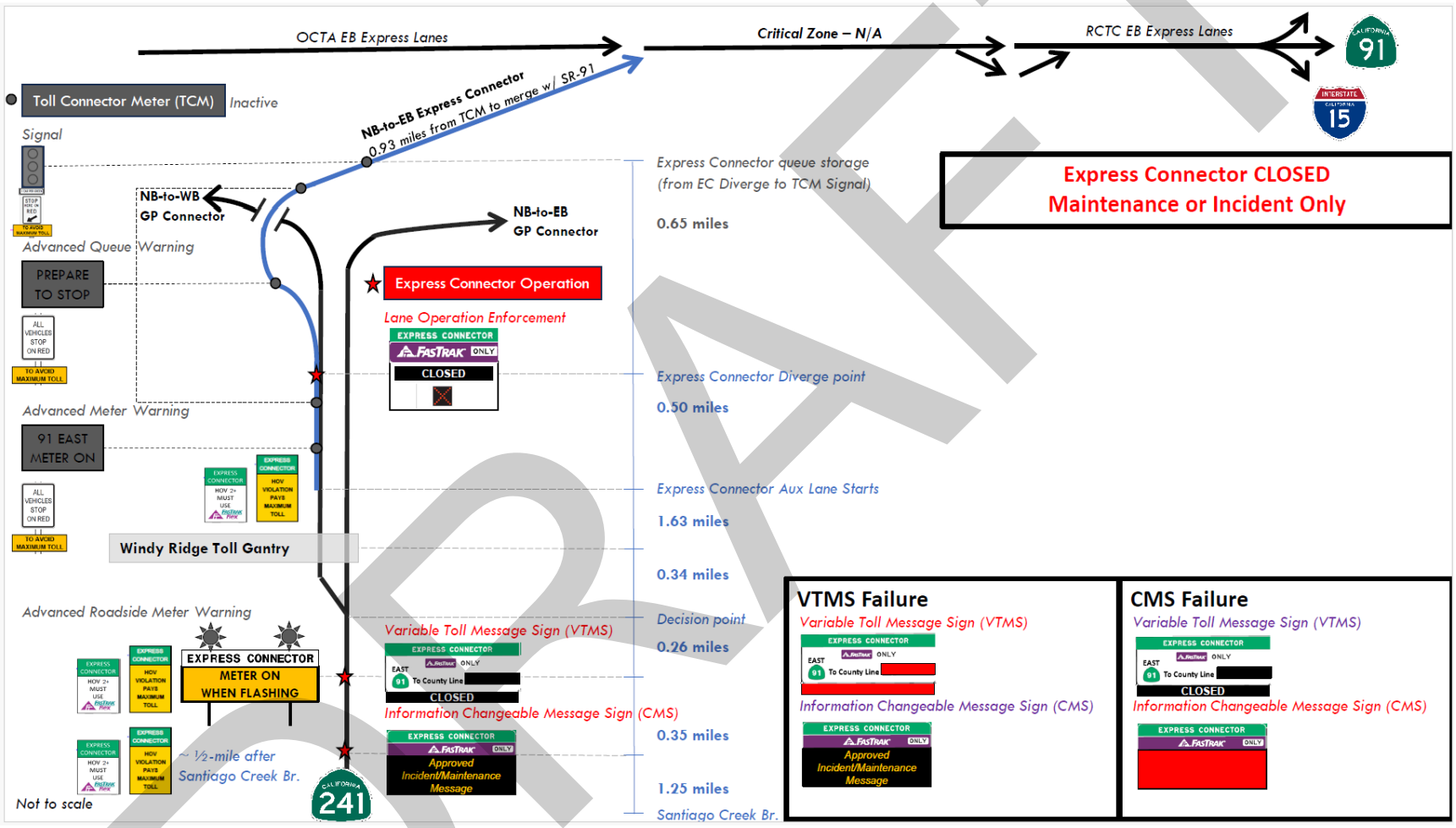


Figure 19 – WB-to-SB Sign Configuration

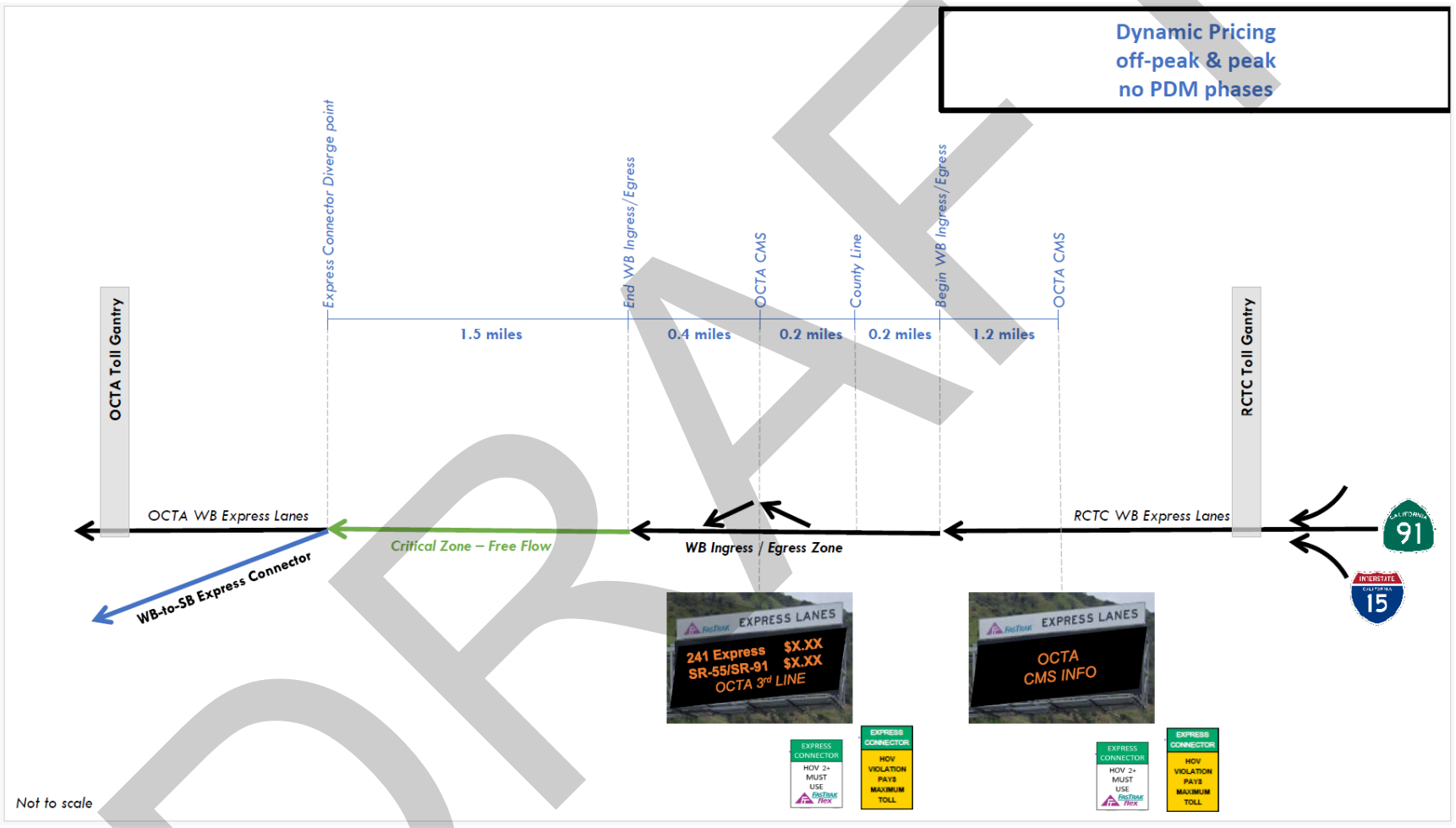


EXHIBIT E
POLICIES AND OPERATING RULES

1. Background

F/ETCA currently operates toll collection systems on SR-133, SR-241, and SR-261, commonly referred to as The Toll Roads. The Toll Roads operate under common policies and operating rules. The 241/91 Express Connector (Express Connector" or "241/91 EC" is a unique facility in that it directly connects to the 91 Express Lanes, and therefore, it requires its own set of policies and operating rules that may differ from the existing Toll Roads.

This exhibit provides the details of the policies and operating rules to be used for the operation of 241/91 EC and sets forth the policies that require adoption by the F/ETCA through the required public process.

2. Goals

Establish policies and operating rules for the 241/91 EC to provide alignment between the 241/91 EC and 91 Express Lanes where possible, to avoid motorist confusion, comply with project requirements of the State, and to achieve the established performance metrics.

3. Hours of Operations

The Express Connector is a 24-hour, seven day per week tolled facility.

4. Eligibility

Eligible users include two-axle vehicles, motorcycles, buses, and vanpools with valid FasTrak® transponder accounts. All vehicles must weigh under 10,000 pounds.

All two-axle vehicles are eligible to access the Express Connector, but vehicles with 3-or-more axles (excluding buses) and vehicles towing a trailer are prohibited from the Express Connector.

Note that eligible users are subject to Express Connector access restrictions that may be in effect as described in Section 6.2 (Progressive Demand Management). Applicable toll discounts are described in Section 7 (Toll Discounts).

5. Toll Collection

Automated toll collection is performed by utilizing All-Electronic Tolling (AET) technology that assesses tolls through RFID transponders and license plates associated with a valid FasTrak account. Express Connector users with a valid FasTrak account with any California toll agency can pay their toll by deducting the amount due from their FasTrak account.

The Toll Roads FasTrak Account customers must comply with The Toll Roads

FasTrak Terms and Conditions. The Toll Roads FasTrak Account customers must register their vehicle's license plate to their account and properly mount their transponder to their vehicle's windshield. If a transponder is not read, the license plate is used to charge the toll to the customer's account. Express Connector users are required to have a properly mounted transponder

New FasTrak Accounts established with The Toll Roads are issued ISO-18000 6C protocol transponders. FasTrak customers can obtain transponders from The Toll Roads Customer Service Center in person or through the mail and at participating retailers. Transponders obtained from participating retailers must be registered to the customer's Toll Roads FasTrak Account.

F/ETCA's Pay Toll Now feature, which enables non-accountholders to pay their TCA tolls online, will not be available for paying Express Connector tolls.

6. Dynamic Pricing and Progressive Demand Management

Dynamic Pricing and Progressive Demand Management will be used on the 241/91 EC to achieve the agreed upon performance metrics. Details regarding the design of Dynamic Pricing and Progressive Demand Management are included in Exhibit D of this agreement.

The Parties will work together to achieve the agreed-upon metrics by making necessary changes to the Dynamic Pricing and Progressive Demand as outlined in the governance process ("Governance Process described in Exhibit F (Traffic Operations Metrics Monitoring and Governance). If the Governance Process does not result in unanimous agreement for a change to Dynamic Pricing or Progressive Demand Management OCTA and RCTC will have final approval as described in Exhibit F.

6.1 Dynamic Pricing

Toll rates will be set by a dynamic pricing algorithm. The toll rates will increase or decrease based on real-time traffic data to influence traffic demand on the Express Connector itself and the portion of the 91 Express Lanes immediately east of the Express Connector. Toll pricing may also be periodically adjusted to reflect conditions on the east end of the 91 Express Lanes (McKinley St) in Riverside County. The toll rates can adjust as frequently as every three minutes. The toll rate increases and decreases will be limited to $5 every three minutes.

Initially, the minimum toll will be $2.00 and will be increased annually based on the F/ETCA approved CPI rate.

The minimum toll, frequency of price change, maximum amount of a single price change, and annual CPI increase will be adopted by F/ETCA and will require board authorization to change. A draft toll policy is attached to this Exhibit as Attachment 1.

The dynamic toll is displayed on Variable Toll Message Signs (VTMS) prior to the location where the traveler decides to use the Express Connector.

6.2 Progressive Demand Management

The toll collection system uses Progressive Demand Management strategies in response to changes in traffic conditions on the Express Connector and on the 91 Express Lanes. Express Connector traffic operations are controlled by the following strategies, which are enabled in the following sequence:

- **Level 1 – Pricing**: The Express Connector is open to all eligible users. Congestion is managed using pricing that is dynamically calculated based on real-time traffic data ("Dynamic Pricing").

- **Level 2 – Toll Connector Meter** (northbound only): The Express Connector is open to all eligible users; however, a traffic signal meters the rate at which vehicles may access the Express Connector when congested conditions are detected on the eastbound SR-91 Express Lanes. Express Connector users receive prior notification via signage about the Toll Connector Meter operation.

- **Level 3 – High Occupancy Vehicles (HOV) Only** (Northbound only): The Express Connector is only open to eligible vehicles carrying the number of occupants posted (either HOV 2+ or HOV 3+), including transit vehicles and registered vanpools. Express Connector users are informed by signage that HOV Only mode is in operation.

- **Level 4 – Bus/Registered Vanpool Only** (Northbound only): The Express Connector is only open to buses (with FasTrak accounts) and F/ETCA registered vanpools. Express Connector users receive signage notification about Bus/Registered Vanpool Only mode.

This sequence can vary depending on the performance metrics and the governance team's evaluation. The functionality of dynamic pricing and progressive demand management and their relationship to the performance metrics is found in Exhibit D (Progressive Demand Management) and the governance process for changing dynamic pricing and progressive demand management is found in Exhibit F.

7. Peak Periods and Super Peak Periods

The establishment of Peak Periods and Super Peak Periods is critical to the implementation of the HOV discount policy and progressive demand management. The establishment and modification of the Peak and Super Peak periods will be performed through the process set forth in the governance process in Exhibit F.

7.1 Peak Periods

During Peak Periods, HOV customers will be charged the full toll. During the non-peak periods, HOV 3+ customers will receive a 100% discount. It is also during Peak Periods that the Progressive Demand Management systems will likely be in use.

The peak periods will be established 6 months prior to the opening of the 241/91 EC. Through the Governance Process, volumes on the 91 Express Lanes will dictate the peak periods. Based on the results of traffic studies, Peak Periods are initially defined as the following hours:

- Eastbound - Monday through Thursday, 2-6 PM and Friday 1-7 PM.
- Westbound - Monday through Thursday, 5-9 AM.

7.2 Super Peak Periods

The Super-Peak periods are a window within the Peak Periods when the 91 Express Lanes are at, or near capacity and can no longer meet the performance metrics defined in Exhibit F. During the Super-Peak Periods, the 241/91 EC will likely be in HOV Only Mode. The HOV Only Mode occupancy level will be set through the governance process.

The Super-Peak Periods will be established 6 months prior to the opening of the 241/91 EC. Through the governance process, volumes on the 91 Express Lanes will dictate the Super-Peak Periods. Super-Peak Periods are currently defined as the following hours:

- Eastbound direction only Thursday from 2 to 3 pm and Friday from 1 to 3 pm.

8. Toll Discounts

The following vehicles are permitted use of the Express Connector free or at a discounted toll as defined below:

- **High-Occupancy Vehicles 3+ Non- Peak Periods**: Vehicles with three or more occupants and a valid switchable FasTrak Flex transponder set to 3+ will receive a 100% discount.

- **Veterans**: Vehicles with Disabled Veteran and related special recognition license plates issued by the California Department of Motor Vehicles with a valid FasTrak account are permitted free travel on the Express Connector at all times, in accordance with California Vehicle Code Section 23301.3.

- **Transit vehicles and registered vanpools**: Transit vehicles and

registered vanpools are municipal transit buses and public/private vanpools. Eligible vehicles with a valid FasTrak account registered to F/ETCA are permitted free travel on the Express Connector at all times.

Toll discounts will be set by the F/ETCA Board with the adoption of their toll policy resolution.

9. Toll Exemptions

Eligible non-revenue vehicles are established at the discretion of F/ETCA in coordination with the Operating Partners. Vehicles with non-revenue status are always eligible for free entrance or use of the Express Connector. Non-revenue usage of the Express Connector is governed partially by California statute and partially by F/ETCA's rules. F/ETCA provides non-revenue usage to emergency providers as required by California Vehicle Code §23301.5. Additionally, F/ETCA may permit non-revenue usage for certain vehicles providing maintenance, safety, and other public services associated with the Express Connector and the 91 Express Lanes. Note that non-revenue vehicles established by F/ETCA do not get free usage of the 91 Express Lanes without the approval of OCTA and RCTC.

10. Toll Evasion Violations

Express Connector users who fail to pay the toll through a FasTrak account are subject to the toll evasion violations process under the California Vehicle Code, Division 17, Chapter 1, Article 4. The California Vehicle Code requires notification of the violation to the registered owner of the subject vehicle; unpaid tolls and violation fees can escalate to collections, vehicle registration holds, and other permitted measures.

F/ETCA enforces the payment of tolls using toll industry best practices and in accordance with the California Vehicle Code and other applicable statutes. F/ETCA makes all reasonable attempts to encourage the payment of tolls by all patrons to promote equitable cost sharing among all users of F/ETCA's facilities. F/ETCA will be amending their existing Toll Enforcement Ordinance to include the 241/91 EC. A draft of the Toll Enforcement Ordinance is attached to this Exhibit as Attachment 2.

Additionally, F/ETCA incorporates a hybrid approach to enforcing violations, consisting of traditional California Highway Patrol enforcement, augmented by technology to create additional deterrents. Express Connector users who violate must pay the following tolls, fees, and penalties depending on the progressive demand management strategies in operation at the time of the violation:

Scenario	Eligible Express Connector Users	Compliance	Non-Compliance Deterrent	CHP CVC Section Enforced

Normal Mode – HOV Occupancy Violation	Express Connector open to all travelers meeting vehicle eligibility with a valid FasTrak account. Travelers with 3 or more vehicle occupants and FasTrak Flex transponder set to 3+ are eligible for applicable discount	Customer has 3+ occupants pays Dynamic toll displayed on sign, less applicable discount, as defined in Section 7 (Toll Discounts).	Vehicles not meeting occupancy requirement pay an elevated Non-compliant Toll (Fixed at $40).	CVC 23302(a)(1)
Toll Connector Meter (TCM) On	Express Connector open to all travelers meeting vehicle eligibility requirements with a valid FasTrak account; meter limiting access to Express Connector.	Customer pays Dynamic toll displayed on the sign Minus any applicable discounts after stopping at the red TCM signal and proceeding after the signal turns green.	Customers proceeding past a red TCM signal get charged an elevated Non-Compliance Toll (Fixed at $40).	CVC 21453
HOV-Only Mode	Express Connector open only to all HOV 2+/3+, buses, and Vanpool travelers meeting vehicle eligibility with valid FasTrak accounts and with FasTrak Flex transponders set to 2+/3+; meter limiting access to Express Connector; signage displaying HOV requirement.	HOV 2+/3+ carpools pay Dynamic toll displayed on sign, less applicable discount (off-peak). Transit and Registered Vanpools are free.	HOV Only Mode Violators (# of occupants < 2, or occupancy designation set to 1) get charged an elevated Non-compliance Toll (fixed at $40).	CVC 21655.5
Buses and Registered Vanpool Mode	Express Connector open only to Buses and Registered Vanpool travelers with FasTrak account; meter limiting access to Express Connector; signage displaying transit/registered vanpool vehicle requirement	Buses and Registered Vanpools travel free. Non-transit buses can access connector but must pay full toll during peak hours.	Non-eligible vehicles charged an elevated Non-compliance Toll (fixed at $40).	TBD CVC 21655.1(d) CVC 40240(g)
Closed Connector (Maintenance and Incident Management)	Express Connector closed to all traffic except maintenance vehicles.	Customer Vehicle does not enter Express Connector when it is closed, no toll is charged.	Customers proceeding onto closed connector are subject to CHP Enforcement only, no automated deterrent.	CVC 2818

In addition to the above deterrents, non-compliance with this toll policy is also subject to receiving citations from California Highway Patrol (CHP). If a motorist is found to be non-compliant with more than one of the elements above, they will only be charged one non-compliant toll per transaction. In the event that a single event (for example, proceeding past a red TCM signal) results in both a CHP citation and an automated deterrent, F/ETCA will waive the automated deterrent if contacted by the customer.

In order to create higher value deterrents that do not involve posting elevated tolls to customer FasTrak accounts, F/ETCA may also pursue changes to the California Vehicle Code as needed, such that TCM, HOV Occupancy, and HOV-Only mode related non-compliance could result in a violation similar in nature to a Notice of Toll Evasion.

11. Definitions

Acronym/Term	Definition
91 Express Lanes	The express lanes jointly operated by OCTA and RCTC between SR-55 and McKinley Street.
Business Rules	Rules that define all decision points and processes necessary to execute the operation of F/ETCA's Roadway Toll Collection System and Back Office System in accordance with the Toll Policy.
California Toll Operators Committee (CTOC)	A collaborative organization composed of California's toll facility operators/owners, of which F/ETCA is a member. CTOC is the primary resource for interoperability and coordination among tolling facilities, and education and advocacy regarding tolling in California.
California Vehicle Code	The set of statutes that regulate the operation, registration and ownership of motor vehicles, bicycles, and other devices used to move people, animals and goods along the state's roadways.
Caltrans	California Department of Transportation is an executive department of the state of California that manages transportation functions. Caltrans is responsible for the design, construction, maintenance, and operation of the California State Highway System and the Interstate Highway System within the state's borders.
Customer Service Center	The F/ETCA entity responsible for providing customer services, including call center, billing, payment processing, and other related services.
Express Connector	The express connector operated by F/ETCA between SR-241 and 91 Express Lanes.
F/ETCA Board of Directors	F/ETCA members: Anaheim, Dana Point, Irvine, Lake Forest, Mission Viejo, Orange, Rancho Santa Margarita, San Juan Capistrano, Santa Ana, Tustin, Yorba Linda and the County of Orange.
F/ETCA Privacy Policy	A policy that defines the personal data collected by F/ETCA and how it is used, retained, and shared.
FasTrak®	Trademarked electronic toll system that allows motorists to prepay to use any toll road, bridge, or express lane in California and thus not need to stop to pay at a read point.
FasTrak Flex	Also known as FasTrak switchable transponder, is a device with a switch that allows the user to indicate the occupancy of the vehicle between 1, 2 and 3+, and become eligible for discounts based on occupancy.
Foothill/Eastern Transportation Corridor Agency (F/ETCA)	The Foothill/Eastern Transportation Corridor Agency (F/ETCA) manages the 133, 241 and 261 Toll Roads, which link the 91 freeway near the Orange County/Riverside County border to Interstate 5 in Irvine and to communities in South Orange County.

Acronym/Term	Definition
High Occupancy Vehicles 3+ (HOV3+)	A motor vehicle carrying three (3) or more people.
High Occupancy vehicles 2+ (HOV2+)	A motor vehicle carrying two (2) or more people
Interoperable Agency	Agencies, including members of CTOC, that manages toll accounts that are permitted for use on the Express Connector, in accordance with applicable state statues.
Master Agreement	Agreement between F/ETCA, OCTA, RCTC, and Caltrans for the development and operations of the SR-241/91 Express Lanes Connector.
Operating Partners	An advisory and administrative body made up of representatives of F/ETCA, OCTA, and RCTC who collaborate on decision making regarding the Express Connector as it relates to the 91 Express Lanes.
Orange County Transportation Authority (OCTA)	The Orange County Transportation Authority is the county transportation planning commission, responsible for funding and implementing transit and capital projects for a balanced and sustainable transportation system. OCTA operates the 91 Express Lanes and I-405 Express Lanes in Orange County.
Riverside County Transportation Commission (RCTC)	The Riverside County Transportation Commission is the County Transportation Commission for Riverside County, California. It is an association of local governments in the county and is the funding and operating agency of the 91 Express Lanes and the I-15 Express Lanes.
Roadway Toll Collection System	The hardware, software, and other equipment that supports vehicle transaction creation and processing functions required to toll vehicles accessing the Express Connector.
The Toll Roads	The Toll Roads® logo along with the FasTrak branding are registered trademarks of the Transportation Corridor Agencies. The branding extends to public communications on social media platforms (including Facebook, X, and Instagram), mobile applications for iOS and Android platforms and in communications with the public from the agencies.
The Toll Roads FasTrak Account	An account that is linked to a FasTrak transponder or other means of identification of a vehicle in order to pay a toll to F/ETCA by automatic debit.
Toll Connector Meter	A toll connector meter (TCM) is a traffic signal that controls the rate at which vehicles enter a freeway from a connector to reduce congestion.
Toll Policy	A document that defines the key controlling aspects of the Express Connector toll setting, toll enforcement, and toll operations.
Variable Toll Message Sign (VTMS)	The signs installed before all entrances to Express Connector that display the toll rate information.

ATTACHMENT 1
DRAFT F/ETCA TOLL POLICY

F2028-01

RESOLUTION OF THE BOARD OF DIRECTORS OF THE
FOOTHILL/EASTERN TRANSPORTATION CORRIDOR AGENCY
ESTABLISHING TOLL POLICY AND TOLL SCHEDULE FOR
THE 241/91 EXPRESS CONNECTOR

On motion of Director _____ the following Resolution was adopted:

WHEREAS, the Foothill/Eastern Transportation Corridor Agency (the "Agency") is authorized, pursuant to California Government Code Section 66484.3(f) and California Streets and Highways Code Section 31121, to fix the rate of tolls and other charges to be collected from users of the Foothill and Eastern Transportation Corridors, designated State Routes 133, 241 and 261 (the "Corridor"); and

WHEREAS, the Agency received separate additional authorization from the California Transportation Commission on XX/XX/XX in accordance with section 149.7 of the California Streets and Highways code to fix the rate of tolls and other charges to be collected for a new express connector (the "241/91 Express Connector") that connects the northern portion of State Route 241 directly to the 91 Express Lanes; and

WHEREAS, on November 14, 2019, the Agency adopted a toll rate policy via Resolution F2019-06 establishing a toll rate policy for the Corridor;

WHEREAS, the Agency desires to establish a separate toll rate policy that will apply exclusively to the 241/91 Express Connector, as the Agency desires to provide for the implementation of dynamic toll pricing and a progressive form of traffic demand management for the 241/91 Express Connector; and

NOW, THEREFORE, be it resolved, determined and ordered by the Board of Directors of the Foothill/Eastern Transportation Corridor Agency as follows:

Section 1. The Agency approves the toll rate policy and toll schedule for the 241/91 Express Connector attached as Exhibit A.

Section 2. This Resolution shall become effective immediately upon adoption.

ADOPTED BY THE FOOTHILL/EASTERN TRANSPORTATION CORRIDOR AGENCY ON XXXXXXXXXX.

_____
Chairman
Foothill/Eastern Transportation
Corridor Agency

ATTEST:

Clerk of the Board
Foothill/Eastern Transportation Corridor Agency

I, _____, Clerk of the Board of the Foothill/Eastern Transportation Corridor Agency, hereby certify that the foregoing Resolution No. F2028-01 was adopted on _____, 2028, by the Board of Directors of the Foothill/Eastern Transportation Corridor Agency by the following vote:

Yes:

No:

Absent:

Abstain:

XXXXXX, Clerk of the Board
Foothill/Eastern Transportation
Corridor Agency

EXHIBIT A

Definitions

The following terms shall have the meaning as set forth below for purposes of this toll rate policy.

(a) "241/91 Express Connector" shall mean the tolled roadway connecting the northern portion of State Route 241 directly to the express lanes of State Route 91.

(b) "Abnormal Traffic Conditions" shall mean when traffic volumes vary from those of a prior period due to a holiday, incident, construction, or other atypical occurrence.

(c) "Bus/Registered Vanpool Mode" shall mean a demand management tool which will restrict the use of the 241/91 Express Connector to municipal transit buses and public/private vanpools with a properly mounted transponder associated with a valid FasTrak account registered with the Toll Roads.

(d) "Dynamic Pricing" shall mean the setting of a toll in real-time based on level of traffic congestion and other factors.

(e) "Dynamic Pricing Algorithm" shall mean the methodology by which tolls are set that aims to manage demand for the 241/91 Express Connector by adjusting tolls using real-time and historic traffic data.

(f) "Emergency" shall mean a circumstance that poses an immediate and grave threat to life or safety, or a serious environmental hazard that cannot be abated except by closure of the 241/91 Express Connector. Closures of or traffic on the General Purpose Lanes that cause an inconvenience to the public shall not be considered, on their own, an emergency, as used herein.

(g) "HOV Only Mode" shall mean a demand management tool which will restrict the use of the 241/91 Express Connector to Vehicles which meet the posted occupancy requirement with a valid switchable transponder set to the appropriate setting.

(h) "Inflation Factor" shall mean the U.S. Bureau of Labor Statistics Consumer Price Index adjuster for the Los Angeles-Long Beach-Anaheim area from January to December of the previous calendar year that will be applied annually to the Minimum Toll Rate.

(i) "Minimum Toll Rate" shall mean the lowest toll per Trip that the Pricing Algorithm can assign.

(j) "Non-Peak Period" shall mean a period of time each day when the 241/91 Express Connector and 91 Express Lanes have low traffic volumes allowing for Vehicles with three or more occupants and a switchable transponder properly mounted and set to the appropriate setting.

(k) "Performance Metrics" shall mean a set of criteria, established through an agreement with 241/91 Express Connector partner agencies, aimed at preventing unsafe traffic conditions on the 241/91 Express Connector and/or State Route 91 and ensuring the traffic volumes from the 241/91 Express Connector do not have a substantial negative impact on the 91 Express Lanes.

(l) "Progressive Demand Management" shall mean operational control strategies that will be applied in the north-to-east direction of the 241/91 Express Connector to effectively manage demand such that the expected performance metrics are achieved. Strategies to be applied include dynamic pricing, toll connector meter, HOV-only mode, and Bus/Registered Vanpool mode.

(m) "Toll Connector Meter" shall mean a meter installed on the Northbound 241/91 Express Connector which will operate during high traffic volume periods to slow the number of Vehicles entering the 91 Express Lanes.

(n) "Trip" shall mean a Vehicle's unique passage through or attempted use of the 241/91 Express

Connector.

(o) "Vehicle" shall mean any vehicle as defined in California Vehicle Code Section 670.

Dynamic Pricing Principles

(a) The 241/91 Express Connector will use Dynamic Pricing to set toll rates with the goal of optimizing Vehicle throughput while meeting the established Performance Metrics.
(b) A Dynamic Pricing Algorithm which considers traffic volume, density, travel speed, travel time, flow of traffic, and historical traffic patterns to achieve compliance with established Performance Metrics will be used to determine the toll rate.
(c) The Dynamic Pricing Algorithm will establish a toll rate for each Trip through the 241/91 Express Connector.
(d) The toll rate will change as frequently as needed to maintain desired traffic conditions, but not more frequently than every three minutes; and
(e) The toll rate could change in increments of up to $5.00.

Minimum Toll Rate

The initial Minimum Toll Rate for the 241/91 Express Connector will be set at $2.00. The Minimum Toll Rate will be increased annually, effective each July 1, increased by the Inflation Factor and rounded to the nearest 5 cents. When a toll rate is in effect, it shall never be less than the Minimum Toll Rate. Changes to the Minimum Toll Rate will be made as part of the annual toll rate update process and communicated to customers each July 1 through the Toll Roads customer website or as otherwise required by law.

Toll Rates

Toll rates will be determined in real-time based on the level of traffic congestion and other factors consistent with Dynamic Pricing. There is no maximum toll rate. The goals of this 241/91 Express Connector Toll Policy and Toll Schedule are to optimize person throughput in the corridor while meeting established Performance Metrics.

Displaying Toll Rates

1. Toll rates will be posted on overhead signs in advance of the 241/91 Express Connector in both directions.
2. The customer will be charged the toll posted at the time they passed the toll rate sign.
3. Should the toll rate sign not be able to display tolls for any reason, then a historical toll rate for the same time period will be charged to the customer.

Abnormal Traffic Conditions or Emergencies and Suspension of Tolling

A temporary toll schedule may be implemented, which may include the suspension of tolling, during Abnormal Traffic Conditions or Emergencies.

Progressive Demand Management

Traffic volumes on the 241/91 Express Connector will be controlled through a strategy of Progressive

Demand Management. This strategy incorporates Dynamic Pricing and additional controls such as the Toll Connector Meter, HOV Only Mode and/or Bus/Registered Vanpool Mode to limit traffic on the 241/91 Express Connector as needed to optimize Vehicle throughput while achieving established Performance Metrics.

Discounts

The following discounts will be offered on the 241/91 Express Connector during the specified time periods and subject to satisfying all applicable eligibility requirements:

- High-Occupancy Vehicles 3+: Vehicles with three or more occupants and a valid and properly mounted switchable FasTrak Flex transponder set to 3+ will receive a 100% discount during Non-Peak periods.
- Veterans: A Vehicle registered to a veteran and displaying one of the license plates set forth in Vehicle Code Section 23301.3(b)(2)(A)-(F) that was issued by the California Department of Motor Vehicles and associated with a valid FasTrak account will receive a 100% discount at all times.
- Transit vehicles and registered vanpools: Municipal transit buses and public/private vanpools with a properly mounted transponder and valid FasTrak account registered with the Toll Roads will receive a 100% discount during at all times.

Toll Rate in Specific Circumstances

A Vehicle will be charged a $40.00 toll as opposed to the displayed toll rate in all of the following circumstances:

- The Vehicle fails to stop at the Toll Connector Meter when it is operational.
- A Vehicle does not have the proper occupancy designation set on the FasTrak Flex transponder.
- A Vehicle enters onto or travels through the 241/91 Express Connector during HOV Only Mode, but the number of occupants in the Vehicle does not meet or exceed the posted occupancy requirement.
- A Vehicle uses the 241/91 Express Connector during Bus/Registered Vanpool Mode, but the Vehicle is not a bus or public/private vanpool that has a properly mounted transponder associated with a valid FasTrak account registered with the Toll Roads.

ATTACHMENT 2
DRAFT TOLL ENFORCEMENT ORDINANCE

TOLL ENFORCEMENT ORDINANCE ADOPTION NO. FE2028-01 AN ORDINANCE OF THE BOARD OF DIRECTORS OF THE FOOTHILL/EASTERN TRANSPORTATION CORRIDOR AGENCY RELATING TO THE ADMINISTRATION OF TOLLS AND THE ENFORCEMENT OF TOLL VIOLATIONS ON THE FOOTHILL AND EASTERN TRANSPORTATION CORRIDORS

WHEREAS, the Foothill/Eastern Transportation Corridor Agency (the "Agency") is authorized, pursuant to California Government Code Section 66484.3(f) and California Streets and Highways Code Section 31121, to fix the rate of tolls and other charges to be collected from users of the Foothill and Eastern Transportation Corridors, designated State Routes 133, 241 and 261 (the "Corridor") and to do such acts as are necessary or desirable in connection with the duties and powers conferred on it, including the establishment of penalties for violations of the toll requirements; and

WHEREAS the Agency received separate additional authorization from the California Transportation Commission on XX/XX/XX in accordance with section 149.7 of the California Streets and Highways code to fix the rate of tolls and other charges to be collected for a new express connector (the "241/91 Express Connector") that connects the northern portion of State Route 241 directly to the 91 Express Lanes; and

WHEREAS, Section 23302.5 of the California Vehicle Code ("Code") provides that it is unlawful for a person to evade or attempt to evade the payment of tolls or other charges on any vehicular crossing or toll highway, and provides that such acts are subject to civil penalties; and

WHEREAS, subpart (d) of Section 23302 of the Code provides that for toll highways where the issuing agency, as defined in Section 40250, permits pay-by-plate payment of tolls and other charges in accordance with the policies adopted by the issuing agency, and where electronic toll collection is the only other method of paying tolls or other charges, it is prima facie evidence of a violation of Section 23302 for a driver to drive a vehicle onto the toll highway without either a transponder or other electronic toll payment device associated with a valid Automatic Vehicle Identification Account with a balance sufficient to pay those tolls or valid vehicle license plates properly attached to the vehicle, and pursuant to subpart (e) of Section 23302 of the Code, "pay-by-plate toll payment" means an issuing agency's use of on-road vehicle license plate identification policies adopted by the issuing agency; and

WHEREAS, subpart (b) of Section 23302 of the Code provides that for toll highways where the issuing agency, as defined in Section 40250 uses electronic toll collection as the only method of paying tolls or other charges, it is prima facie evidence of a violation of this section for a driver to drive a vehicle onto the toll highway without a transponder or other electronic toll payment device associated with a valid Automatic Vehicle Identification account with a balance sufficient to pay those tolls; and

WHEREAS, subpart (d) of Section 23302 of the Code applies to all vehicular crossings and toll highways within the Corridor except for the 241/91 Express Connector; and

WHEREAS, subpart (b) of Section 23302 of the Code applies to the 241/91 Express Connector; and

WHEREAS, Sections 40250, et seq. of Chapter 1 of Division 17 of the Code provide for

enforcement of civil penalties for violation of a statute, regulation, or ordinance governing the evasion of tolls under the Code, including Code Section 23302.5 and under a federal or state statute or regulation, and under an ordinance enacted by a local authority including a joint powers authority in accordance with administrative procedures set forth in Article 4 of Chapter 1 of Division 17 of the Code; and

WHEREAS, on August 8, 1996 the Agency adopted ordinance F96-01 making the passing through a Corridor toll collection facility without payment of the proper toll a civil violation, and establishing Penalties for such violation and the procedures for issuance of violation notices and enforcement to be consistent with the new provisions of the code; and

WHEREAS, the Agency's Toll Enforcement Ordinance was subsequently amended by the adoption of Ordinance FE2013-01 to adjust Agency's policies and procedures for

administration of tolls along with the Toll Evasion Penalty and the Delinquent Toll Evasion Penalty in the Schedule of Penalties, Schedule A; and

WHEREAS, the availability of new technologies made it necessary and desirable for the Agency to amend Ordinance FE2013-01 to reflect the Agency's deployment of such new and improved technologies and business practices; and

WHEREAS, the enactment of AB 2594 (2022) introduced changes to Chapter 13 of Division 11 and Chapter 1 of Division 17, modifying procedures for toll evasion violations starting July 1, 2024, making it necessary and desirable for the Agency to amend Ordinance FE2018-01 to maintain its alignment with the Code; and

NOW, THEREFORE, THE BOARD OF DIRECTORS OF THE AGENCY DOES HEREBY ORDAIN THAT ORDINANCE FE2014-01 AS ADOPTED MAY 9, 2024 RELATING TO ADMINISTRATION OF TOLLS AND THE ENFORCEMENT OF TOLL VIOLATIONS FOR THE FOOTHILL AND EASTERN TRANSPORTATION CORRIDORS IS REPLACED IN ITS ENTIRETY ON XXXXXXX at 11:59 p.m. by the following:

Section 1. Definitions. The following terms shall have the meanings as set forth below:

(a) "Account" shall mean an Automatic Vehicle Identification Account established with Agency.

(b) "Agency" shall mean the Foothill/Eastern Transportation Corridor Agency.

(c) "Automatic Vehicle Identification Account" shall mean an account for the electronic payment of tolls incurred by vehicles registered to this account and automatically identified by the Agency's electronic toll collection system, that is established by the patron with Agency, or that is established by the patron with another operator of a toll facility who has an agreement with Agency for the interoperable processing of tolls incurred by their customers with registered accounts for the payment of tolls.

(d) "Code" shall mean the California Vehicle Code.

(e) "Corridor" shall mean the Foothill and Eastern Transportation Corridors, except for the 241/91 Express Connector.

(f) “Department” shall mean the California Department of Motor Vehicles.

(g) “Electronic Toll Collection” shall mean with respect to the Corridor the collection of tolls through the use of a valid Automatic Vehicle Identification account or an online toll pre- payment or post-payment, as provided in Section 2, below. With respect to the 241/91 Express Connector, “Electronic Toll Collection” shall mean the collection of tolls through the use of a valid Automatic Vehicle Identification account associated with a properly mounted transponder that is located in the vehicle using the 241/91 Express Connector.

(h) “241/91 Express Connector” shall mean the tolled roadway that connects the northern portion of State Route 241 to the express lanes of State Route 91.

(i) "Motorist" shall mean the registered owner, rentee, lessee and/or driver of a Vehicle.

(j) “Notice of Violation” shall mean the notice of toll evasion issued by Agency if a Violation is detected by any means (including automated device, video image, visual observation, or otherwise) and the subject Vehicle is not stopped.

(k) "Toll Enforcement Officer" shall mean any member of the California Highway Patrol or any employee or contractor of Agency whose duty is to enforce the payment of tolls.

(l) "Vehicle" shall mean any vehicle as defined in California Vehicle Code Section 670.

(m) Violation" means the commission of an activity proscribed in Section 3(a) through 3(d) hereof.

(n) “Toll Evasion Penalty” or “Penalty” shall have the same meaning as set forth in Vehicle Code Section 40252 subdivision (b).

(o) “Toll Payment Procedures” means the written procedures for implementing Electronic Toll Collection issued by the Agency’s Chief Toll Operations Officer as set forth in the Agency’s Business Rules and/or Standard Operating Procedures.

Section 2. Electronic Toll Collection. The Chief Toll Operations Officer is authorized to issue written procedures for implementing the system for Electronic Toll Collection for the payment of Corridor tolls and 241/91 Express Connector tolls consistent with this Ordinance and such Board direction as may be given from time to time. The Toll Payment Procedures shall establish the methods by which Corridor toll payment can be made automatically via a valid Automatic Vehicle Identification Account, including the types of registered electronic toll payment accounts and

options available to Motorists through the Agency. The Toll Payment Procedures shall also establish the method by which 241/91 Express Connector toll payments can be made automatically via a valid Automatic Vehicle Identification Account.

Additionally, with respect to the Corridor (not the 241/91 Express Connector), Motorists may make toll pre-payments or post-payments in order to avoid receiving a Notice of Violation pursuant to Section 4(c) of this Ordinance.

(a) FasTrak Account. To establish an Account with Agency, a Motorist must register for a FasTrak Account prior to traveling the Corridor or 241/91 Express Connector. An applicant for an Account shall execute an application and License Agreement providing for the terms and conditions of use of the Account and establishing a customer credit, cash or invoice Account with the Agency. The Account holder will be supplied a sticker tag/transponder and must properly mount the sticker tag/transponder on the Vehicle in order for tolls to be deducted from the Account when passing through a toll point. Account holders will have the option to purchase a switchable transponder for use in declaring occupancy counts on applicable facilities.

(b) Account Payment Types. FasTrak Accounts include the following three methods of toll payment:

(i) Prepaid Payment Method. The Prepaid Account customer must make a credit card, cash or check payment to open and replenish the Prepaid Account. The payment and replenishment rules for such accounts, including opening balance, replenishment threshold and replenishment amount shall be set forth in the Toll Payment Procedures.

(ii) Charge Payment Method. The Charge Account customer is not required to have a prepaid balance but is required to maintain a valid credit card or bank account number on file with the Agency. The Agency will regularly charge the credit card account or debit the bank account as toll trips are taken in accordance with the Toll Payment Procedures.

(iii) Invoice Account Method. The Invoice Account customer is not required to have prepaid balance nor a credit card or bank account on file with the Agency. The Agency will invoice the holder of an Invoice Account periodically for all tolls incurred during the invoice period. Invoices are due immediately upon receipt and are past due if not paid within the time period set forth in the Toll Payment Procedures.

(c) Toll Pre-payment – Post-payment. A customer who enters the Corridor without a valid Automatic Vehicle Identification Account may avoid a Violation by making a pre-payment of the toll amount in accordance with the

Toll Payment Procedures up to five days before incurring the toll. This pre-payment option is not available on the 241/91 Express Connector. A customer who enters the Corridor without a valid Automatic Vehicle Identification Account may cure a Violation by making payment within a five-day grace period after incurring a toll by contacting the Agency and making a payment, in accordance with the Toll Payment Procedures. There is no similar grace period for curing a Violation associated with the 241/91 Express Connector. Establishment of an Automatic Vehicle Identification Account is not required to make pre- payment or post- payments for use of the Corridor; however, establishment of an Automatic Vehicle Identification Account and a properly mounted transponder are required to use the 241/91 Express Connector.

Section 3. Liability for Failure to Pay Toll or Meet Minimum Occupancy Requirements.

(a) No person shall cause a Vehicle to pass through or attempt to pass through a Corridor toll collection facility or toll point without payment of the proper toll for the Vehicle.

(b) No person shall cause a Vehicle to pass through or attempt to pass through the 241/91 Express Connector toll collection facility or toll point without a valid Automatic Vehicle Identification account associated with a properly mounted transponder that is located in the vehicle using the 241/91 Express Connector.

(c) No person shall cause a Vehicle to pass through or attempt to pass through the 241/91 Express Connector toll collection facility or toll point with a transponder declared occupancy that is equal to or greater than the minimum occupancy requirements established for declaring a Vehicle on the 241/91 Express Connector a High Occupancy Vehicle at that particular date and time when the number of occupants within the Vehicle does not meet or exceed the minimum occupancy requirements established for declaring a Vehicle on the 241/91 Express Connector a High Occupancy Vehicle.

(d) If the payment method for a toll incurred by an Account holder fails (cash balance is overdrawn, credit card declines, bank account debit is not honored, or invoice is past-due), the Account shall be suspended and outstanding transactions will, at the Agency's discretion, escalate to Violations. Subsequent transactions after the account is suspended will immediately escalate to Violations. If an invoice issued to an Invoice Account holder is past-due, all transactions billed on the past-due invoice may be identified in a single Violation Notice, with each separate transaction carrying its own Violation penalty pursuant to Section 4 of this

Ordinance.

(e) Except as provided herein, the registered owner(s) and the driver, rentee or lessee of a Vehicle which is the subject of any Violation shall be jointly and severally liable for the Penalties imposed under this Ordinance, unless the registered owner can demonstrate, as provided in Section 5 hereof, that the Vehicle was used without the express or implied consent of the registered owner. A registered owner who pays any Penalty pursuant to this Ordinance shall have the right to recover the same from the driver, rentee or lessee.

(f) A Motorist who is not the owner of the Vehicle may contest the Notice of Violation in accordance with this Ordinance.

(g) Any Motorist assessed a Penalty for a Violation shall be deemed to be charged with a non-criminal civil violation.

Section 4. Penalties and Enforcement of Violations.

(a) The Penalties for a Violation of this Ordinance shall be the amounts set forth in the Schedule of Penalties, attached hereto as Schedule A and incorporated by reference herein. The Schedule of Penalties may, in the discretion of the Agency's Chief Executive Officer, be amended, from time to time by the Agency, but may not be greater than the amounts established under Code Section 40258 as the maximum Penalties for civil toll evasion violations. Subject to the limitations stated above, the Agency's Board of Directors may establish late payment Penalties and other related charges for Violations, except in the event the driver is arrested pursuant to Article 1 (commencing with Section 40300) of Chapter 2 of the Code, in which case the civil procedure for enforcement of violations that is established by this Ordinance shall not apply. Penalties assessed and paid pursuant to this subsection shall be remitted to the Agency.

(b) The Agency may designate certain of its employees or contractors as Toll Enforcement Officers. Training and qualifications of the employees or contractors for such designation shall be determined by the Agency. Designation as a Toll Enforcement Officer does not provide the Toll Enforcement Officer with the power of arrest. Any member of the California Highway Patrol patrolling the Corridor shall be deemed to be a Toll Enforcement Officer for purposes of enforcing the payment of tolls.

(c) If a Violation is detected by any means (including automated device, video image, visual observation, or otherwise) and the subject Vehicle is not stopped, a notice of toll violation shall be forwarded to the registered owner within 21 days, unless accurate information concerning the identity and address of the registered owner is not available within 21 days or the registered owner is a “repeat violator” as that term is defined in Section 40254(a) of the Code. If accurate information concerning the identity and address of the registered owner is not available within 21 days of the

violation, the Agency shall have up to 66 days to forward the notice of toll violation. If the registered owner is a repeat violator, the Agency shall have up to 90 days to forward the notice of toll violation.

(d) In the case of joint ownership of a Vehicle, the Notice of Violation shall be issued to the first name appearing in the registration. If a Notice of Violation is issued in person to the driver of a Vehicle, the driver of the Vehicle shall be deemed the agent of the registered owner for purposes of delivery of the Notice of Violation. The Notice of Violation shall contain:

(i) The date and time of issuance.

(ii) The name and address of the person to whom the Notice of Violation is issued.

(iii) The date, time and location of the alleged Violation.

(iv) The alphanumeric designation of the license plate on the Vehicle that was used in the alleged Violation(s) and, if applicable, the registration expiration date and the make of the Vehicle.

(v) The Section of the California Vehicle Code alleged to have been violated.

(vi) The procedure and deadline for the Motorist to follow in order to pay the penalty or to contest the Notice of Violation (and to appeal an adverse decision), including the time and place for appearance by the registered owner.

(vii) The amount of the applicable Penalty for the Violation and the further Penalty to be paid in the event the Penalty imposed with the Notice of Violation is not paid timely.

(viii) A statement that there will be additional costs and fees incurred by the Motorist according to the local jurisdiction rules if collection is pursued through court action.

Additional information may be included in the Notice of Violation in the discretion of the Chief Executive Officer of the Agency.

(e) If the description of the Vehicle in the Notice of Violation does not match the corresponding information on the registration card for that Vehicle, the

Agency may, on written request of the Motorist, cancel the Notice of Violation without the necessity of appearance by that person.

(f) If after a copy of the Notice of Violation has been sent to the Motorist, the Agency determines that, in the interest of justice, the Notice of Violation should be dismissed, the Agency shall dismiss the charges and so notify the Motorist.

(g) If the full amount of the Penalty is received by the person authorized to receive the deposit of the Penalty and there is no contest as to that Violation, proceedings under this Ordinance shall terminate.

Section 5. Failure to Pay Toll Evasion Penalties.

(a) If the payment of a Penalty is not received by the Agency as specified in the Notice of Violation by the time and date fixed on the Notice of Violation under Section 4, above, the Agency shall deliver by personal service or first-class mail to the registered owner of the Vehicle a Notice of Delinquent Violation.

(b) The Agency shall establish a procedure for providing, upon request, a photo static copy of the original Notice of Violation or an electronically produced facsimile of the original Notice of Violation. The Agency may charge a fee sufficient to recover the actual cost of providing the copy, to be established by the Chief Executive Officer, not to exceed two dollars ($2).

(c) The Notice of Delinquent Violation shall contain the information required to be contained in the original Notice of Violation and, additionally shall contain a notice to the registered owner that, unless the registered owner pays the Penalties or contests the citation pursuant to the procedure set forth in the Notice of Violation within 30 days after mailing of the Notice of Delinquent Toll Violation, or completes and files an Affidavit of Non-liability in compliance with this Section and Section 4(d), the Violation shall be considered to be a debt due and owing the Agency, and the Agency may seek recovery in any lawful manner, including non-renewal action against the Vehicle's registration.

(d) The Notice of Delinquent Violation shall contain, or be accompanied with, an Affidavit of Non-liability and information regarding what constitutes non-liability, information as to the effect of executing the Affidavit, and instructions for returning the Affidavit to the Agency. If the Affidavit of Non-liability is returned to the Agency within 30 days of the mailing of the Notice of Violation or Notice of Delinquent Toll Violation together with proof that either (i) the driver at the time of the Violation did not possess express or implied authority to drive the Vehicle, or (ii) the registered owner

served has made a bona fide sale or transfer of the Vehicle and has delivered possession thereof to the purchaser prior to the date of the alleged Violation in compliance with Section 5602 of the Code, and the Agency is satisfied with such proof, the Agency may terminate proceedings against the originally served Motorist and proceed against the unauthorized driver at the time of the Violation, or the new owner of the Vehicle. To establish the defense enumerated in clause (i), above, the registered owner may provide a stolen vehicle police report or other evidence which the Agency will evaluate and in its discretion determine whether the defense has been established.

Section 6. Payment After Notice of Delinquent Violation.

(a) If a Motorist, or agent of a Motorist who was served with a Notice of Delinquent Violation pursuant to Section 5, deposits the demanded Penalties with the Agency, after the Notice of Delinquent Violation is issued for delivery, the Agency shall follow the procedures set forth in Section 40266 of the Code.

Section 7. Contest of Notice of Violation or Delinquent Violation.

(a) Any Motorist who wishes to contest a Notice of Violation or Notice of Delinquent Violation may do so without having to deposit the toll or Penalty. If a Motorist timely contests a Notice of Violation or Notice of Delinquent Violation, the Agency shall conduct an administrative investigation, which shall consist of reviewing the evidence on which the alleged violation was based, including any photographs of the alleged violation, reviewing the Department's registered owner information, and confirming that a full and complete payment was not timely made. The results of the administrative investigation shall be mailed or emailed to the Motorist.

(b) The Agency shall establish a fair and impartial administrative review procedure for any Motorist who wishes to timely contest a Notice of Violation or a Notice of Delinquent Violation after receiving the results of an administrative investigation. Such procedure shall be in accordance with Section 40255 of the Code, including with respect to the deposit requirement, although the Agency may require a reduced deposit under circumstances approved by the Chief Executive Officer. The procedure shall be implemented by the Agency's Chief Executive Officer who shall have the authority to update and revise such procedure from time to time as the Agency's Chief Executive Officer deems necessary.

(c) Any Motorist who wishes to timely contest a Notice of Violation or Notice of Delinquent Violation after receiving the results of an administrative investigation shall be provided with a copy of the administrative review procedure and invited to request a hearing. A properly requested hearing

shall be held within 90 calendar days following the receipt of a request for administrative hearing, excluding any time tolled pursuant to Article 4 of Chapter 1 of Division 17 of the Code. In the event a hold has been placed on the renewal of a Motorist's Vehicle registration under Section 4770 of the Code, then the hearing shall be held within 30 days following a proper request, provided the Motorist requesting the hearing cooperates in its scheduling. Prior to filing any request to intercept monies due to the Motorist from the Franchise Tax Board in accordance with Government Code Sections 12419.5 et seq. the Agency shall provide 45 days' advance written notice, and the hearing on the review shall be scheduled prior to the filing of the request to intercept.

Section 8. Payment Plans. The Agency's Chief Toll Operations Officer shall establish a payment plan policy for offering payment plans to qualified Motorists for purposes of resolving Penalties. The policy shall comply with the requirements set forth in Section 40269.5 of the Code. The Agency's Chief Toll Operations officer may also authorize payment plans or other reasonable terms for resolution of outstanding Penalties on terms that the officer deems reasonable even if the Motorist does not qualify under Section 40269.5 of the Code.

Section 9. Collection of Unpaid Penalties. Except as otherwise provided in Sections 40268 and 40269 of the Code, the Agency shall be authorized to proceed under one or more of the following options for the collection of unpaid Penalties:

(a) The Agency may file an itemization of unpaid Penalties (including administrative and service fees) with the Department for collection with the registration of the Vehicle pursuant to Section 4770.

(b) If more than four hundred dollars ($400) in unpaid Penalties and other charges have been accrued by any Motorist or registered owner, the Agency may file proof of that fact with the court with the same effect as a civil judgment. Execution may be levied, and other measures may be taken for the collection of the judgment as are authorized for the collection of any unpaid civil judgment entered against a defendant in an action on a debtor. The court may assess costs against a judgment debtor to be paid upon satisfaction of the judgment. Prior to seeking entry of judgment, the Agency shall send a notice by first-class mail (and by e-mail, if known) to the Motorist or registered owner indicating that a judgment shall be entered for the unpaid Penalties and that after 30 days from the date of the mailing of the notice, the judgment shall have the same effect as an entry of judgment against a judgment debtor. The notice shall include all information required by Section 40267 of the Code and shall also advise the Motorist of the Motorist's right to request an administrative review. The filing fee and any costs of collection shall be added to the judgment amount.

(c) If the registration of the Vehicle has not been renewed for 60 days beyond the renewal date, and the notice has not been collected by the Department pursuant to Section 4770 of the Code, the Agency may file proof of unpaid Penalties with the court with the same effect as a civil judgment as provided in subdivision (b), except that if the amount of the unpaid Penalties is not

more than four hundred dollars ($400), the filing fee shall be collectible by the court from the debtor.

(d) The Agency may file a request to intercept a Motorist's tax refund from the Franchise Tax Board in accordance with Government Code Sections 12419.5 et seq.

(e) The Agency may contract with a collection agency to collect unpaid Penalties and other charges.

Section 10. Termination of Proceedings. The Agency shall terminate proceedings on the Notice of Delinquent Violations upon the occurrence of the circumstances specified in Section 40269 of the Code.

Section 11. Other Notices. Nothing herein shall prohibit the Agency from establishing informal methods of notifying Motorists of Violations and from collecting Penalties for Violations through such means.

Section 12. Implementation. The Chief Executive Officer of the Agency is hereby authorized and directed to develop such procedures, forms, documents and directives which may be necessary to implement the terms of this Ordinance.

Section 13. Severability. If any provision of this Ordinance is determined to be void or invalid by any administrative or judicial tribunal, said provision shall be deemed severable and such invalidation shall not invalidate the entirety of this Ordinance or any other provision hereof.

ADOPTED BY THE FOOTHILL/EASTERN TRA
XXXXXXXX.

TOLL ENFORCEMENT ORDINANCE ADOPTION NO. FE2028-01 AN ORDINANCE OF THE BOARD OF DIRECTORS OF THE FOOTHILL/EASTERN TRANSPORTATION CORRIDOR AGENCY RELATING TO THE ADMINISTRATION OF TOLLS AND THE ENFORCEMENT OF TOLL VIOLATIONS ON THE FOOTHILL AND EASTERN TRANSPORTATION CORRIDORS

ATTEST:

I, Sarah Lighthipe, Clerk of the Board of the Foothill/Eastern Transportation Corridor Agency hereby certify that the foregoing Ordinance FE2028-01 was duly adopted on XXXXXX, by the Board of Directors of the Foothill/Eastern Transportation Corridor Agency by the following vote:

Yes:	XXXX XXXX
No: Absent:	None Farrah
Abstain:	Khan None

Sarah Lighthipe, Clerk of
Foothill/Eastern Transportation Corridor Agency

Schedule "A"

Schedule of Penalties

Toll Evasion Penalty	$57.50
Delinquent Toll Evasion Penalty	$42.50

EXHIBIT F
TRAFFIC OPERATIONS METRICS MONITORING & GOVERNANCE

Table of Contents

Tables

1 Introduction

This exhibit will address three main topics:

- Section 2 will discuss the key performance metrics whose performance will be continually monitored once the Express Connector is opened.
- Section 3 will discuss the conditions under which traffic volumes on the Express Connector may need to be further constrained to preserve operations at the East End of the eastbound 91 Express Lanes.
- Section 4 will identify the data that will need to be collected to support the evaluation of the key performance metrics.
- Section 5 will outline the governance structure that will be responsible for reviewing the key performance metrics and for making subsequent adjustments to the dynamic pricing and progressive demand management systems.

The ultimate purpose of this exhibit is to establish a framework by which existing operations are continually evaluated and operational parameters are adjusted, as necessary, in the pursuit of more effective and efficient traffic operations in the corridor.

2 Key Performance Metrics

The effectiveness of the operation of the Express Connector will be determined by the extent to which the key performance metrics are satisfied during peak travel periods. Four performance metrics have been identified by the Parties as being foundational to successful operations in the corridor.

The four key metrics, along with the direction in which they will be applied, are summarized in Table 1.

Table 1 – Key Metric Summary

Metric	**Applicability of metric to:**		**Method of Measurement**
	NB-to-EB Direction	WB-to-SB Direction	
Express Connector Volumes not to exceed 1500 vehicles per hour	Yes	Yes	Automated
Maintain Speeds > 60 mph in EB and WB Critical Zones	Yes	Yes	Automated
EB County Line Egress volumes < 200 vph	Yes	No	Manually
Toll connector meter queue < 100 vehicles or 3,400 ft.	Yes	No	Automated

The metrics measured by automated means are incorporated into the dynamic pricing and/or progressive demand management systems. These systems will rely on traffic detection devices to provide information regarding traffic speed, volumes, density, and queue length. The dynamic pricing and progressive demand management systems incorporated into the F/ETCA toll system (or "TCA Toll System") will respond to the data inputs to enact changes in pricing or the various progressive demand management strategies.

The metrics measured by manual means will require the collection of data from other sources and will be evaluated. This manual data will be used to adjust the dynamic pricing algorithm or progressive demand management strategies as needed.

3 91 Express Lanes East End Performance

RCTC has concerns regarding the operation of the east end of the 91 Express Lanes following the opening of the 241/91 EC. The Parties acknowledge that prior to opening of the 241/91 EC, it is not known if vehicles travelling NB to EB to the 91 Express Lanes will significantly contribute to East End performance issues. The Parties also acknowledge that it is not known if reducing the 241/91 EC volumes will improve the East End performance.

The purpose of this section is to identify the conditions under which usage of the Express Connector may be constrained to protect operations at the east end of the 91 Express Lanes.

3.1 Super-peak Condition

The Parties have agreed to evaluate the impact of the 241/91 EC on the East End performance during Super-peak periods. A Super-peak period occurs when the following three conditions are met simultaneously:

1. McKinley toll rate is 25% greater than the established baseline toll rate;
2. Average speed in the East End zone is <65 mph or queuing at the East End is > 0.5 miles; and
3. Traffic density in the East End zone is > 23 vpmpl.

3.2 Express Connector Volumes

During Super-peak periods it is agreed that the Express Connector volume will be restricted to 370 vehicles per hour. The 370 vehicle per hour restriction shall be monitored in 30-minute increments. During Super-peak periods (as defined in Section 3.1), the total number of vehicles using the Express Connector in any two consecutive 30-minute intervals must not exceed 370 vehicles. If the volume does exceed 370 vehicles, then changes must be made to the dynamic pricing algorithm and/or the progressive demand management framework to reduce the volumes.

The Express Connector volumes will be reviewed and adjusted according to the governance process outlined in Section 5.

4 Data Collection and Analysis Requirements

The accurate evaluation of the above-mentioned key performance metrics requires timely and accurate collection of traffic data. Table 2 summarizes the data that will need to be collected to support the evaluation of the metrics identified in Section 2. The table is structured in the following manner:

- The top part of the table summarizes the data requirements for the NB-to-EB Express Connector;
- The middle part captures East End data requirements; and,
- The lower part summarizes the data requirements for the WB-to-SB Express Connector.

The table also identifies the source of each data requirement.

Table 2 – Data Collection Summary

Direction	Data Required	Data Source
NB-to-EB Express Connector	Speeds in EB critical zone	TCA Toll System
	Volumes in EB critical zone	TCA Toll System
	HOV Only and Bus/Registered Vanpool mode time/duration, traffic volumes and cheater rates	TCA Toll System
	Volumes through Express Connector Toll Point	TCA Toll system
	Weaving volumes (from Express Connector to County Line egress and from general purpose lanes to Express Lanes ingress)	OCTA/RCTC Toll System + TCA Toll System (Windy Ridge & Express Connector) + TCA FasTrak reader at egress
	Start and end time of all TCM activations	TCA Toll System / Dynamic Pricing Engine
	Start and end time of all periods in which TCM queue >80 vehicles or 3,200 feet	TCA Toll System / Dynamic Pricing Engine
	Toll Rates on Express Connector	TCA Toll System / Dynamic Pricing Engine
	Identification (including start and end time) of all non-recurring incidents	Traffic Operations Center
RCTC East End (EB)	Volumes at RCTC and OCTA mainline	OCTA and RCTC Toll System
	Toll Rates on RCTC 91 Express Lanes in 5 minute increments for all destinations	RCTC Toll System
	Volumes and speeds at RCTC East End	RCTC Toll System / "RCTC Traffic Monitoring System"
	Queue lengths by date, time and duration at RCTC East End	RCTC Traffic Monitoring System
	Identification (including start and end time) of all non-recurring incidents	Traffic Operations Center
WB-to-SB Express Connector	Speeds in WB critical zone	TCA Toll System
	Volumes in WB critical zone	TCA Toll System
	Volumes through Express Connector Toll Point	TCA Toll System
	Weaving volumes (from WB RCTC GP lanes to WB-to-SB Express Connector)	RCTC Toll System + TCA Toll System
	Average speed in WB mixing zone (the 0.61-mile open-access portion of the WB 91 Express Lanes between the end of RCTC's barrier-separated facility and the start of OCTA's barrier-separated facility)	TCA Toll System
	Identification (including start and end time) of all non-recurring incidents	Traffic Operations Center

As Table 2 indicates, a significant amount of data will need to be compiled on a regular basis to support a consistent and continual evaluation of the key performance metrics and East End

performance. To somewhat narrow the scope of the data analysis effort, the analysis of data should focus on Super-peak, peak, and shoulder travel periods in each direction. Table 3 summarizes the time periods from which data should be analyzed. These are initial estimates that may be refined once live data from the Express Connector is available to better inform the selection.

Table 3 – Time Periods for Data Analysis

Direction	**Weekday Time Period (Mon-Fri)**	**Weekend Time Period (Sat-Sun)**
NB-to-EB Express Connector	Noon – 8 pm	1 pm – 6 pm
WB-to-SB Express Connector	4 am – 11 am	Noon – 8 pm
East End (EB)	Noon – 8pm	2 pm – 6 pm

Once the data is collected, it will be analyzed to determine the extent to which the key performance metrics were satisfied. East End performance data will also be analyzed. The key components of the data analysis are summarized in Table 4. The table summarizes the critical outputs that will be required from the analysis, organized by direction. An important element of toll system design will be to define a series of reports that can be swiftly pulled on a recurring basis to support the analysis.

Please note that the term "interval" in Table 4 refers to the frequency with which prices on the Express Connector are calculated and updated. The duration of these pricing intervals is defined in Table 7 of Appendix A. The initial recommended duration is 5 minutes; the Governance Team will ultimately be responsible for establishing the value.

Table 4 – Data Analysis Requirements

Direction	Data Required	Frequency
NB-to-EB Express Connector	# of non-conforming intervals (< 60 mph in EB critical zone)	By interval
	Density of EB critical zone during non-conforming intervals	By interval
	# of unique 60-minute periods in which NB-to-EB Express Connector volume > 1500 vehicles	By interval
	# of 30-minute instances during East End super-peak where Express Connector volume > rate of 370 vehicles per hour (185 vehicles per ½ hour)	By occurrence
	# of hours with weaving volume (Express Connector to County Line egress) > 200 vehicles; and/or from general purpose lanes to county line ingress	Hourly
	# of intervals with TCM activated	By interval
	# of intervals with HOV ONLY engaged	By interval
	# of 60 minute periods in which HOV2+ volume exceeds configurable target value	By occurrence
	# of 60 minute period in which peak period exceeds xxx vph	By occurrence
	# of 60 minute periods in which super-peak volumes exceed xxx or queueing or speeds (should discuss)	By occurrence
	# of intervals in which max queue length is exceeded	By interval
East End (EB)	# of 5-minute periods the East End (at McKinley) toll rate is 25% (or more) greater than the established baseline toll	By occurrence
	# 30 minute periods in which the traffic density at East End is greater than 23 vpmpl (vehicles/mile/lane)	By occurrence
	# 30 minute periods in which at least one of the conditions below is observed: • East End average speed below 65 mph • East End queues longer than 0.5 miles	By occurrence
	30 minute periods within which the East End Super-peak conditions are met	30 minute time periods
WB-to-SB Express Connector	# of non-conforming intervals (< 60 mph in WB critical zone)	By interval
	Density of WB critical zone during non-conforming intervals	By interval
	# of unique 60-minute periods in which WB-to-SB Express Connector volume > 1500 vehicles	By interval
	# of days in which average speed in WB mixing zone is compromised (10% or more below baseline conditions for speed)	Hourly
	Weaving volumes during compromised hours of the WB mixing zone	Hourly

One important note is that all data analysis should be restricted to analysis periods not impacted by atypical conditions or incidents within the Express Connector or Express Lanes. This allows the analysis to focus on periods in which the only external variable contributing to traffic operations is change in demand.

The most important output of the Data Analysis process is the identification of **conditions requiring review**. These conditions are summarized in Table 5. If any of these conditions are observed, they will need to be reviewed by the Governance Team (discussed in the next section) for possible action.

Table 5 – Conditions Requiring Review

Direction	Location	Condition
NB-to-EB Express Connector	EB Critical Zone	3 non-conforming intervals (speeds < 60 mph) within any rolling 30-minute window
	Express Connector	Any 30-minute window of time in which the Express Connector volume > 1500 vehicles (flow rate)/ hour
	Express Connector	Any 30-minute window during Super-peak periods in which Express Connector volume > 185 vehicles.
East End (EB)	East End	Super-Peak Period established
WB-to-SB Express Connector	WB Critical Zone	3 non-conforming intervals (speeds < 60 mph) within any 30-minute window
	Express Connector	Any 30-minute window of time in which the Express Connector volume > 1500 vehicles / hour
	WB Mixing Zone	Any 60-minute periods in which the average speed through the WB Mixing Zone is ≥ 10% lower than existing conditions

5 Governance Structure

The tasks of monitoring conditions, assessing causes of operational shortcomings, and advancing solutions will be the responsibility of the Governance Team. The Governance Team (GT) will consist of 1-2 designated representatives each from F/ETCA, RCTC, and OCTA. The GT may also consult with traffic and revenue consultants and Caltrans as needed. The purpose of the Governance Team (GT) is to oversee a continuous analytical feedback loop by regularly reviewing operational data and by collectively making appropriate adjustments to the dynamic pricing framework.

This section will be organized as follows:

- Section 5.1 will discuss the functions of the Governance Team (GT) with respect to reviewing and managing operations within the **critical zones** (eastbound and westbound) as well as the **WB mixing zone**.
- Section 5.2 will discuss the responsibilities of the GT with respect to monitoring and managing operations at the **East End** of RCTC's Express Lanes.

5.1 Governance Team – Critical Zones & Mixing Zone

This section will provide an overview of the functioning of the Governance Team as it pertains to managing operations in the EB and WB critical zones as well as in the WB mixing zone. Section 5.1.1 will discuss the manner in which the GT will operate, while Section 5.1.2 will outline the Change Management Process that represents the mechanism by which adjustments may be implemented to support improved operations in the corridor.

5.1.1 Governance Team Operations – Critical & Mixing Zones

With respect to both the EB critical zone, the WB critical zone, and the WB mixing zone, the GT is proposed to operate as follows:

- The first task of the GT will be to establish the initial parameters under which the dynamic pricing algorithm will operate. These parameters (along with some initially proposed values) are identified in Appendix A to this exhibit.
- At 6 months prior to go-live, the GT will review the latest available traffic volumes/speeds and update the configurable parameters as needed.
- After go-live, the GT will convene regularly to review data and ongoing operational conditions.
    - Immediately after the 241/91 EC opens, the GT will meet on a daily basis.
    - Once a measure of operational stability and consistency is observed, the GT will meet on a less frequent (e.g., weekly) basis.
- Ultimately, the frequency of meetings will be made by consensus among the Governance Team members. F/ETCA will be responsible for organizing and scheduling GT meetings.
- The GT meetings will primarily focus on identifying and evaluating conditions requiring review, as described previously in Table 5. Upon identification of the conditions requiring review, the GT will collaboratively perform the following tasks:
    - Assess the causes of the failure(s) to meet the prescribed performance metrics
    - Discuss possible changes to help improve performance
    - Identify appropriate adjustments to configurable parameters and to the PDM strategy.
- It is also envisioned that the GT may periodically perform additional analysis and/or testing beyond conditions requiring review, such as reviewing upstream traffic volumes and general purpose lane weaving in the EB direction. The purpose of this additional analysis would be to identify and/or test potential adjustments to dynamic pricing or progressive demand management strategy, or to potentially change the definition of Super-peak conditions (as described in Section 2.2). As with all functions, the goal of the GT's efforts is to optimize overall performance in the corridor.
- An important component of the routine meetings will be to evaluate the effectiveness of

previous adjustments. It will be important for the GT to learn and understand how traffic operations respond to various changes to configurable parameters.

Systematic analysis will be critical to understanding the root causes of non-conformance to the performance metrics. Table 6 helps identify the appropriate analysis that should follow any instance of non-conformance to the key performance metrics identified in Section 2. Please note that the analysis should focus on non-conforming metrics that occur during **periods that are free from non-recurring incidents**.

Table 6 – Guidance for Assessing Non-Conformance to Standards

Non-Conforming Metric	Required Analysis
Not maintaining **60+ mph in the critical zone**	• Assess densities during non-conforming periods (as well as during the interval prior to and after) to determine the role of traffic volume • Assess weave volumes during the non-conforming periods to understand their impact on operations • In the NB-to-EB direction, evaluate whether progressive demand management was actively engaged and determine its effectiveness in restoring acceptable conditions • If applicable, review HOV-access level and determine if a modification is needed • Evaluate toll rates on the EC to determine whether they are sufficiently responsive to increasing congestion • Assess HOV2+ volume to determine if the vph is too high and the HOV Only mode needs to be changed to HOV3+ • Assess non-compliance rate for TCM and HOV Only
Not keeping **Express Connector volumes < 1500 vph**	• Evaluate whether EC toll rates are effective at managing demand • Consider the extent to which other factors (e.g., conditions in GP lanes) contribute to demand • Evaluate whether engagement of TCM (in the NB-to-EB direction) is effective at restricting demand for EC • Evaluate PDM strategies to determine if they require changes
Not keeping **TCM queues < 100 vehicles / 3400 feet**	• Consider whether a toll connector meter timing adjustment is needed. • Ensure that HOV ONLY is appropriately triggered per the algorithm's parameters • Assess whether HOV2+ during HOV Only mode produces too many vehicles • Assess whether the HOV Only mode is resulting in too many cheaters and enforcement efforts need to be changed • Calculate the time required to restore an acceptable queue once HOV ONLY is triggered • Assess whether more sensors may be needed to better react to queuing
Failure to maintain **speeds in the WB mixing zone that are within 10% of baseline**	• Evaluate the relationship between weave volumes and WB Mixing Zone operations • Assess impact to 91 El customers travelling both the RCTC and OCTA segments • Assess whether adjusting the EC price would decrease weaving

In short, any instance of non-conformance identified by the Governance Team should be followed by an inquiry into the extent to which pricing on the Express Connector was related to the non-

conformance. This inquiry will likely involve an evaluation of external factors (such as conditions in the parallel GP lanes), an assessment of internal operations (such as weaving), and a confirmation that PDM is functioning as prescribed.

After conducting the analysis described in Table 6, the Governance Team may find it necessary to adjust one or more of the dynamic pricing algorithm or progressive demand management parameters or policies. The two tables in Appendix B to this exhibit provide initial guidance regarding the effective targeting of adjustments to address operational issues.

To summarize, the role of the Governance Team with respect to the EB and WB critical zones as well as the WB mixing zone will be to (1) establish the initial parameters for the dynamic pricing algorithm and progressive demand management system, (2) review all primary performance metrics on a regular basis, (3) recommend changes to the parameters to enable the facility to meet its operational goals, and (4) evaluate the effectiveness of its proposed changes. This analysis will be critical in the early stages of the opening of the Express Connector. It will also be critical whenever regional improvements (such as ECOP) are implemented, since such improvements will likely affect traffic operations in the corridor.

5.1.2 Change Management Process

In support of its mandate to oversee and manage operations in the EB and WB critical zones and in the WB mixing zone, the Governance Team may implement changes to follow up on its analysis. The changes will generally fall into one of three categories: (a) changes to the dynamic pricing algorithm, (b) changes to the progressive demand management strategy, and (c) changes to Express Connector-related policies. Some examples of these potential changes are identified below:

- **Changes to dynamic pricing algorithm input values and parameters**:
    - Maximum density in the critical zone (the primary trigger for advancing to the next level of PDM)
    - Recovery density in the critical zone (the primary trigger for unraveling each stage of PDM)
    - Peak design toll
    - Not-to-exceed toll amount
    - Maximum queue length
- **Changes to progressive demand management (PDM) strategy and related parameters**:
    - TCM – activation threshold, timing, involvement during HOV-Only mode
    - HOV Only mode operation at the 2+ or 3+ level, dynamic or pre-scheduled operation
    - Bus/Registered Vanpool trigger density
- **Changes to Express Connector related policies**. (Note that changes to these policies will likely require F/ETCA Board approval.)
    - Determining that the Express Connector will be dynamically priced, and related

principles, including maximum toll price change interval and change amount
- Determining that the Express Connector will utilize a progressive form of traffic demand management
- Determining eligibility for discounts and discount levels
- Determining a minimum toll rate for the Express Connector
- Determining policy regarding a patron paying a displayed toll price
- Determining a toll rate or penalty for specific circumstances, such as failure to stop at the Toll Connector Meter when it is active

The three agencies (F/ETCA, RCTC, and OCTA) will work jointly to identify needed changes and consider the consistency of policies. Any of the three agencies can propose changes. Proposed changes will be subject to the guidelines that follow.

5.1.2.1 Algorithm Changes and PDM Strategy Changes

1) Management level reviews the proposed change.
2) If all three agencies agree on a proposed change, the change is made, and the effects are monitored.
3) If the management level of all three agencies does not unanimously agree on a proposed change, the matter escalates to the executive level:
    a) If OCTA and RCTC executives agree on a change to the dynamic pricing algorithm or progressive demand management strategy, the change is made, and the effects are monitored.
    b) If OCTA and RCTC executives do not agree on a change, then no change is made.

5.1.2.2 Policy Changes

1) Management level reviews the proposed changes to the policy to determine if approval is required by each agency or not
2) If approval by each agency is needed, changes to policy must be approved by all three agency executives
3) No change is made to a policy requiring the approval of all three agencies until the executives of the agencies agree on the change. Note that changes to policy may require the approval of F/ETCA's Board of Directors.

5.2 Governance Team Operations – East End

The Governance Team will also be responsible for overseeing operations on the East End of the RCTC Express Lanes. The GT's responsibilities relative to the East End will include the following:

1. Establishing the baseline toll at go-live;

2. Re-establishing the baseline toll when corridor improvements or changes are made;
3. Defining Super-peak conditions (as initially laid out in Section 2.2);
4. Identifying when the Super-peak conditions have been met, ensuring the Super-peak data is collected for analysis;
5. Monitoring Express Connector volumes during Super-peak conditions;
6. Identifying all 60-minute windows of time *during Super-peak periods* in which the Express Connector volumes exceed 370 vehicles;
7. Evaluating the periodic need for changes to 241/91 EC dynamic pricing, PDM, RCTC dynamic pricing, other policy change;
8. Enacting changes to EC toll pricing and/or progressive demand management strategy to bring EC traffic volumes within 370 vph during subsequent super-peak conditions. Reasonableness shall be used when determining if the current volume fulfills the intent of the 370 vph limit. As adjustments are not automated it should be understood that it may be unreasonable to demand adjustments of the EC volume is close to 370; and,
9. Performing analysis and pilots to determine if the 241/91 EC is materially contributing to east-end performance issues and determining what adjustments can be made to maximize corridor performance.

In anticipating the important role of the Governance Team in monitoring and maintaining acceptable conditions in the East End, it is important to note the following:

- All Parties of this Agreement have agreed that **an East End super-peak condition shall not itself represent contractual non-conformance**. Rather, non-compliance is defined as the failure of F/ETCA to bring EC volumes under 370 vph during Super-peak conditions.
- Section 5.1.2.1 discusses the RCTC and OCTA final approval provision for dynamic pricing and progressive demand management. However, **this provision does not apply to Super-Peak governance**. Any Party can propose such changes, but all three Parties must approve.
- The GT may, upon agreement of all GT members, perform additional testing, including temporarily bringing the EC volume under 370 vph during subsequent super-peaks to measure its effect on East End toll price and performance. Any such testing that further lowers EC volumes under 370 will be limited in duration (i.e. 2-3 weeks), after which EC volumes can return to within 370 vph. Such testing may also include temporarily increasing EC traffic volumes over 370 vph during super-peak to measure this effect on East End toll price.
- Should all three GT members (OCTA, RCTC, and TCA) not agree on testing parameters, or on changes to related pricing or progressive demand strategy parameters, then the matter will be escalated, first to the management level, and then to the executive level. If all three parties still do not agree on a proposed change, a mutually agreed independent third party

will evaluate the PDM change and make an objective recommendation, which the Parties agree will prevail.

Appendix A. Configurable Parameters

A variety of parameters that will be employed in the proposed framework for dynamic pricing and progressive demand management. Table 7 summarizes these parameters and provides some initial possible values. These values need to be modeled, tested, and agreed upon by Governance Team members 6 months prior to deployment. The Governance Team will be primarily responsible for establishing these parameters prior to going live, evaluating these parameters after going live, and updating these parameters as part of the Governance process (see Section 4 of this exhibit).

Table 7 – Summary of Configurable Parameters and Proposed Initial Values

Configurable Parameter	**Proposed Value**		**Comment**
	NB-to-EB	WB-to-SB	
Peak Period	Mon-Thu: 2-6 pm Fri: 1-7 pm	Mon-Thu: 5-9 am	HOV3+ vehicles required to pay tolls during peak periods
Superpeak Period	Thu: 2-3 pm Fri: 1-3 pm	n/a	Subset of peak periods in which alternative approach to PDM may be used
Minimum discharge rate at the Toll Connector Meter (vph)	360	n/a	
Maximum discharge rate at the TCM (vph)	900		
Interval length (min.)	5	5	Should be in the range of 2 to 15 minutes
Minimum price change per interval	± $0.25	± $0.10	
Maximum price change interval			
Minimum toll for Express Connector	$2.00	$2.00	These values go together. The min. toll is charged when density <= minimum density
Minimum density (vehicles per mile per lane)	9	9	
TCM trigger density	26	n/a	
Peak design toll rate	$40	$30	These values go together. The peak design toll is charged when actual density = maximum density
Maximum density (vehicles per mile per lane) sustained densities at or above this value will initiate progressive demand management	26	26	

Configurable Parameter	Proposed Value		Comment
	NB-to-EB	WB-to-SB	
Not-to-Exceed Toll A configurable value designed to prevent any potentially high toll rates from being posted; to bypass, set to a very high number	$75	$50	This is for control of the dynamic pricing and not an approved maximum toll rate
Θ multiplier calibrated such that Θ * minimum density = 1.0	0.111	0.111	These values are not independently determined, but are a function of other key parameters
ß rate escalation factor governs the rate at which tolls escalate above the min. toll	3.037	1.9125	
Recovery density (vehicles per mile per lane) Once PDM has been engaged, density must be consistently below this level before the recovery phase can begin	22	n/a	
TCM Engagement Trigger # of consecutive intervals that critical zone density must be above TCM trigger density before TCM engaged	3		The selection of this value should be related (in part) to the interval length
Max queue length (ft.) if the queue at the TCM exceeds this value, transition to HOV ONLY	3400		Alternatively, this could be expressed as # of vehicles
HOV Only Capacity	2		
HOV ONLY Engagement Trigger # of consecutive intervals that critical zone density must be above max density before HOV ONLY restriction is enacted	3		Applied after TCM engaged for NB-to-EB; continuously evaluated for WB-to-SB
Buses & Registered Vanpools Engagement Trigger # of consecutive intervals that critical zone density must be above max density before enacting "Buses & Registered Vanpools ONLY"	3		Not evaluated until HOV ONLY mode has been engaged
Recovery Mode Engagement Trigger # of consecutive intervals the critical zone must remain below recovery density before transition to recovery mode	3		Ensures that conditions are consistently acceptable before recovery mode begins
Recovery Stage Duration # of consecutive intervals the critical zone must remain below recovery density before transitioning to the next stage of recovery	3		Ensured conditions are consistently good before further lifting restrictions

The parameters identified in the table above will be configured primarily to sustain the minimum acceptable average speed in the critical zone. This primary performance metric is **60+ miles per hour** (mph). In other words, the variables underlying the dynamic pricing framework should be

designed (and modified as necessary) to ensure the operation of the Express Connector supports this performance standard. A key purpose of the analytical feedback loop described in this exhibit is to identify modifications to these parameters such that this primary performance metric can always be satisfied.

Appendix B. Algorithm Adjustment Guidance

The tables on the following two pages provide guidance regarding making adjustments to the dynamic pricing algorithm's key parameters.

- Table 8 reviews the key parameters, and it provides a high-level discussion on how changes to these parameters could impact operations.
- Table 9 provides some initial guidance on how each of the key parameters relates to the five key metrics identified in Section 1. In reviewing this table, please note the following:
    - A star indicates a strong relationship between the designated parameter and the corresponding performance metric.
    - A checkmark (√) indicates an indirect relationship between the designated parameter and the corresponding performance metric.
    - A blank space suggests that there is little-to-no relationship.

Table 8 – Qualitative Discussion of Possible Parameter Adjustments

Configurable Parameter	NB-to-EB Value	WB-to-SB Value	Comment
Minimum Density (vphpl)	9	9	Reducing minimum density would cause rates to escalate earlier; more effective if coupled with a reduction in the maximum density and/or increase in minimum toll
Minimum Toll	$2.00	$2.00	Increasing the minimum toll could suppress off-peak usage and delay the onset of elevated rates. It would have little effect on peak conditions unless coupled with an increased to the peak design toll.
Maximum Density (vphpl)	26	26	A decrease in the maximum density would cause rates to escalate more quickly, assuming the peak design toll stays the same. Its impact is magnified if peak design toll rate is increased.
Peak Design Toll Rate	$40	$30	An increase in the peak design toll would cause rates to escalate more quickly, assuming the max density stays the same. Its impact is magnified if maximum density is decreased.
TCM Trigger Density (vphpl)	22	n/a	A decrease in the TCM trigger density would cause the TCM to engage more quickly, initiating PDM more quickly. The risk is an increased likelihood of creating queues that could ultimately lead to HOV ONLY mode.
Max Queue Length (ft.)	3400	n/a	Reducing the max queue length could cause HOV ONLY mode to engage more quickly. This would strengthen demand management but would likely result in more frequent restrictions for single-occupant vehicles.
Max. Price Change per Interval	± $2.00	± $1.00	Increasing the maximum price change per interval will provide greater responsiveness if congestion abruptly worsens. This value is interrelated with the interval length: The shorter the interval, the lower your “max price change per interval” can be.
Interval Length	5 min.	5 min.	Reducing the interval length can allow a quicker response to changing traffic conditions.
HOV Only Mode Occupancy	2	0	

Table 9 – Relationship between Parameters and Performance Metrics

Parameter Adjustment	Maintain 60+ mph in Critical Zone	Maintain Express Connector Volumes < 1500 vph	Avoid TCM Queues > 100 vehicles	Sustain Speeds in WB Mixing Zone
Reduce Minimum Density (vphpl)	√	√		√
Increase Minimum Toll	√	√		√
Decrease Maximum Density (vphpl)	√	√		√
Increase Peak Design Toll Rate	★	★	√	★
Reduce TCM Trigger Density (vphpl)	★	√		
Reduce Max Queue Length (vehicles)	√	√	★	
Increase Max. Price Change per Interval	√	√		√
Reduce Interval Length	√	√	★	

Legend

√ Indirect relationship between parameter and corresponding performance metric

★ Strong relationship between parameter and corresponding performance metric

Appendix C. Progressive Demand Management Guidance

Table 10 below provides guidance regarding the adjustment of specific parameters related to Progressive Demand Management (PDM). Each parameter identified in the table will have an impact on how PDM will operate. A qualitative description of this impact is provided in the "Comment" column.

Table 10 – Qualitative Summary of PDM Parameter Adjustments

Configurable Parameter	Proposed Value	Comment
Maximum Density (vphpl)	30	When exceeded for a configurable # of intervals, this value will trigger the next stage of PDM. Therefore, all else being equal, raising this parameter will delay the implementation of subsequent stages of PDM. The tradeoff is that raising this value could also result in elevated levels of congestion in the EB critical zone.
Required # of Intervals	3	This value represents the number of intervals in which certain conditions must be observed prior to advancing to the next stage of PDM. Raising this value will tend to make the system less responsive to changes in traffic conditions and will delay the onset of various stages of PDM. A higher value will also lengthen the time required to return to normal conditions once PDM is engaged.
TCM Trigger Density (vphpl)	26	Engaging the TCM is the first level of PDM. An increase in the TCM trigger density would require higher levels of traffic to engage the TCM, thus delaying the initiation of PDM. The risk of raising this value too much is that the system would be less proactive in warding off congestion before it becomes problematic.
Recovery Density (vphpl)	22	Once PDM is engaged, the recovery process (restoring PDM to Stage 1) doesn't begin until the density in the EB critical zone has been below this level for a configurable number of intervals. Raising this value will tend to accelerate the recovery process; lowering this value will lengthen the time required to return to Stage 1.
Peak Design Toll Rate	$40	An increase in the peak design toll would cause rates to escalate more quickly, assuming the max density stays the same. Its impact is magnified if maximum density is decreased.
Max Queue Length (ft.)	3400	This is one of the conditions that directly leads to advanced stages of PDM. Reducing the max queue length would cause HOV ONLY mode (as well as BUS/REGISTERED VANPOOLS ONLY mode) to engage more quickly. This would yield more aggressive demand management and would lower the likelihood that queues could become disruptive. But it would likely result in more frequent restrictions for single-occupant vehicles.
HOV Requirement	HOV3+	Both the effectiveness and the restrictiveness of Stage 3 of PDM (HOV ONLY mode) depend on the HOV requirement. A requirement of HOV3+ will be more effective at managing demand and reducing queues at the TCM. But it will also be much more restrictive, eliminating the option of using the Express Connector for the vast majority of travelers.
Discharge Rate	Range of 360-900 vph	In general, a higher discharge rate will reduce the likelihood of extensive queuing at the TCM and will therefore decrease the likelihood (all else being equal) of advancing to subsequent stages of PDM.

EXHIBIT H

EXPRESS CONNECTOR

MAINTENANCE CLOSURE PLAN

Table of Contents

Tables

Figures

Table 1 - Abbreviations/Acronyms

AET	All Electronic Toll
AVC	Automatic Vehicle Classification
AVI	Automatic Vehicle Identification System
Caltrans	California Department of Transportation
Caltrans D8	Caltrans District 08
Caltrans D12	Caltrans District 12
CCTV	Closed Circuit Television
CHP	California Highway Patrol
CMS	Changeable Message Sign
CPC	Central Processing Center
CRD	Central Repair Depot
DVAS	Digital Video Auditing System
EL	Express Lanes
ECMA	Express Connector Maintenance Agreement
F/ETCA	Foothill/Eastern Transportation Corridor Agency
FCC	Federal Communications Commission
GP	General Purpose
ICS	Image Capture System
IVIS	Intelligent Vehicle Identification System
KPI	Key Performance Indicators

Table 1 - Abbreviations/Acronyms

MOMS	Maintenance On-Line Management System
OCTA	Orange County Transportation Authority
PPS	Plate Processing System
RCTC	Riverside County Transportation Commission
SOP	Standard Operating Procedure
SR	State Route
SR-91 TOC	SR-91 Traffic Operations Center
TCM	Toll Connector Meter
TCS	Toll Collection System
TDS	Traffic Detection System
TMC	Toll Management Console
TSP	Toll System Provider
VCARS	Vehicle Capture and Recognition System
VES	Vehicle Enforcement System
VTMS	Variable Toll Message Sign

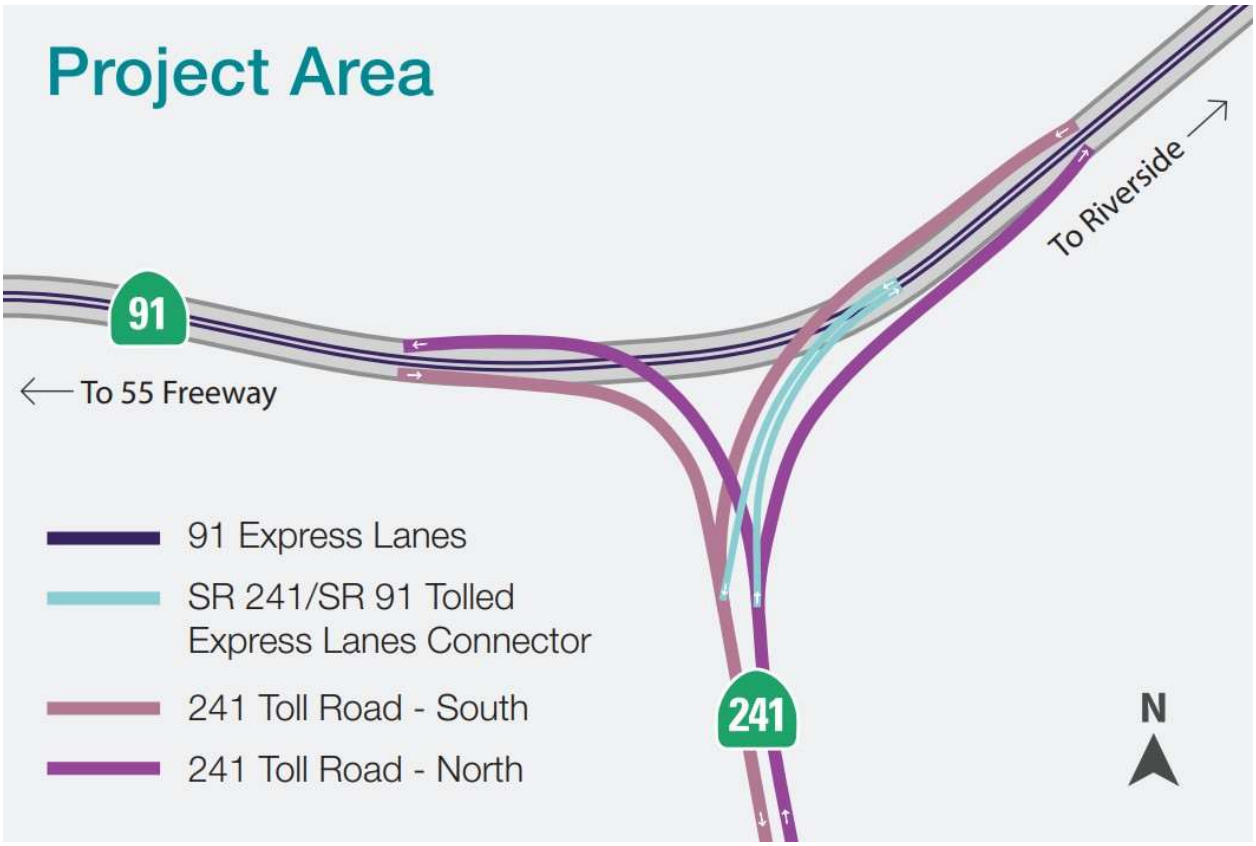
1 OVERVIEW

1.1 Express Connector Project Description

The Foothill/Eastern Transportation Corridor Agency (F/ETCA) along with Orange County Transportation Authority (OCTA), and Riverside County Transportation Commission (RCTC) collectively referred to as the Operating Partners, are working together to deliver and operate a direct Express Connector between 241 Toll Road and the 91 Express Lanes. The 241/91 Express Connector Project (Project) will provide improved connectivity between the 91 Express Lanes and the 241 Toll Road and will enhance operations. The project area is shown in Figure 1.

Ultimately, the Project will construct a median-to-median tolled connector that will bring one lane from the median of northbound 241 Toll Road to the eastbound 91 Express Lanes and the reverse movement from the westbound 91 Express Lanes to the median of southbound 241 Toll Road. The Project area is within Caltrans right-of-way and includes improvements on State Route (SR) 241, from Santiago Creek to the SR-241/SR-91 interchange, and on SR-91, from the SR-241/SR-91 interchange to the Coal Canyon Undercrossing.

Figure 1 – Project Map



The 241/91 Express Connector will have four access points:

- Northbound SR-241 – Ingress to Express Connector
- Southbound SR-241 – Egress from Express Connector
- Eastbound 91 Express Lanes – Egress from Express Connector
- Westbound 91 Express Lanes – Ingress to Express Connector

A new Express Connector toll point will be installed for Express Connector traffic traveling in both the northbound and southbound directions on 241 Toll Road. Several other improvements will also be made, including:

- In the direction of the northbound-to-eastbound connector, a series of static guide signs will communicate the distance to and lane assignment for the Express Connector and the general-purpose connector entrances to SR- 91. A variable toll message sign (VTMS) placed a quarter mile from the decision point will display the toll rates associated with using the 241/91 Express Connector to the Orange-Riverside County line. The VTMS will utilize static destination messaging with a changeable toll rate panel and a 16- character bottom banner for additional information. A full-matrix changeable message sign (CMS) prior to the Windy Ridge toll plaza will also be installed and will display approved traveler information messages and serve as a backup if the toll pricing sign becomes nonfunctional.
- In the direction of the westbound-to-southbound connector, the existing OCTA messaging sign located at the county line will be available to display Express Connector pricing. This sign consists of a full matrix display CMS and will display the 241/91 Express Connector and 91 Express Lanes toll price. Static guide signs will be added in the westbound direction of the SR-91 to inform traffic of the 241/91 Express Connector movement to southbound SR-241.
- A series of traffic detectors will be installed on the 91 Express Lanes collecting live data in both the east and westbound directions. The data will be used for the dynamic pricing algorithm, the toll connector meter operations, and for monitoring performance metrics.
- The project will also implement toll connector metering of the 241/91 Express Connector for the northbound-to-eastbound movement. The CMS prior to the Windy Ridge toll plaza, and a series of five connector meter signs spaced approximately 1,000 feet apart leading up to the toll point and the Toll Connector Meter (TCM) will let drivers know when the toll connector meter is operating.
- Additionally, closed circuit television (CCTV) cameras will be installed at each access point, at the connector meter, and on new toll gantries, CMS and VTMS to ensure complete coverage of the 241/91 Express Connector facilities and throughout the length of the Express Connector.

1.2 Express Connector Maintenance Plan Overview

This Maintenance Closure Plan provides an overview of the activities that will be performed to maintain the Express Connector tolling assets as described in Exhibits A and B and to ensure its continued operation in conjunction with the 91 Express Lanes. The plan includes toll collection system infrastructure and associated responsibilities, criteria for maintenance, processes, and closures associated with the activities. F/ETCA and their tolling contractor will be responsible for maintaining the Express Connector Toll Collection System (TCS). F/ETCA will partner with Caltrans to maintain the roadway infrastructure which is covered in detail in the Express Connector Maintenance Agreement (ECMA). The 91 Express Lanes facility is separately maintained by OCTA and RCTC.

1.3 Express Connector Maintenance Plan Updates

This Maintenance Plan is a living document and will be revised at appropriate milestones as necessary.

1.4 Express Connector Assets

Exhibit B of the Operating Agreement depicts the schematic plans for the Express Connector TCS. Exhibit B is limited to those items which are part of the electronic toll collection system and includes dynamic message signs, cameras, vehicle detectors, and the All-Electronic Toll (AET) collection system. Additionally, Exhibit B shows the Toll Connector Meter and the ancillary equipment required to operate the TCM. The design of the TCM and the toll point gantry will include rear facing signals, and HOV displays to assist CHP officers with enforcement. Figure 2 and Figure 3 are provided only as a reference for Exhibit B. Exhibit B is the official document for the equipment covered in this plan and in the Operating Agreement and will be updated at appropriate milestones as necessary. The official Exhibit B document will take precedence over the figures shown in this Maintenance Plan.

Figure 2 – Schematic Plan #1

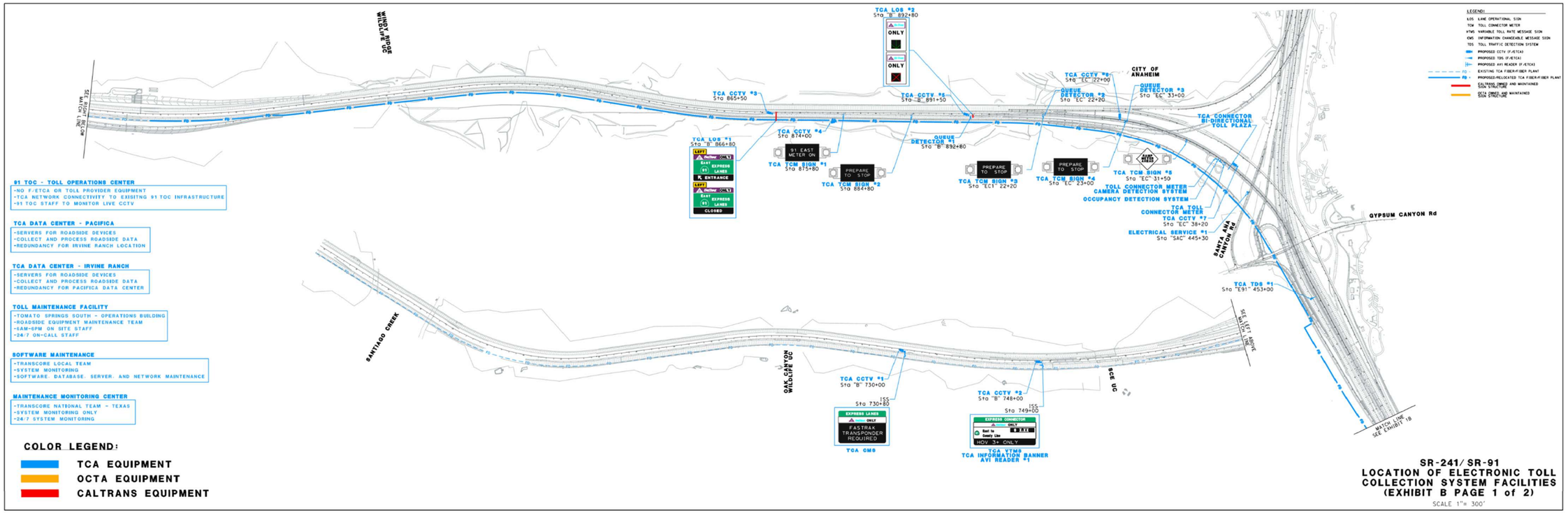
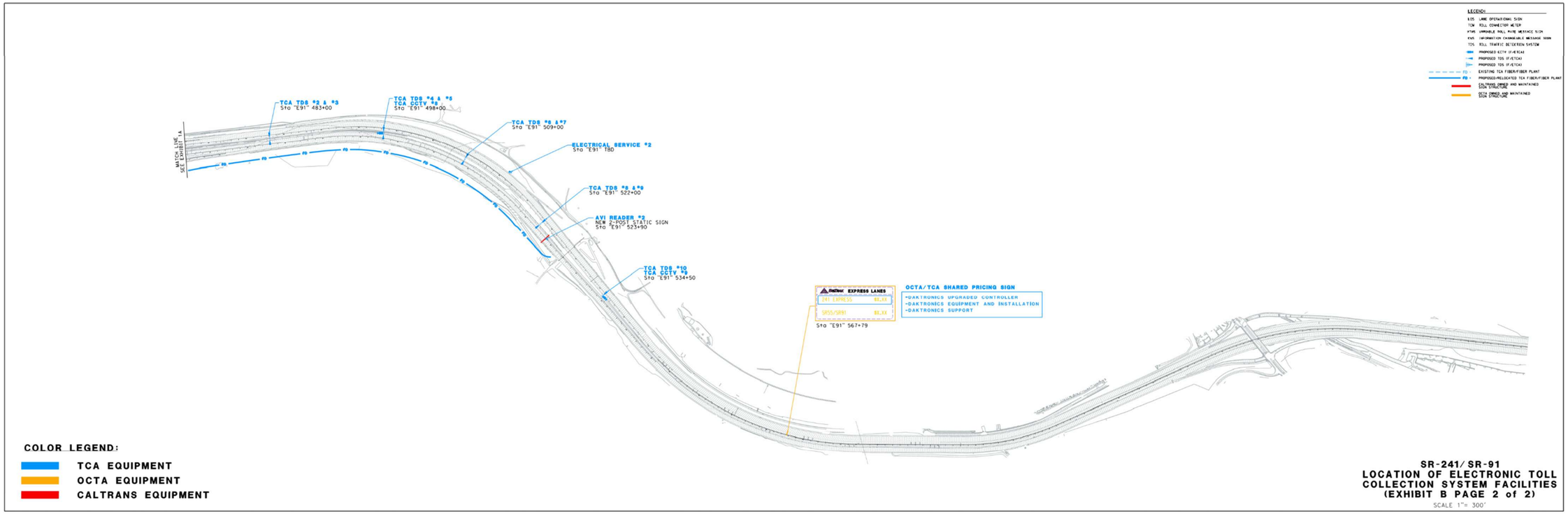


Figure 3 – Schematic Plan #2



1.5 Express Connector Maintenance Activities Summary

Maintenance activities are performed on all roadway and toll system assets under various maintenance agreements. Coordination of scheduled maintenance activities among the Operating Partners and their contractors is expected by all Parties.

Roadway Infrastructure

F/ETCA will establish an Express Connector Maintenance Agreement (ECMA) with Caltrans for the Express Connector roadway infrastructure. The ECMA will cover all highway improvements and related infrastructure constructed as part of the Express Connector (herein referred to as roadway infrastructure). F/ETCA will coordinate all maintenance activities which impact the 91 Express Lanes for review and approval with OCTA and RCTC a minimum of 7 days in advance of planned work. Approvals of emergency maintenance closures that impact the 91 Express Lanes are at the sole discretion of OCTA and RCTC.

OCTA and RCTC each have separate agreements with Caltrans associated with maintaining the 91 Express Lanes. OCTA and RCTC will provide F/ETCA 7 days' advance notification of any planned maintenance closures which impact the Express Connector. OCTA and RCTC will provide F/ETCA with notification of emergency closures but F/ETCA approval is not required.

SR-91 Traffic Operations Center (SR-91 TOC)

F/ETCA, OCTA, and RCTC will enter a future "Traffic Operations Center Services Agreement" for the work required to be done by the SR-91 TOC. The Traffic Operations Services Agreement will include the 91 Express Lanes TOC operator, TOC facility, 91 Express Lanes TOC system and infrastructure. The Agreements will cover the scope and cost to integrate the 241/91 EC into the 91 Express Lanes TOC from a system and operational standpoint as well as the ongoing management and system maintenance and improvements. Every effort will be made to identify the incremental operational costs related to the 241/91 EC, but where that cannot be done costs will be split amongst the parties.

The agreement will include routine updates/upgrades that will be required and the responsible parties which will perform the updates/upgrades. Cost for upgrades directly attributable to F/ETCA will be paid by F/ETCA. Costs that are for the benefit of all three parties will be shared amongst the parties.

Freeway Services Patrol (FSP)

F/ETCA will enter into an agreement with OCTA to leverage OCTA's existing FSP services agreement such that the same provider of FSP services for the 91 Express Lanes will also provide services for the 241/91 EC.

Toll Collection System

F/ETCA will operate and maintain the Toll Collection Systems (TCS) for the Express Connector to ensure system functionality works as intended. Operations and maintenance of the Express Connector TCS is performed by F/ETCA's Toll Systems Provider (TSP) under a toll services

contract with F/ETCA. See Section 4 of this document for detailed information.

OCTA and RCTC each have similar toll services contracts with their own TSPs to maintain the 91 Express Lanes toll collection systems.

1.6 Express Connector Maintenance Responsibilities

Exhibit A of the Operating Agreement lists the TCS equipment and the responsibility matrix for the various maintenance activities associated with the Express Connector.

Agencies involved in maintenance activities include the following:

- Foothill/Eastern Transportation Corridor Agency (F/ETCA)
- Orange County Transportation Authority (OCTA)
- Riverside County Transportation Commission (RCTC)

F/ETCA will be responsible for establishing a separate Express Connector Maintenance Agreement (ECMA) with Caltrans for roadway related maintenance on the Express Connector, which is beyond the scope of this document.

The 91 Express Lanes maintenance is included under separate agreements among OCTA, RCTC, and Caltrans. The 91 Express Lanes, OCTA, and RCTC are referenced in this document only to the extent that:

- Express Connector assets are located within the 91 Express Lanes and maintenance of such assets requires coordination between F/ETCA, OCTA, and RCTC
- Maintenance of 91 Express Lanes assets may restrict access to the Express Connector and require coordination between F/ETCA, OCTA, and RCTC.

1.7 Express Connector Maintenance Organization

This section describes F/ETCA's maintenance organization and contractual arrangements to administer, verify, and perform maintenance on the Express Connector. F/ETCA's maintenance organization includes:

- **Chief Toll Operations Officer:** Overall responsible for F/ETCA's tolling operations, maintenance, implementation, and forecasting for the tolling operations. Responsibilities also include management of capital projects related to toll operations.
- **Director of Tolling & Customer Information Systems:** Maintenance responsibilities include:
    - Preparation and monitoring of toll collection system maintenance budget.
    - Overseeing operation and maintenance of F/ETCA's toll collection system assets.
    - Evaluating roadway toll collection equipment performance and determining lifecycle maintenance cycles.
    - Verifying contractor performance of preventive, predictive, and corrective

maintenance.

- Performing inspections and testing of F/ETCA toll collection system assets.

- **Chief Capital Programs Officer:** Overall responsible for the F/ETCA's Engineering, Environmental, and Facilities departments supporting the implementation and maintenance of F/ETCA's Express Connector roadway infrastructure assets within tolling areas. Responsibilities also include management of F/ETCA's Capital Improvement Plan (CIP) related to roadway infrastructure and coordinating roadway infrastructure maintenance with Caltrans according to its ECMA.
- **F/ETCA Support Departments**
  - Finance
  - Legal
  - Contracts
  - External Affairs
  - Other participants in the F/ETCA maintenance program include Caltrans, CHP, and TSP Maintenance Manager.

Table 2 identifies the F/ETCA maintenance program members.

Table 2: F/ETCA Express Connector Maintenance Program Members

Role	Name	Contact Info
Chief Toll Operations Officer	Vincent Valdez	vvaldez@thetollroads.com 949-754-3456
Director of Tolling & Customer Information Systems	Myung Park	mpark@thetollroads.com 949-754-3471
Chief Capital Programs Officer	Stephanie Blanco	sblanco@thetollroads.com 949-754-3454

Express Connector maintenance must be coordinated with the operations and maintenance of the connecting facilities, including the 241 Toll Road and the 91 Express Lanes. Table 3 identifies the members who must participate in the planning and execution of maintenance activities that have the potential to impact connecting facilities.

Table 3: Express Connector Maintenance Program Teams

Team	Team Members
Maintenance Management Team	F/ETCA Chief Toll Operations Officer F/ETCA Chief Capital Programs Officer RCTC Director of Toll Operations OCTA Express Lanes General Manager
Toll Collection System Maintenance Team	F/ETCA Chief Toll Operations Officer F/ETCA Director of Tolling & Customer Information Systems F/ETCA TSP Maintenance Manager RCTC Director of Toll Operations OCTA Express Lanes General Manager

2 EXPRESS CONNECTOR MAINTENANCE CONTROLS

To ensure that the procedures detailed in this Plan are implemented, F/ETCA has outlined the following controls to be used for Express Connector maintenance.

2.1 Express Connector Maintenance Performance Standards

TCS performance standards are outlined in the toll services contracts held by F/ETCA for the Express Connector. F/ETCA's TSP is responsible for performing preventative maintenance that supports the achievement of various system performance standards (Key Performance Indicators, KPI's). Should a toll collection system fail to achieve its KPI's, the TSP will take action to remedy the cause. Refer to Section 4 for additional details related to toll collection system maintenance.

The roadway infrastructure Maintenance Services will be performed to Caltrans Maintenance Standards which are defined in the ECMA as the applicable published Caltrans maintenance schedules and standards, the Maintenance Manual, or any applicable Caltrans guidance of statewide application which is in effect at that time, to the same extent and manner that Caltrans is applying the same manual or guidance to the maintenance of comparable State Highways.

Each year, F/ETCA will develop and approve the annual Work Plan and Budget for the Express Connector, as well as the 10-Year Work Plan and Budget to define preventive, predictive, and corrective roadway infrastructure maintenance. The Maintenance Services also include unplanned and urgent maintenance requirements. Refer to Section 3 for additional details related to roadway infrastructure maintenance.

2.2 Express Connector Maintenance Contracting and Purchasing

2.2.1 Express Connector Maintenance Contracts Summary

F/ETCA will enter into several contracts with various entities to perform maintenance of the Express Connector assets. Table 4 provides a summary of the maintenance agreements. As needed, F/ETCA may enter into additional maintenance contracts for the Express Connector, following the F/ETCA procurement guidelines.

Table 4: Express Connector Maintenance Agreements Summary

Agreement	Description	Expiration Date
Toll Collection System Agreement	Agreement between F/ETCA and TransCore to provide and maintain a roadway toll collection system on SR-241 Toll Road and Express Connector. TransCore is required to provide "turnkey" maintenance of all tolling systems as required to achieve Key Performance Indicators. Initial O&M Term is XXX years (beginning with Revenue Service Commencement) O&M Options are available to extend the O&M Term up to XXX additional years.	TBD
Back Office System Agreement	Agreement between F/ETCA and BRiC to provide and maintain a back office system and customer service center for the 241 Toll Road and Express Connector BRiC is required to provide "turnkey" maintenance of all tolling systems as required to achieve Key Performance Indicators. Initial O&M Term is XXX years (beginning with Revenue Service Commencement) O&M Options are available to extend the O&M Term up to XXX additional years.	TBD
Express Connector Maintenance Agreement	Agreement between F/ETCA and Caltrans amended annually to establish maintenance work plan and budget for Express Connector roadway infrastructure. The annual Work Plan and Budget will be developed prior to the beginning of each fiscal year operating period. Scheduled maintenance will be performed as directed by F/ETCA during low volume traffic periods as defined in the annually adopted Work Plan. Urgent maintenance will be performed in accordance with performance standards.	Term of F/ETCA-Caltrans Toll Facility Agreement
SR-91 Traffic Operations Center Services Agreement	Agreement between F/ETCA, OCTA and RCTC for the use of 91 Express Lanes TOC services. Includes 91 Express Lanes TOC labor and materials and incident monitoring. Includes the communications and ATMS system Includes the 91 Express Lanes TOC facility.	TBD
Freeway Services Patrol (FSP)	Agreement between F/ETCA and OCTA for the provision of FSP services. F/ETCA will leverage OCTA's existing services agreement with its provider.	TBD

2.2.2 Express Connector Material Purchasing

For roadway infrastructure, the F/ETCA contractor will provide labor, materials, equipment, and all other resources required to perform the Maintenance Services in accordance with the annual Work Plan and Budget. Should the work require the procurement and availability of any materials not ordinarily in possession, F/ETCA will develop a plan to procure said inventory so that it is available for deployment or use as needed.

For TCS equipment, TransCore is required to provide turnkey maintenance and replace parts as necessary. TransCore is responsible for purchasing new parts as needed to maintain the TCS KPI Compliance.

Material purchasing responsibilities are summarized in Table 5.

Table 5: Express Connector Material Purchasing

Item	Purchaser	Approval
Any minor roadway maintenance materials not ordinarily in possession or provided by F/ETCA.	F/ETCA Contractor	F/ETCA approves prior to purchase, per ECMA.
All TCS equipment and spare parts (241 Toll Road and Express Connector)	TransCore	TransCore is responsible for turnkey maintenance and will have some spare parts on hand. Additional items will be purchased as necessary.

All materials purchased by F/ETCA will be accounted for in accordance with F/ETCA's current accounting instructions, as specified in vendor contracts, and/or as outlined in the F/ETCA procurement guidelines.

2.3 Express Connector Maintenance Funding

All costs for Express Connector maintenance will be funded by the toll revenue generated at the Express Connector toll point.

2.3.1 Damage to Assets

Insurance

F/ETCA has insurance coverage on a variety of Express Connector assets. Claim processes and filing will depend on the asset and whether it is maintenance or operations related.

Damage to F/ETCA Property

In the event there is third-party damage to F/ETCA property, F/ETCA will immediately initiate

repairs if it poses a security or safety issue or impacts operations. F/ETCA staff will contact the Procurement Manager to process a claim with the insurance provider.

2.4 Express Connector Permits and Licenses

F/ETCA is authorized to operate and maintain the Express Connector under various permits and licenses. Table 6 provides a summary of current permits and licenses.

Table 6: Express Connector Permits and Licenses

Permit/License	Description	Expiration Date
FCC License	Existing F/ETCA License FRN: 0009739020 Call Sign: WQFX552	10/30/2026 Renewed by F/ETCA Chief Operations Officer as needed
Caltrans Encroachment Permit	1298-NMC-0633 Operate, maintain and manage the daily operation of the toll facilities located along the North Leg (SR 241) and East Leg (SR 133) of the Eastern Transportation Corridor with access from the I-5/SR133 (Laguna Canyon Road) interchange, SR241 at Portola Pkwy, and R91/SR241 connectors (in the vicinity of Gypsum Canyon Road), all in accordance with current Caltrans Standard Specifications and Standard Plans, Section 600 (Utilities) of the Caltrans Encroachment Permit Manual, the attached Provisions and Permit Plans dated September 2, 1998.	01/01/2040 Renewed by F/ETCA Chief Capital Programs Officer as needed

2.5 Express Connector Maintenance Quality Assurance/Verification

F/ETCA performs quality assurance and verification tasks to ensure its maintenance contractors comply with the terms of their contract. Some examples include:

- F/ETCA reviews TSP performance statistics reported in monthly maintenance reports.
- F/ETCA performs site visits to evaluate roadway conditions and verify roadway maintenance activities have been performed.
- F/ETCA inspects spare parts inventories.

More details on the quality assurance and verification processes for roadway and infrastructure and toll systems can be found in Sections 3.2 and 4.3, respectively.

3 Express Connector Roadway Infrastructure

This section briefly describes F/ETCA's maintenance program as it relates to the Express Connector roadway infrastructure. Maintenance activities include inspections and testing, routine maintenance, urgent maintenance, lifecycle maintenance, and monitoring and reporting.

F/ETCA will enter into a separate agreement for the roadway infrastructure in the Express Connector Maintenance Agreement (ECMA), which will outline in detail all of the maintenance activities above. This section is a only a preview of the ECMA for the purposes of the operating agreement.

3.1 Maintenance Activities

Roadway infrastructure maintenance includes both routine and lifecycle maintenance activities such as litter/debris removal and sweeping, pavement and barrier repairs, pavement marking, and delineator/channelizer replacement, and signage replacements. Maintenance activities will be coordinated with OCTA and RCTC for review and approval a minimum of 7 days in advance of the scheduled work in order to minimize impacts to users of each facility.

3.1.1 Scheduled Maintenance

Labor, materials, equipment, and all other resources required to perform the Maintenance Services shall be per Caltrans Maintenance Manual Standards, except to the extent that the ECMA or the annual work plan provide higher standards.

The annual work plan will be provided to RCTC and OCTA for review and approval before finalizing. This plan will be updated yearly and will be provided for RCTC and OCTA for review each year.

All Maintenance Services will be performed in accordance with the annual Work Plan, the Maintenance Manual Standards, and in a good, workmanlike and commercially reasonable manner.

Maintenance and repair of the Express Connector will be equivalent to the maintenance and repair of single-lane connectors on State Route (SR) 91, SR-55, Interstate 5, and Interstate 405.

Work will be performed per scheduled maintenance as directed by F/ETCA during low volume periods of traffic to minimize disruption to traffic and loss of revenue.

Maintenance affecting the 91 Express Lanes will be scheduled/performed in coordination with the 91 Express Lanes scheduled closures (approximately every 3 weekends) unless emergency notice is given for a repair. Having this set scheduled will allow all agencies to prepare and plan for the maintenance effort, which will include lane closures, alerting/notifying the driving public, and scheduling of maintenance staff. If the scheduled routine maintenance must be rescheduled, then all agencies will strive to coordinate and agree to the new date. F/ETCA must coordinate with OCTA and RCTC to schedule a new date agreed by all parties. If approved, F/ETCA and OCTA can perform maintenance on a date which does not align with RCTC maintenance closures.

3.1.2 Urgent Maintenance

Urgent Maintenance tasks will be performed as quickly as reasonably possible to minimize safety hazards to the motoring public, risk to property, and adverse impacts on toll collection and operations for the Express Connector. Urgent maintenance tasks are described in the annual Work Plan but may include items such as chemical spills, non-traversable pavement, debris in travel lane, and any other maintenance that disrupts the flow of traffic, or that poses a safety risk.

Emergency notice to OCTA and RCTC is required for urgent maintenance affecting the 91 Express Lanes. Communications and notifications protocols are being developed and will be covered in the Traffic Operations Center Services Agreement, in the Incident Management Plan, and their corresponding Standard Operating Procedures (SOP's)

3.1.3 Express Connector Inspections

As part of F/ETCA's Express Connector Maintenance Agreement (ECMA), documentation will be maintained as required by the Maintenance Manual or as reasonably requested by F/ETCA.

If at any time, F/ETCA determines the level, quality or response time of Maintenance Services does not meet its reasonable expectations, F/ETCA will request a meeting to explore avenues to address the deficiencies. F/ETCA will have the right, but not the obligation, to arrange for any item of Maintenance Services to be provided by F/ETCA personnel, or by third parties contracting directly with F/ETCA.

4 TOLL COLLECTION SYSTEM

This section describes F/ETCA's maintenance program as it relates to its toll collection systems. Maintenance activities include preventative maintenance, corrective maintenance, lifecycle maintenance, and monitoring and reporting.

4.1 Systems and Equipment

F/ETCA is responsible for maintaining the tolling system to ensure safe and efficient operating conditions 24 hours a day, 7 days a week. F/ETCA provides the following Toll System Maintenance Services:

- Field maintenance
- System (hardware/software) maintenance
- Network/communication maintenance

4.1.1 TCS Systems

Components of the Toll Collection System (TCS) include the following:

- **Roadside Controllers** – servers located in roadside cabinets and buildings which interface directly with roadside sensors to correlate data together into a transaction.
- **AVI** (Automatic Vehicle Identification) System – gantry-mounted radio frequency (RF) readers and antennas which capture transponder data from Title 21 and 6C transponders mounted inside customer vehicles.
- **AVDC** (Automatic Vehicle Detection and Classification) – gantry- and pavement-mounted sensors which detect the presence of a vehicle and quantity of axles for each vehicle.
- **Image Capture System (ICS)** – gantry- and pole-mounted cameras which capture license plate images of vehicles traveling through toll zones.
- **DVAS** (Digital Video Auditing System) – an independent system of cameras and servers that captures live action video based on motion and still images triggered by software events. DVAS links the images to the associated transactions to support transaction audit and review.
- **Automatic License Plate Recognition** (ALPR) – software system which extracts license plate values from captured image and uses additional logic to identify the correct plate values from multiple images.
- **ODS** (Occupancy detection system) – hardware and software which detects the number of passengers inside the vehicle.
- **Host System** – a combination of servers, networking equipment, and software which performs final processing on transactions from the roadside controllers, provides maintenance management functionality for the system, and interfaces with the back office system for transmission.

- **Uninterruptible Power Supply (UPS) –** the backup power that keeps the system running during brief utility power loss situations before switching over to generator.
- **Maintenance On-Line Management System (MOMS)** – an integrated maintenance and inventory control system which provides menus, screens, reports, and charts that allow authorized personnel to track equipment problems from the time of failure until they are resolved.
- **Toll Connector Meter –** express lanes metering system that, when necessary, will become active and decrease the flow rate of cars to the connector. Equipment includes the following:
    - Blank Out Signs – indicates the status of metering (e.g., meter on).
    - Lane operational signs – indicates the status of the lane (e.g., open or closed).
    - Signal equipment – metering signal.
    - Automatic enforcement camera – captures vehicles disobeying the TCM, (e.g., red light running).
    - Changeable Message Signs (CMS) - Described in detail below. The CMS will be used to inform drivers prior to the decision point that the TCM has been engaged.
- **Changeable Message Signs (CMS) –** CMS provides roadway information to the northbound-to-eastbound direction. The panel message is controlled by the Tolling Site Controllers. Each panel is capable of displaying CA MUTCD-compliant alphanumeric characters, graphical images, and shapes, and is compliant with both American Association of State Highway and Transportation Officials (AASHTO) requirements and NTCP 1203v1. The CMS system allows F/ETCA staff to provide coordinated messaging between the SR-241 and the 91 Express Lanes and with other nearby CMS systems. The message sign that alerts drivers to express lanes requirements (i.e., Fastrak Transponder required)
- **Variable Toll Message Signs (VTMS)** – VTMS provides Express Connector pricing for the northbound-to-eastbound direction. The sign contains price displays with a single- line changeable text display and a 16-character bottom banner for information display. The sign display is controlled by the Tolling Site Controllers. Each variable message panel allows for the required number of 18-inch alphanumeric characters. The variable toll message sign indicates the current toll fee with the corresponding location.
- **OCTA Changeable Message Signs (CMS) –** CMS provides Express Connector pricing for the westbound-to-southbound direction in addition to the Express Lane pricing for the westbound direction. The panel message is controlled by the Tolling Site Controllers. Each panel is capable of displaying CA MUTCD-compliant alphanumeric characters, graphical images, and shapes, and is compliant with both American Association of State Highway and Transportation Officials (AASHTO) requirements and NTCP 1203v1. The CMS system allows SR-91 TOC staff to provide coordinated messaging between the SR-241 and the 91 Express Lanes and with other nearby CMS systems. The variable toll message sign indicates the current toll fee with the corresponding location. Repair to this sign requires access to the RCTC 91 Express Lanes and thus requires coordination with OCTA and RCTC approval to access the OCTA CMS sign. RCTC shall make every effort to grant access, but F/ETCA agrees that access during peak hours or during a time which conflicts

with RCTC projects may not be possible.

- **Sign verification CCTV's** – an independent digital video recording system used to monitor signages. Sign verification CCTV cameras are situated so that the VTMS and CMS displays can be viewed.
- **Incident management CCTV's –** an independent digital video recording system through the current capabilities of the SR-91 TOC ATMS used to monitor traffic along the corridor. Video analytics may be utilized to analyze the CCTV video stream and are used for real-time incident monitoring, including stopped vehicles, objects in the Lane, pedestrians, wrong- way vehicles, slowed traffic, congestion, and deteriorated views.
- **Traffic Detection System (TDS) -** sensors installed along the roadway to provide real-time traffic data measurement and reporting, including volume, speed, vehicle direction, vehicle length, and lane assignment. Data collected by the TDS is used to report on monitored traffic conditions and for the Dynamic Pricing system**.**

4.1.2 Maintenance Equipment and Support Locations

The systems main operations facility is in F/ETCA headquarters at the 125 Pacifica, Irvine, CA building. This facility is centrally located for F/ETCA toll roads and is 25 minutes from the Express Connector and supported by two other nearby facilities in Irvine Ranch and Tomato Springs South. Together, these locations allow for technicians to service the road while meeting response and repair time obligations.

The Tomato Springs South maintenance facility provides a range of support services to ensure that maintenance support is provided in a timely and cost-efficient manner. The CRD is responsible for providing the following services:

- Technical support
- Equipment repair
- Spare parts supply
- Diagnosis and repair of maintenance equipment
- Shipping and Receiving
- Other maintenance related tasks as assigned by F/ETCA

F/ETCA's toll service provider operates the following vehicles for maintenance:

- Bucket Van – Used to access equipment mounted out of normal reach, such as gantry mounted components and surveillance cameras.
- Pool Van – Used to transport equipment too large for the staff assigned vehicles, for the network team to use when working in the field and when an assigned vehicle is out of service for maintenance.

All maintenance impacting the 91 Express Lanes shall be performed in off-peak hours and with OCTA and RCTC approval. OCTA and RCTC will make every effort to accommodate F/ETCA needs, but the 91 Express Lanes operations take priority over all maintenance.

4.2 TCS Maintenance

F/ETCA's TSP is responsible for preventive, corrective, and predictive maintenance of toll system hardware, software, and the communications network. F/ETCA staff and/or subcontractors are responsible for maintaining the fiber infrastructure which supports the toll system.

F/ETCA's TSP will provide a full-time field maintenance team as part of an existing F/ETCA maintenance program for overseeing existing F/ETCA facilities. The field service team will have normal office hours and will be available 24/7 upon receiving alerts generated by the system.

F/ETCA's TSP will also provide a network/communications maintenance team that is responsible for the management and administration of the AET system communications network. The network/communications maintenance team will have normal office hours.

Additionally, 24/7 system monitoring is provided by a national team located in Texas.

4.2.1 TCS Preventative Maintenance

F/ETCA's TSP will perform preventive maintenance on the RTCS and network/communications systems in accordance with its maintenance plan to support continuous operations and high system availability. At planned intervals, the TSP will perform preventative tasks on RTCS systems such as cleaning, alignment, tuning, and proactive replacement of components. For the network/communications system, the TSP will perform system administration activities, including regular system checks, monitoring of security posture, and management and configuration of RTCS-related networking hardware.

4.2.2 TCS Corrective Maintenance

An on-call schedule is established by the TSP to provide emergency and corrective maintenance coverage after the standard business hours, seven days a week. The on-call schedule is established monthly. At least one technician is on call after hours, on weekends, and on holidays.

F/ETCA's TSP will perform all necessary corrective maintenance actions to return the tolling system to full functionality and performance within the allotted response and repair time. The RTCS automatically monitors the equipment and generates alerts when failures occur. Alerts are sent in real-time to the MOMS, which notifies maintenance staff and generates a work order, if configured to do so for a particular alert.

MOMS will be configured to send alerts to the on duty or on call technicians. If an alert is not responded to in a configurable amount of time, MOMS will send the alert to other staff based on a configured escalation path. The configuration screen used to establish and review the escalation path is in the MOMS section of the TMC application.

Priority Levels

Corrective maintenance issues are categorized into priority levels according to the severity and nature of the issue. Table 7 provides descriptions and response times based on each priority level.

Table 7: RTCS Maintenance Priority Levels

Priority Level	Description	Acknowledgment and Repair Times
1	Any malfunction or fault that will result in the immediate loss of revenue and/or hazard to personnel	Acknowledge: 1 hour Repair: 4 hours
2	Any malfunction or fault that will not result in immediate loss of revenue but will/may impact operational performance of the system.	Acknowledge: 2 hours Repair: 48 hours
3	Any action or event that results in a malfunction or impacts the system performance and is not a priority 1 or 2 event.	Acknowledge: 24 hours Repair:7 days

Escalation Paths

Issues will follow an escalation path based on both severity and timeliness of response and repair. The F/ETCA TSP will notify F/ETCA of any issues within the respective acknowledgment time window for the issue's priority level. Unless modification of the escalation path is required due to staffing levels at the time the issue occurs, escalation paths will follow the following steps:

1. TSP Maintenance Technician
2. TSP Maintenance Supervisor
3. TSP Maintenance Manager
4. TSP Director of Maintenance
5. F/ETCA Director of Tolling and Customer Information Systems

F/ETCA's TSP is responsible for identifying escalation windows within their own team which will enable repairs to be completed successfully within the repair time windows. Escalation will occur any time an issue is not acknowledged in the excepted time or when a notified person deems it necessary to bring in additional support. Upon identifying that any repair will exceed its respective priority's repair window, the TSP will immediately notify F/ETCA's Director of Tolling and Customer Information Systems. At the discretion of F/ETCA's Director of Tolling and Customer Information Systems, additional escalation within the TSP's organization may occur to ensure issue resolution.

4.2.3 RTCS Lifecycle Maintenance

F/ETCA's TCS vendor is responsible for turnkey maintenance and for evaluating the equipment performance regularly, and especially towards the end of the typical lifecycles as shown in Table 8. At F/ETCA's and TSP discretion, if it is determined that the equipment has reached its end of life, the TSP is responsible for the lifecycle replacement of TCS equipment during the O&M Term.

Table 8 summarizes the typical TCS lifecycle replacement, but actual lifecycles will be determined

through an evaluation by the TSP. Table 8 also identifies the amount of lead time suggested to plan, procure, and implement the TCS lifecycle replacements (if individually procured). For major technology replacement projects, its assumed procurement duration will be 18 months followed by a 24-month implementation.

Table 8: TCS Typical Lifecycle Maintenance

Maintenance Task	Description	Frequency	Lead Time
TCS System	Procurement of a new TCS	~15 Years	3.5 Years
VTMS	Replace 100% of VTMS	~12 Years	2.5 Years
CMS	Replace 100% of EL CMS	~12 Years	2.5 Years
TCS CCTV	Replace 100% of CCTV cameras	~12 Years	2.5 Years
TDS	Replace 100% of TDS devices	~12 Years	2.5 Years

4.3 Configuration Management

F/ETCA's TSP is responsible for notifying F/ETCA of any system changes and performing change management. The TSP will notify F/ETCA when they have identified a need for a potential change to the TCS software or equipment. Following the review of the issue, F/ETCA will provide approval for the TSP to further investigate the issue and develop a proposed solution. Prior to implementing the change, the TSP will submit a Configuration Change Request Form that describes the proposed change in detail including a schedule, potential impacts, pre-deployment test plan, rollback procedures, deployment plan, and system monitoring plan. F/ETCA will review and approve the Configuration Change Request Form before the TSP implements the change on the production systems. The TSP is responsible for requesting F/ETCA approval for any lane closures required to support the implementation and testing of the change.

4.4 Maintenance Monitoring, Quality Assurance, and Verification

F/ETCA's TSP is responsible for daily routine monitoring of the TCS performance and determining when maintenance tasks need to be performed. F/ETCA performs routine audits of the TSPs maintenance program, including audits of spare parts inventory and preventative maintenance procedures.

F/ETCA reviews the TSP's monthly maintenance reports and annual renewal test reports. These reports summarize the TCS performance and identify any Key Performance Indicators (KPIs) that were not achieved. F/ETCA will review the supporting documentation, review correction maintenance logs, approve or comment on the KPI results, and assess Liquidated/Stipulated Damages as appropriate under the toll system provider's contract.

F/ETCA regularly monitors system performance and logs any detected events that impact TCS KPIs. For all events that result in an impact to the KPIs or ability to collect toll revenue, F/ETCA will log the following information related to the event:

- Date and description of the incident
- KPIs that have been impacted.
- O&M Priority Level
- Response and repair times
- ROMS ticket details
- Estimate of liquidated damages for the event (if applicable)
- Estimate stipulated damages for events that result in an impact to collecting toll revenue.

4.5 Maintenance Responsibility and Communication Between Agencies

4.5.1 TCS Responsibility

F/ETCA and its TSP are responsible for all aspects of monitoring and maintenance of the Express Connector TCS. For those elements of the TCS located closer to or interfacing directly with the 91 Express Lanes traffic, there are special considerations for maintenance responsibility and communication. These considerations are outlined in detail in Exhibit B of the operating agreement, but can be summarized in general for TCS elements as follows:

- The SR-91 TOC will have the most immediate indications of failed video feeds for any of the CCTV cameras which provide coverage of the Express Connector. As such, system monitoring activities of cameras by OCTA, RCTC, and F/ETCA can be supplemented by notification of failures to the respective agency.
- The OCTA CMS which has been modified to provide Express Connector pricing will interface with both OCTA's and F/ETCA's toll systems. If either agency detects an issue with the sign that may have an impact on the other agency's messaging to the public, the detecting agency should notify the Parties. The communication infrastructure for the sign is independent for each system, meaning each agency is responsible for their own fiber and network hardware up to the point of the sign controller.
- Issues related to pricing/message displays on Express Connector signs or the operation of the Toll Connector Meter should be communicated to both OCTA and RCTC as soon as the issue has been identified.
- Any time maintenance or lane closures are being performed that might impact traffic flow on 91 Express Lanes, F/ETCA will request approval by OCTA and RCTC.
- Any time maintenance or lane closures are being performed that might impact traffic flow into or out of the Express Connector, F/ETCA must be notified as soon as possible.

4.5.2 Back Office Coordination

Both F/ETCA's TCS provider and its back office system (BOS) provider are responsible for monitoring for issues with the interface between the two systems. When an issue with the interface is identified by either party, the identifying party will notify both F/ETCA and the other party of the issue. Depending on the nature of the issue, it may not be immediately obvious which vendor needs to perform corrective action to resolve the issue. For those situations where it is not obvious, both vendors should begin troubleshooting and coordinating with each other to identify the root cause.

4.6 Warranty

F/ETCA's TSP is responsible for administrating a warranty program for all RTCS hardware and third-party software. The TSP will maintain warranty records and will review software discrepancies and available patch reports from third parties to determine when RTCS software requires upgrading. RTCS warranties are tracked in the MOMS and an automated message is generated when the warranties approach the expiration date.

5 TOLLED FACILITY CLOSURES FOR MAINTENANCE

5.1 Closure Diagrams

Maintenance of the Express Connector and adjacent portions of the 91 Express Lanes will require coordination of lane and/or facility closures between F/ETCA, OCTA, and RCTC to minimize impacts to each agency's operations and to the traveling public. Figures 4 through 10 represent the physical lane closure plans anticipated for the maintenance of toll assets supporting the Express Connector. These figures are diagrammatic and only show the tolled lanes to clearly represent the lane closure scenarios.

Lane closures due to maintenance activities will be communicated to travelers using CMS and VTMS which are dynamically controlled by the SR-91 TOC. The messages displayed on these signs will be developed in coordination with Caltrans, OCTA, and RCTC prior to Express Connector opening to traffic.

5.1.1 Normal Operating Conditions

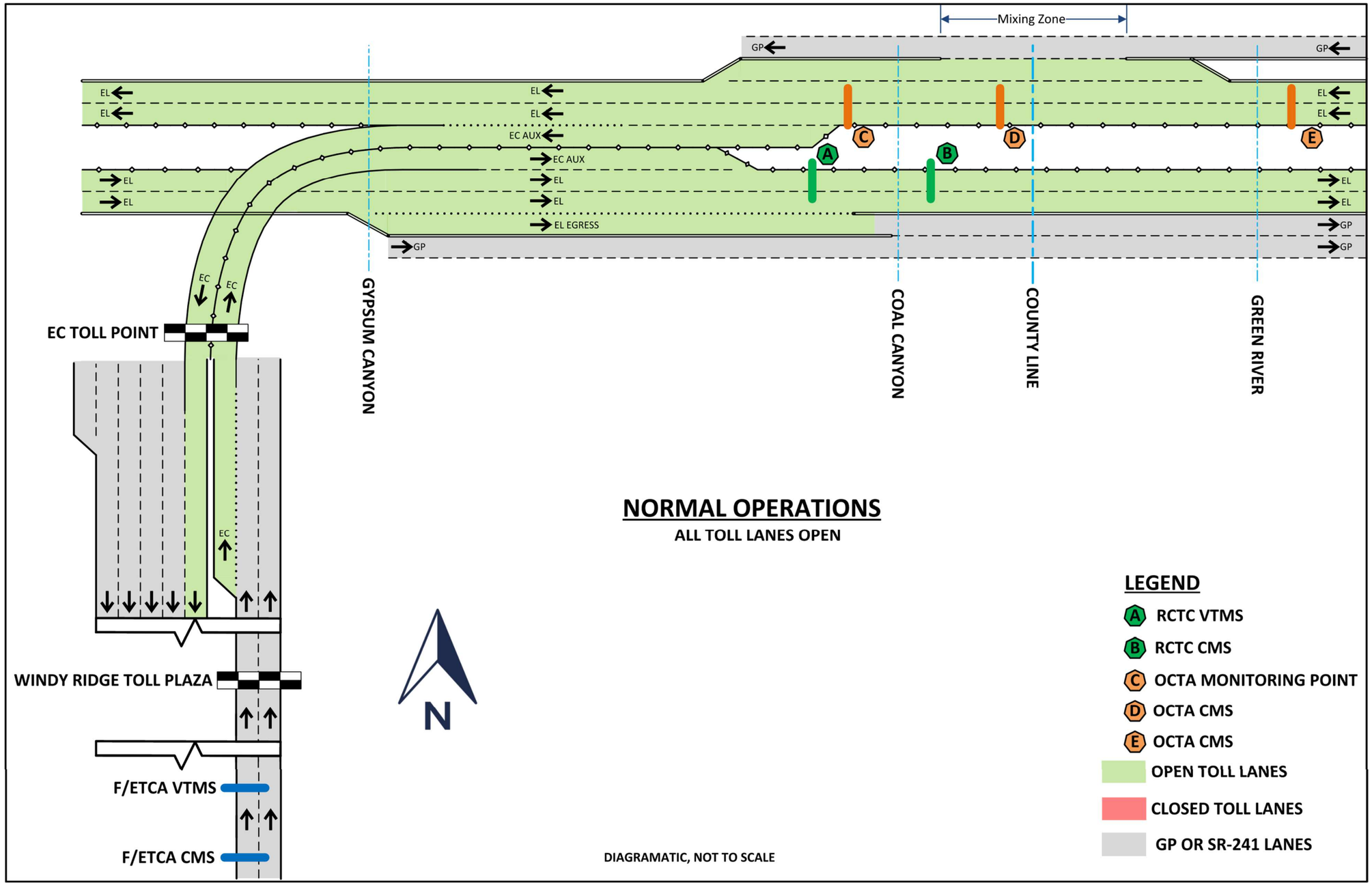
Figure 4 shows normal operating conditions when all toll lanes are open. This is a baseline figure corresponding to this section which shows that no agencies are affected. Refer to section 5.1 for the description of revenue reimbursement to the affected agency. There are no affected agencies during normal operations.

Affected Agency	**Affected Roadway**
None	None

Example CMS signing for Normal Operating Conditions

During normal operations, no special maintenance signing will be required for posting on the CMS. All CMS signs will display price and information for normal operations such as "Transponder Required" or Toll Connector Meter On". Refer to Exhibit B and D for normal operation signing.

Figure 4: Normal Operations



5.1.2 Maintenance on NB SR-241 Express Connector

Figure 5 shows the maintenance area in the NB direction of F/ETCA SR-241 prior to and within the Express Connector. Assets that require maintenance in this area include roadway infrastructure, toll collection systems associated with the toll connector meter, and the Express Connector toll gantry. This closure is anticipated only when minor maintenance is needed in the aux lane without impact to the express lanes. Users will be notified of the Express Connector closure via the F/ETCA CMS located upstream of the decision point. Physical closure of the NB Express Connector will begin at the opening of the dedicated lane roughly 3,000 feet upstream of the Express Connector toll gantry.

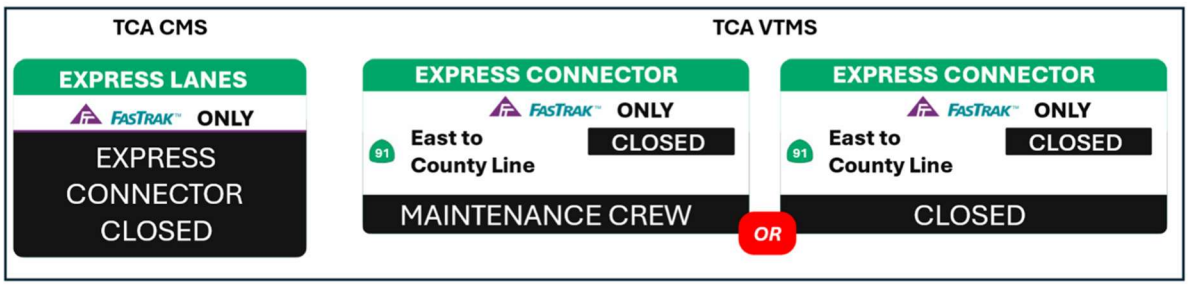
TCA is the only affected party in the Figure 5 scenario.

Affected Agency	**Affected Roadway**
TCA	NB to EB Express Connector

Example CMS signing for Maintenance for NB SR-241 Express Connector Closure

This section provides an initial list of pre-approved messages that may posted on the F/ETCA electronic signs. The NB to EB Express Connector closure does not require signs on the SR-91 Express Lanes to be utilized, only those on NB SR-241. Additional messages may be approved as needed. The F/ETCA CMS is a full color matrix sign which allows for virtually any font and message to be displayed. Font and message will conform to MUTCD standards.

Northbound-to-Eastbound Express Connector Signs:



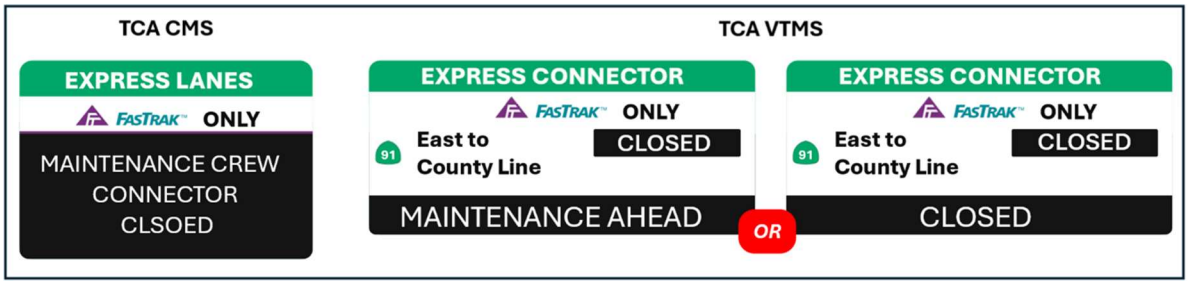
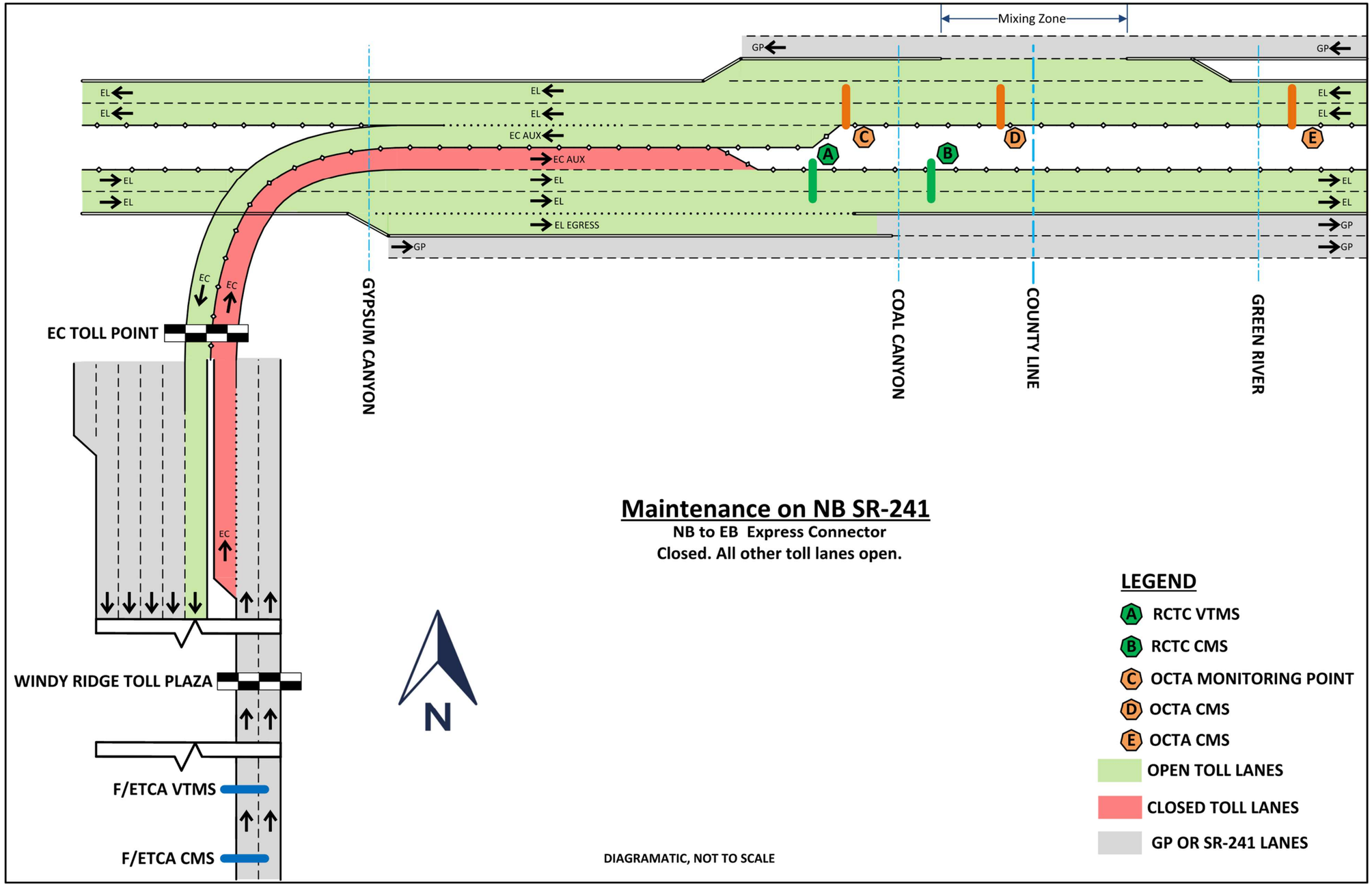


Figure 5: Maintenance on NB SR-241 Express Connector



5.1.3 Maintenance on SB SR-241 Express Connector

Figure 6 shows the maintenance area in the SB direction of F/ETCA SR-241 downstream of the Express Connector. Assets that require maintenance in this area include roadway infrastructure and TCS. This closure is anticipated only when minor maintenance is needed in the aux lane without impact to the express lanes. Closure of the SB Express Connector will require messages posted on the OCTA CMS sign upstream of the County Line. Physical closure of the SB Express Connector will begin in the WB 91 Express Lanes location where the SB Express Connector departure lane begins.

TCA is the only affected party in the Figure 6 scenario.

Affected Agency	**Affected Roadway**
TCA	WB to SB Express Connector

Example CMS Signing for Maintenance for SB SR-241 Express Connector Closure

This section provides an initial list of pre-approved messages that may posted on the F/ETCA and OCTA electronic signs. Additional messages may be approved as needed.

Westbound-to-Southbound Express Connector Sign:

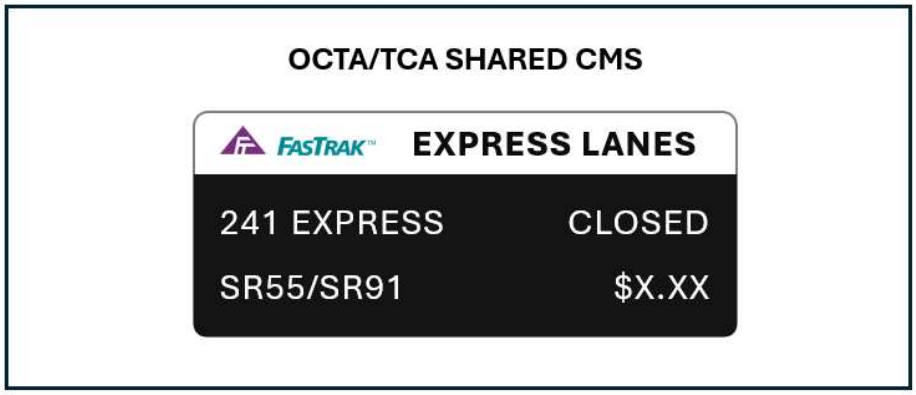
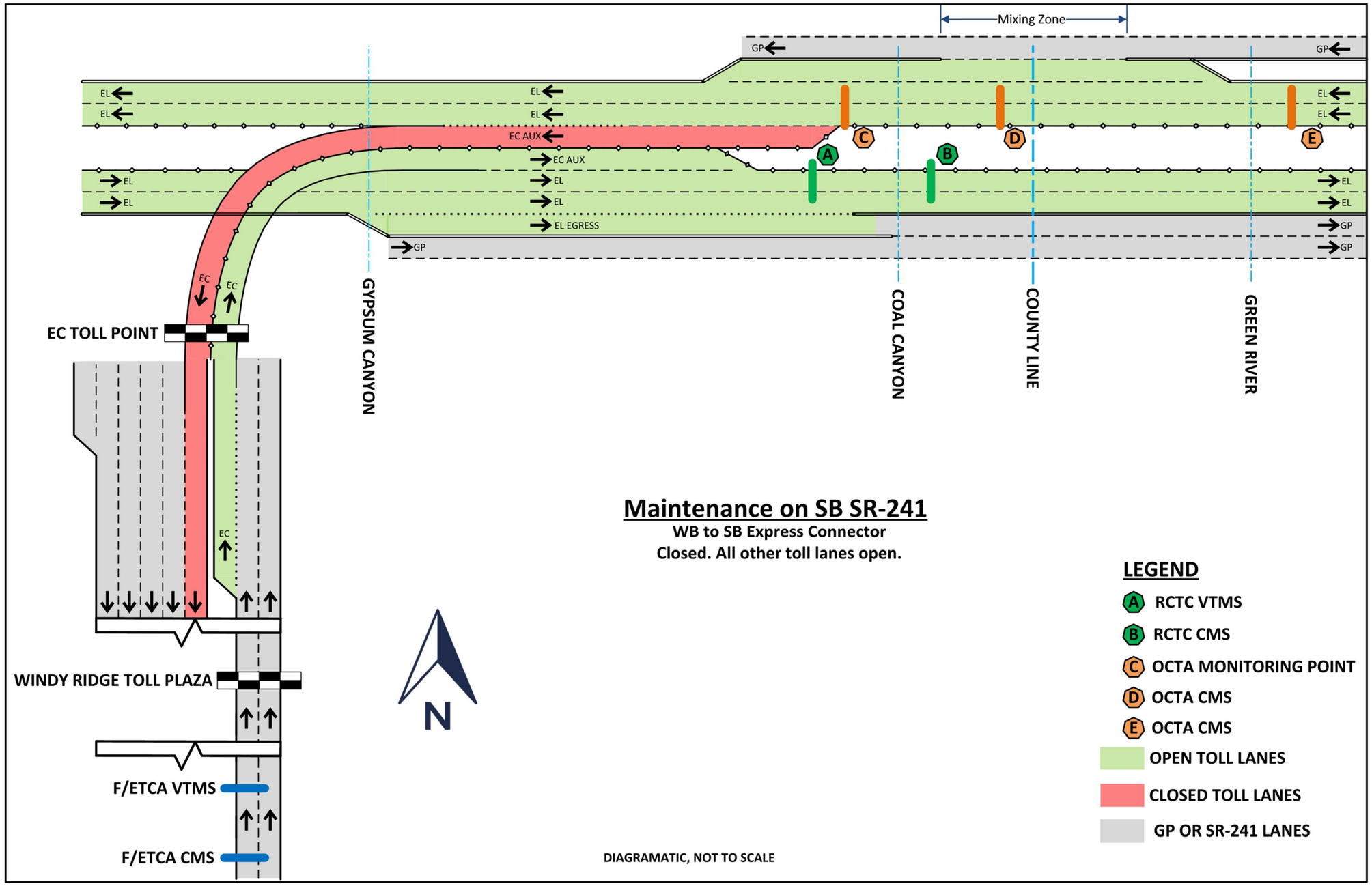


Figure 6: Maintenance on SB SR-241 Express Connector



5.1.4 Maintenance on WB SR-91 Express Lanes

Figure 8 shows the closure required when maintenance is performed in the WB 91 Express Lanes. F/ETCA assets that require maintenance in this area include roadway infrastructure and toll collection systems associated with traffic counting and CCTV camera sites. In addition, OCTA and RCTC maintain 91 Express Lanes assets in this location. In this scenario, the ingress/egress to the RCTC 91 Express Lanes may remain open.

Physical closures in this scenario will occur at the County Line ingress/egress location. Shared OCTA-F/ETCA CMS upstream of the closure will be used to inform users of the closure.

TCA and OCTA are the affected parties in the Figure 7 scenario.

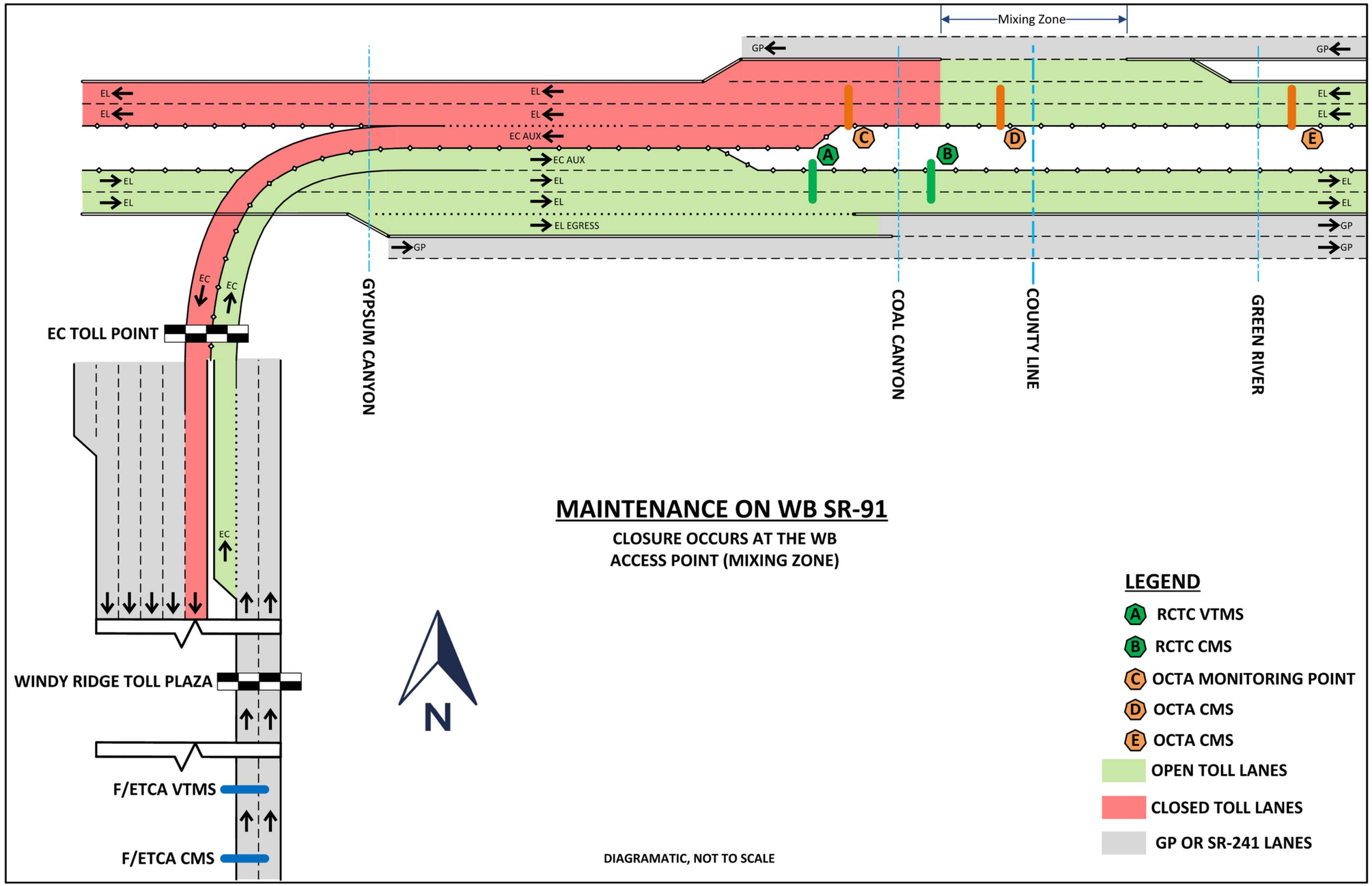
Affected Agency	**Affected Roadway**
TCA	WB to SB Express Connector
OCTA	WB SR-91 Express Lanes

Example CMS Signing for Maintenance for WB SR-91 Express Lanes and SB Express Connector Closure

This section provides an initial list of pre-approved messages that may posted on the F/ETCA and OCTA electronic signs. Additional messages may be approved as needed.

WB EL & Westbound-to-Southbound Express Connector Signs:

Figure 7: Maintenance on WB SR-91 Express Lanes



5.1.5 Maintenance on EB SR-91 Express Lanes

Figure 9 shows the closure required when maintenance is performed in the EB 91 Express Lanes. F/ETCA assets that require maintenance in this area include roadway infrastructure and toll collection systems associated with traffic counting and CCTV camera sites. In addition, OCTA and RCTC maintain 91 Express Lanes assets in this location. In this scenario the ingress/egress to the RCTC 91 Express Lanes may remain open.

Physical closures for this scenario will occur at the beginning of the 91 Express Lanes at the SR-55 and SR-91 interchange ramps. CMS signs upstream of the ingress to the express lanes will notify users of the closer and inform users to use the general-purpose lanes.

TCA and OCTA are the affected parties in the Figure 8 scenario.

Affected Agency	**Affected Roadway**
TCA	NB to EB Express Connector
OCTA	EB SR-91 Express Lanes

Example CMS Signing for Maintenance for EB SR-91 Express Lanes and NB Express Connector Closure

This section provides an initial list of pre-approved messages that may posted on the F/ETCA electronic signs. The NB to EB Express Connector closure does not require signs on the SR-91 Express Lanes to be utilized, only those on NB SR-241. Additional messages may be approved as needed. The F/ETCA CMS is a full color matrix sign which allows for virtually any font and message to be displayed. Font and message will conform to MUTCD standards.

EB EL & Northbound-to-Eastbound Express Connector Signs:

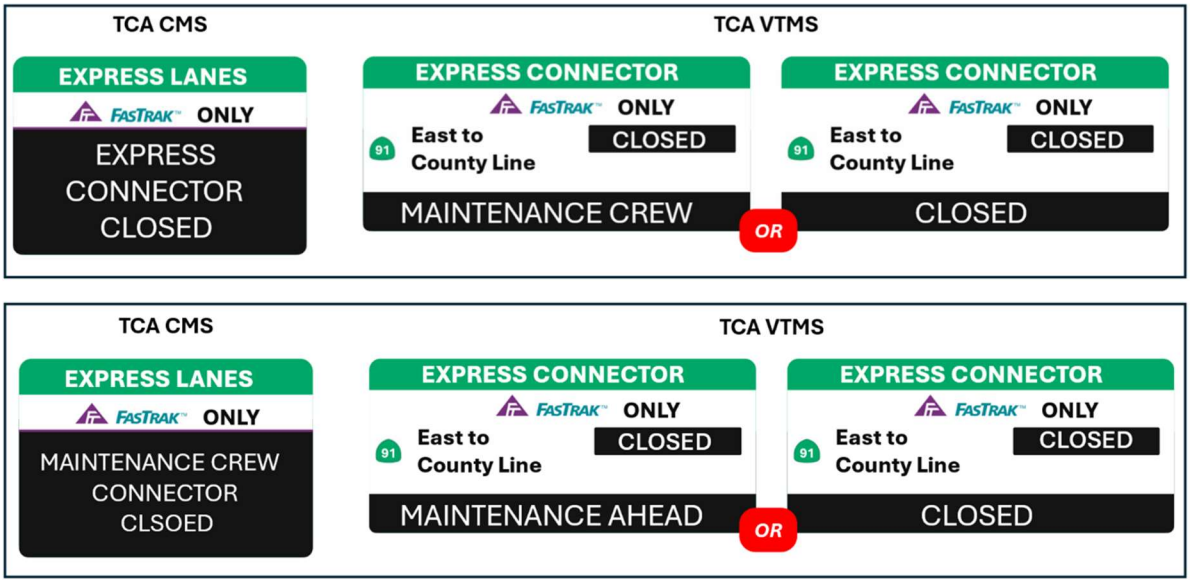
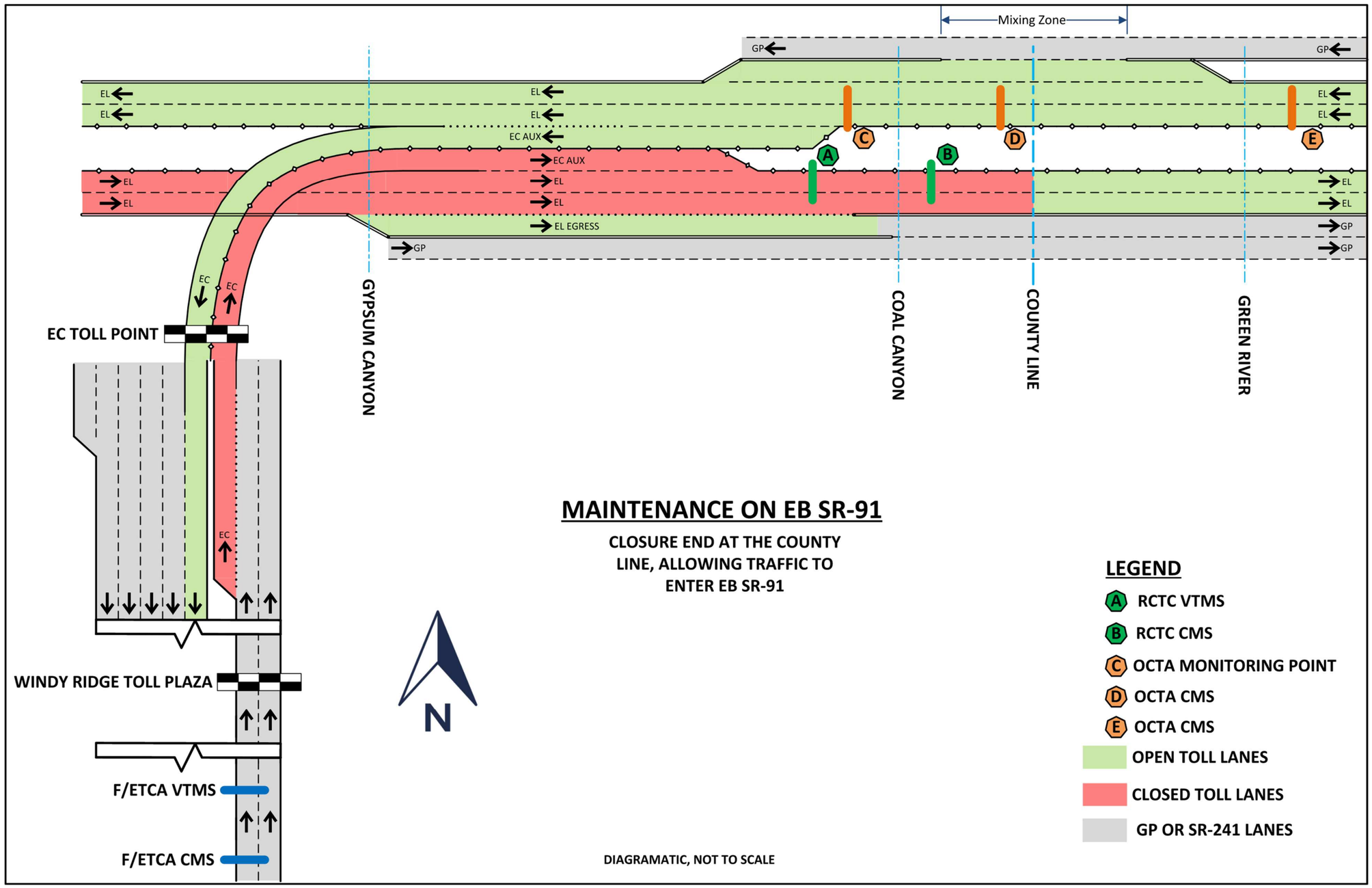


Figure 8: Maintenance on EB SR-91 Express Lanes



5.2 Permitted Closure Periods with Associated Closure Fees and Liquidated Damages

Upon acceptance by Caltrans, F/ETCA, OCTA, and RCTC have agreed to coordinate regularly (e.g., monthly) scheduled closures of the Express Connector and 91 Express Lanes for maintenance activities on these tolled facilities. It is anticipated that no closure fees will be charged when F/ETCA's maintenance work coincides with the OCTA and/or RCTC regularly scheduled closures.

Any other planned or unplanned closures of the Express Connector or 91 Express Lanes due to operations, maintenance, or ensuing improvement projects that cause closures to the Express Connector and/or 91 Express Lanes will be subject to closure fees and liquidated damages for lost toll revenues. F/ETCA agrees to closure periods and to compensate OCTA and RCTC, in the month that the closure occurs, for lost toll revenues due to any closures, including lane reductions, of the 91 Express Lanes. F/ETCA will also reimburse itself from project revenues for lost toll revenues due to any closures of the SR 241, including connectors. OCTA/RCTC will not reimburse F/ETCA for planned or unplanned closures.

5.2.1 Permitted Closures

Permitted closure periods and associated closure fees will be assessed by the affected party/ies to compensate for lost toll revenues and paid by F/ETCA for the permitted closure.

The permitted closure windows are shown in Tables 9, 10 and 11. Any closures outside of these windows are unpermitted and subject to liquidated damages. It is suggested that the Parties re-review the permitted closure windows prior to open to traffic.

Typically closures are not allowed on holidays/special events even if during otherwise permitted windows.

5.2.2 Unpermitted Closures

Closures which go beyond the permitted closure periods, and actual closures that are not approved, will be considered unpermitted closures and will be subject to liquidated damages charges paid by F/ETCA.

Liquidated damages will be charged per 10-minute interval beyond the permitted closure window.

5.2.3 Methodology

Closure fees, including liquidated damages, will typically be calculated by averaging the toll revenue in the 5–6-week period before and/or after the closure, excluding outliers (like holidays, special events or other closures) unless the closure is on an outlier event (like a holiday or during a special event). Typically, closures are not allowed on holidays/special events but would be included in the closure fee and liquidated damages calculation if the F/ETCA closure occurs in an outlier window. Each toll operator may make slight adjustments to this methodology when calculating its closure fees and liquidated damages.

Any substantial updates to the methodology should be communicated in writing with the other Parties and documented as a change to this Exhibit H.

Table 9: Permitted Closure Periods – OCTA Toll Facility

Type of facility	**Route**	**Direction and segment**	**Period**
Express Lanes (OCTA)	Route 91	EB from Route 55 to County Line Ingress	Sunday 23:00 to Monday 5:00
			Monday 23:00 to Tuesday 5:00
			Tuesday 23:00 to Wednesday 5:00
			Wednesday 23:00 to Thursday 5:00
			Friday 23:00 to Saturday 5:00
			Saturday 23:00 to Sunday 5:00
Express Lanes (OCTA)	Route 91	WB from County Line Ingress/Egress to Route 55	Sunday 22:00 to Monday 4:00
			Monday 22:00 to Tuesday 4:00
			Tuesday 22:00 to Wednesday 4:00
			Wednesday 22:00 to Thursday 4:00
			Friday 23:00 to Saturday 5:00
			Saturday 22:00 to Sunday 5:00
Express Lanes (OCTA)	Route 91	EB from Route 55 to County Line Ingress	Friday 22:00 to Monday 5:00
Express Lanes (OCTA)	Route 91	WB from County Line Ingress/Egress to Route 55	Friday 21:00 to Monday 4:00

Table 10: Permitted Closure Periods – RCTC Toll Facility

Type of facility	Route	Direction and segment	Period
Express Lanes (RCTC)	Route 91	EB from County Line Egress to Route 15	Sunday 23:00 to Monday 4:00
			Monday 24:00 to Tuesday 4:00
			Tuesday 24:00 to Wednesday 4:00
			Wednesday 24:00 to Thursday 5:00
			Friday 24:00 to Saturday 4:00
			Saturday 23:00 to Sunday 5:00
Express Lanes (RCTC)	Route 91	WB from Route 15 to County Line Ingress/Egress	Sunday 23:00 to Monday 4:00
			Monday 24:00 to Tuesday 4:00
			Tuesday 22:00 to Wednesday 4:00
			Wednesday 24:00 to Thursday 4:00
			Friday 24:00 to Saturday 4:00
			Saturday 23:00 to Sunday 5:00
Express Lanes (RCTC)	Route 91	EB from County Line Egress to Route 15	Friday 24:00 to Monday 4:00
Express Lanes (RCTC)	Route 91	WB from Route 15 to County Line Ingress/Egress	Friday 24:00 to Monday 4:00

Table 11: Permitted Closure Periods – F/ETCA Toll Facility

Type of facility	Route	Direction and segment	Period
Express Connector	Route 241	North-to-East	Sunday 23:00 to Monday 5:00
			Monday 23:00 to Tuesday 5:00
			Tuesday 23:00 to Wednesday 5:00
			Wednesday 23:00 to Thursday 5:00
			Friday 23:00 to Saturday 5:00
			Saturday 23:00 to Sunday 5:00
Express Connector	Route 91	West-to-South	Sunday 23:00 to Monday 5:00
			Monday 23:00 to Tuesday 5:00
			Tuesday 23:00 to Wednesday 5:00
			Wednesday 24:00 to Thursday 4:00
			Friday 23:00 to Saturday 5:00
			Saturday 23:00 to Sunday 5:00
Express Connector	Route 241	North-to-East	Friday 23:00 to Monday 5:00
Express Connector	Route 91	West-to-South	Friday 23:00 to Monday 5:00

AGENDA ITEM 8

RIVERSIDE COUNTY TRANSPORTATION COMMISSION	
DATE:	August 18, 2025
TO:	Toll Policy and Operations Committee
FROM:	Jennifer Crosson Toll Operations Director
THROUGH:	Aaron Hake, Executive Director
SUBJECT:	Elimination of Clean Air/Zero Emission Discount for Express Lanes

STAFF RECOMMENDATION:

This item is for the Committee to recommend the Commission take the following action(s):

1) Conduct a public hearing to receive input on the proposed Amended RCTC 91 Express Lanes Toll Policy and Amended 15 Express Lanes Toll Policy Goals and Toll Policies;
2) Adopt Resolution No. 25-007, "*Resolution of the Riverside County Transportation Commission Adopting the Amended RCTC 91 Express Lane Toll Policy and Toll Schedule"*, to eliminate the Zero Emission Vehicle (ZEV) discount; and
3) Adopt Resolution No. 25-006, "*Resolution of the Riverside County Transportation Commission Adopting the Amended Interstate 15 Express Lanes Toll Policy Goals and Toll Policies"* to eliminate the Clean Air Vehicle (CAV)/ZEV discount.

BACKGROUND INFORMATION:

California Vehicle Code (CVC) Section 5205.5 (h)(1) requires high-occupancy toll lanes which were authorized under Streets and Highways Code Section 149.7 to provide toll-free or reduced-rate passage to certain CAV/ZEVs which display a valid Department of Motor Vehicle (DMV) issued CAV decal. The 15 Express Lanes is a Section 149.7 project and therefore is currently required to comply with CVC 5205.5. The 91 Express Lanes is not a Section 149.7 project and is not required by law to provide a discount to ZEVs.

While not required by statute, Orange County Transportation Authority (OCTA), the Commission's partner on the 91 Express Lanes, offers the ZEV discount to 91 eligible account holders. The Commission's cooperative agreement with OCTA requires OCTA and the Commission to have consistent policies where possible. Therefore, RCTC offer the ZEV discount on the 91 Express Lanes in Riverside County.

The Commission has adopted, by resolution, ZEV/CAV discount policies for both the 15 and 91 Express Lanes as summarized below:

15 Express Lanes

In March of 2019, the Commission amended the 15 Express Lanes Toll Policy to include a 15 percent discount for CAV/ZEVs. Between May 2024 and April 2025, the CAV/ZEV discount was applied to 500,000 transactions or 1 percent of all 15 Express Lanes transactions. The estimated annual value of the discount on the 15 Express lanes is $200,000.

91 Express Lanes

In January 2023, the Commission adopted the 91 Express Lanes Toll Policy and Toll Schedule which includes a 100 percent discount to 91 Express Lanes accountholders who register a ZEV. The 100 percent discount is reduced to 50 percent for eastbound travel between 4:00-6:00 pm (Monday-Friday). Between May 2024 and April 2025, the ZEV discount was applied to 1.3 million transactions or 6 percent of all 91 Express Lanes transactions. The estimated annual value of the discount on the RCTC 91 Express Lanes is $7.7 million.

Notification of Changes to the Public

The Commission follows the Mitigation Fee Act which requires a noticed public hearing when adopting or increasing fees. The authorizing legislation for the 91 Express Lanes, Public Utilities Code section 130244, requires that the Commission make available for public review and comment proposed changes to its toll schedule at least 30 days prior to adoption. Streets and Highways Code 149.8 applies to the 15 Express Lanes and similarly requires that the Commission make any changes to the proposed toll schedule available for public review and comment 30 days prior to its adoption. The Commission will conduct a noticed public hearing and make the amended policies available for public review and comment 30 days prior to the Commission action.

DISCUSSION:

The State of California's CAV decal program is authorized by federal statute, which is set to expire on September 30, 2025. Unless federal authorization is extended, the statutory requirement to provide the CAV/ZEV discount on the 15 Express Lanes will also end. In addition, the basis for determining eligibility (an active decal) will no longer be available for both the 15 and 91 CAV/ZEV programs.

As members of the California Toll Operations Committee (CTOC), Commission staff has been following the intentions of the other CTOC express lanes operators with regard to their CAV/ZEV discount programs. To date, all express lanes operators in the state are preparing to eliminate their CAV/ZEV discounts upon termination of the decal program.

As the number of CAV/ZEV eligible vehicles continues to grow, the number of discounts provided also increases. The continued growth in number of vehicles receiving the CAV/ZEV discount reduces the effectiveness of congestion management pricing. The express lanes sustain long periods where demand is in excess of capacity and high toll rates are in effect. Customers

receiving the CAV/ZEV discount are not influenced by price or are less influenced by price when receiving the 15 percent discount on the 15 Express Lanes or 50 percent discount on the 91 Express Lanes. Discontinuation of the CAV/ZEV discount should improve the effectiveness of congestion management pricing on both express lanes.

A phased approach is required to effectively implement elimination of the CAV/ZEV discount. Commencing October 1, 2025, Riverside Express (15 Express Lanes) and 91 Express Lanes account holders will no longer be able to register a vehicle for the CAV/ZEV discount. As additional time is required in order to make changes to the toll systems to eliminate the CAV/ZEV discount, the discounts for tolled transactions on the 15 Express Lanes and 91 Express Lanes will remain in effect until the required changes have been completed for each toll facility. The discounts will remain in effect until a 30-day notification of a change in the Riverside Express account agreement and the 91 Express Lanes account agreement to eliminate the CAV/ZEV discount has been provided to Riverside Express and 91 Express Lanes account holders and notification of elimination of the discount has been posted on the applicable website. This is anticipated to occur on or before January 1, 2026, at which time the CAV/ZEV discount will cease to be provided.

It is also the intent, commencing as of October 1, 2025, to cease the provision of the CAV/ZEV designation to other toll facility interoperable partners for CAV/ZEV vehicles registered with the 15 Express or the 91 Express Lanes.

A comprehensive communication effort will be made in addition to the required accountholder notification. Communication efforts will include email announcements, website updates, statement inserts, and social media postings. The policy update will also be communicated through SoCal 511, FasTrak.org website and AAA.

Staff recommends approval of the resolutions adopting the proposed Amended 91 Express Lane Toll Policy and Toll Schedule and Amended 15 Express Lanes Toll Policy Goals and Toll Policies and seeks authorization to forward the item to the Commission to conduct a public hearing and consider adoption of the resolutions. In preparation for a public hearing at the September 10, 2005 Commission meeting, the amended policies will be published on the Commission's website for public review and comment 30 days in advance of the hearing.

SUMMARY:

Staff recommends adoption of Resolution 25-007, *"Resolution of the Riverside County Transportation Commission Adopting the Amended RCTC 91 Express Lane Toll Policy and Toll Schedule"*.

Staff also recommends adoption of Resolution 25-006, "*Resolution of the Riverside County Transportation Commission Adopting the Amended Interstate 15 Express Lanes Toll Policy Goals and Toll Policies".*

The resolutions provide for the amended policies to take effect in two phases as detailed above in the discussion section, and as further set forth in each resolution.

FISCAL IMPACT:

Removal of discounts for both the 15 and 91 Express Lanes will result in an increase of Toll Revenue for each facility. The value of the increase will be determined based on the number of CAV and ZEV vehicles continuing to utilize both Express Lanes.

Attachments:

1) Resolution No. 25-007, 91 Express Lanes Amended Toll Policy
2) Resolution No. 25-006, 15 Express Lanes Amended Toll Policy

RESOLUTION NO. 25-007

**RESOLUTION OF THE
RIVERSIDE COUNTY TRANSPORTATION COMMISSION
ADOPTING
THE AMENDED RCTC 91 EXPRESS LANES
TOLL POLICY AND TOLL SCHEDULE**

WHEREAS, the Riverside County Transportation Commission (the "Commission") has been, in accordance with its legislative and regulatory authority, operating two tolled Express Lanes in Riverside County located between the Orange County Line and Interstate 15 ("RCTC 91 Express Lanes");

WHEREAS, the Commission adopted its original RCTC 91 Express Lanes Toll Policy on June 7, 2012;

WHEREAS, the Commission adopted an Amended and Restated RCTC 91 Express Lanes Toll Policy on October 10, 2018;

WHEREAS, the Commission adopted the RCTC 91 Express Lanes Toll Policy and Toll Schedule to implement Dynamic Pricing as defined therein and to make changes to the toll discount policy on January 11, 2023 ("Toll Policy");

WHEREAS, the Commission now desires to amend the Toll Policy to eliminate the discount offered to qualified Zero Emission Vehicles ("ZEVs") to take effect as follows:

(i) As of October 1, 2025, 91 Express Lanes account holders will no longer able to register vehicles for the ZEV discount;

(iii) Discounts for tolled transactions on the RCTC 91 Express Lanes will cease to be provided once the required toll system changes have been completed and a 30-day notification of a change in the 91 Express Lanes account agreement to eliminate the ZEV discount has been provided to 91 Express Lanes account holders and notification of elimination of the discount has been posted on the 91 Express Lanes website, which is anticipated to occur on or before January 1, 2026, at which time the ZEV discount will cease to be provided.

NOW, THEREFORE, be it resolved by the Riverside County Transportation Commission as follows:

Section 1. The Recitals set forth above are true and correct and incorporated into this Resolution as though fully set forth herein.

Section 2. In accordance with the findings set forth above and in the staff report accompanying this Resolution, the Riverside County Transportation Commission hereby adopts the Amended RCTC 91 Express Lanes Toll Policy and Toll Schedule ("Amended Toll Policy") attached as Exhibit A, to be effective as follows:

(i) As of October 1, 2025, 91 Express Lanes account holders will no longer be able to register vehicles for the ZEV discount;

(ii) Discounts for tolled transactions on the 91 Express Lanes will remain in effect until the required toll system changes have been completed and a 30-day notification of a change in the 91 Express Lanes account agreement to eliminate the ZEV discount has been provided to 91 Express Lanes account holders and notification of elimination of the discount has been posted on the 91 Express Lanes website, which is anticipated to occur on or before January 1, 2026, at which time the ZEV discount will cease to be provided, and the Amended Toll Policy shall take full effect.

[Signatures on following page]

SIGNATURE PAGE
TO
RESOLUTION NO. 25-007

RESOLUTION OF THE
RIVERSIDE COUNTY TRANSPORTATION COMMISSION
ADOPTING
THE AMENDED RCTC 91 EXPRESS LANES
TOLL POLICY AND TOLL SCHEDULE

APPROVED AND ADOPTED this _____, 2025.

_____
Karen Spiegel, Chair
Riverside County Transportation
Commission

ATTEST:

_____
Lisa Mobley
Clerk of the Board

EXHIBIT A

AMENDED RCTC 91 EXPRESS LANES TOLL POLICY AND TOLL SCHEDULE

[attached behind this page]

RCTC 91 Express Lanes Toll Policy and Toll Schedule

Goals

The goals of the RCTC 91 Express Lanes Toll Policy and Toll Schedule are to:

- Provide a safe, reliable, and predictable commute for 91 Express Lanes customers;
- Optimize vehicle throughput at free flow speeds;
- Pay debt service and maintain debt service coverage;
- Increase average vehicle occupancy;
- Balance capacity and demand to serve customers who pay tolls as well as carpoolers with three or more persons who are offered discounted tolls;
- Generate sufficient revenue to sustain the financial viability of the RCTC 91 Express Lanes;
- Ensure all covenants in the Financing Documents are met; and
- Provide net revenues for State Route 91 corridor improvements.

Definitions

Abnormal Traffic – when traffic volumes vary from those of a prior period due to a holiday, incident, construction, or other atypical occurrence.

Dynamic Pricing – The setting of a toll in real-time based on level of traffic congestion and other factors.

Emergency – A national, state, or local declared state of emergency or other emergency situation that impacts toll operations.

Inflation Factor – The U.S. Bureau of Labor Statistics Consumer Price Index adjuster for the region from January to December of the previous calendar year that will be applied annually to the Minimum Toll Rate.

Minimum Toll Rate – The lowest toll per trip that the Pricing Algorithm can assign.

Pricing Algorithm – The methodology by which tolls are set that aims to manage demand for the express lanes by adjusting tolls using real-time and historic traffic data.

Trip – A unique combination of entry and exit points on the 91 Express Lanes.

Trip Minimum Toll Rate – Established by multiplying the Minimum Toll Rate per mile by the number of miles for each trip and rounded up to the nearest $.05.

Dynamic Pricing Principles and Parameters

1. The 91 Express Lanes will use Dynamic Pricing to set toll rates to optimize vehicle throughput at free flow speeds consistent with the goals in this RCTC 91 Express Lanes Toll Policy and Toll Schedule.
2. A Pricing Algorithm which considers traffic volume, density, travel speed, travel time, flow of traffic, and historical traffic patterns will be used to determine the toll rate.
3. The Pricing Algorithm will establish a toll rate for each 91 Express Lanes Trip.
4. The toll rate will change as frequently as needed to maintain desired traffic conditions, but not more frequently than every three minutes; and
5. The toll rate could change in increments up to $3.00 per Trip.

Minimum Toll Rates

Minimum Toll Rates were initially established based on the rate assumed in the traffic and revenue study used to finance the 91 Express Lanes Project. The Minimum Toll Rates have been adjusted by the inflation factor each year on July 1. The Minimum Toll Rates will be adjusted annually, effective each July 1, by the Inflation Factor and rounded to the nearest 5 cents. The Minimum Toll Rates in Figure 1 will be adjusted by the Inflation Factor on July 1, 2023. When a toll rate is in effect it shall never be less than the Minimum Toll Rate.

Figure 1 Minimum Toll Rate Schedule (effective July 1, 2022)

Westbound	
McKinley St. To County Line	$1.75
No. I-15 Magnolia to County Line	$2.00
So. 15 Express Lane at 2nd Street to County Line	$2.80

Eastbound	
County Line to McKinley St.	$1.95
County Line to So. I-15 at Magnolia	$2.20
County Line to No. 15 Express Lane at Second Street	$2.85

Toll Rates

Toll rates will be determined in real-time based on the level of traffic congestion and other factors consistent with Dynamic Pricing. There is no maximum toll rate. The goals of this RCTC 91 Express Lanes Toll Policy and Toll Schedule are to optimize person throughput in the corridor while meeting debt obligations. This balances throughput and revenue thereby providing the

flexibility to better match lane supply with user demand. This flexibility in the maximum toll rate also supports the creditworthiness of the 91 Express Lanes and ensures the Commission's ability to meet its operating and debt obligations.

Displaying Toll Rates

1. Toll rates will be posted on overhead signs in advance of each 91 Express Lanes entrance.
2. Each toll rate sign will include toll rates to the posted destination.
3. The customer will be charged the toll posted at the time they passed the toll rate sign.
4. Should the toll rate sign not be able to display tolls for any reason then the historical rate for the same time period will be posted.

Abnormal Traffic Conditions or Emergencies and Suspension of Tolling

A temporary toll schedule may be implemented, which may include the suspension of tolling, during Abnormal Traffic or Emergencies.

Discounts

The following vehicles, which have a valid FasTrak account, will travel for free in the 91 Express Lanes except for Monday through Fridays between 4:00 p.m. and 6:00 p.m. in the eastbound direction when they will pay 50% of the toll:

1) Vehicles with three or more persons (HOV3+) when using the dedicated 3+ lane; and
2) Vehicles with disabled plates that are registered to a 91 Express Lanes account and have provided the Department of Motor Vehicles registration indicating that the vehicle is registered with a disabled plate.

Notwithstanding (3) above, vehicles registered to a disabled veteran or other veteran statuses as included in Assembly Bill 2949, who have provided proof of such by submitting their Department of Motor Vehicles registration to the agency that holds their FasTrak account, will travel for free in the 91 Express Lanes. The list of qualifying veteran statuses includes the following:

- Disabled veteran
- Pearl Harbor survivor
- Former Prisoner of War
- Congressional Medal of Honor
- Purple Heart Recipient
- Army Medal of Honor, Navy Medal of Honor, Air Force Medal of Honor, Army Distinguished Service Cross, Navy Cross, or Air Force Cross

Financing Requirements

RCTC shall charge and collect tolls that generate enough revenue to maintain the debt service coverage ratios as required in the financing documents and to operate and maintain the RCTC 91 Express Lanes in a safe condition in accordance with all applicable laws and regulations.

RESOLUTION NO. 25-006

**RESOLUTION OF THE
RIVERSIDE COUNTY TRANSPORTATION COMMISSION
ADOPTING THE AMENDED
INTERSTATE 15 EXPRESS LANES
TOLL POLICY GOALS AND TOLL POLICIES**

WHEREAS, the Riverside County Transportation Commission (the "Commission") has commenced operation of the I-15 Express Lanes.

WHEREAS, the Commission adopted its original I-15 Express Lanes Toll Policy on June 8, 2016 pursuant to adoption of Resolution No. 16-011.

WHEREAS, on March 13, 2019, by Resolution No. 19-003, the Commission amended and restated, in its entirety, the original I-15 Express Lanes Toll Policy (the "Toll Policy") with the intent of reducing the toll discount offered to qualified zero emission vehicles to 15%, from commencement of operations.

WHEREAS, on June 9, 2021, by Resolution No. 21-012, the Commission reaffirmed and readopted the amended and restated Toll Policy ratifying actions in furtherance of the policy.

WHEREAS, the Commission now desires to amend the Toll Policy to eliminate the discount offered to qualified Zero Emission Vehicles ("ZEVs"), also referred to in the Toll Policy as Clean Air Vehicles ("CAVs"), to take effect as follows:

(i) As of October 1, 2025, Riverside Express (15 Express Lanes) account holders will no longer be able to register a vehicle for the CAV/ZEV discount;

(iii) Discounts for tolled transactions on the 15 Express Lanes will remain in effect until the required toll system changes have been completed and a 30-day notification of a change in the Riverside Express account agreement to eliminate the CAV/ZEV discount has been provided to Riverside Express account holders and notification of elimination of the discount has been posted on the Riverside Express website, which is anticipated to occur on or before January 1, 2026, at which time the CAV/ZEV discount will cease to be provided.

NOW, THEREFORE, be it resolved by the Riverside County Transportation Commission as follows:

Section 1. The Recitals set forth above are true and correct and incorporated into this Resolution as though fully set forth herein.

Section 2. In accordance with the findings set forth above and in the staff report accompanying this Resolution, the Riverside County Transportation Commission hereby adopts the Amended and Restated Interstate 15 Express Lanes Toll Policy Goals and Toll Policies ("Amended Toll Policy") attached as Exhibit A, to be effective as follows:

(i) As of October 1, 2025, Riverside Express (15 Express Lanes) account holders will no longer be able to register a vehicle for the CAV/ZEV discount;

(ii) Discounts for tolled transactions on the 15 Express Lanes will remain in effect until the required toll system changes have been completed and a 30-day notification of a change in the Riverside Express account agreement to eliminate the CAV/ZEV discount has been provided to Riverside Express account holders, and notification of elimination of the discount has been posted on the Riverside Express website, which is anticipated to occur on or before January 1, 2026, at which time the CAV/ZEV discount will cease to be provided and the Amended Toll Policy shall take full effect.

[Signatures on following page]

SIGNATURE PAGE

TO

RESOLUTION NO. 25-006

APPROVED AND ADOPTED this ___ day of _____, 2025.

_____
Karen Spiegel, Chair
Riverside County Transportation Commission

ATTEST:

_____
Lisa Mobley
Clerk of the Board

EXHIBIT A

AMENDED
INTERSTATE 15 EXPRESS LANES
TOLL POLICY GOALS AND TOLL POLICIES

[attached behind this page]

I-15 EXPRESS LANES PROJECT

Toll Policy Report

Adopted March 2019
Revised June 2021
Revised September 2025

Table of Contents

Introduction

This report provides a description of the toll policies that form the basis for the Concept of Operations, which serves as the framework for the ultimate design of the I-15 Express Lanes Project. These toll policies will also be used as key assumptions for the I-15 Express Lanes Traffic and Revenue Study prepared separately.

The I-15 Express Lanes Project will generally include two tolled express lanes in each direction on Interstate 15 (I-15) in Riverside County between Cajalco Road in Corona and the State Route 60 (SR-60) interchange, a distance of approximately 15 miles. The Project is being developed by the Riverside County Transportation Commission (RCTC) in partnership with the California Department of Transportation (Caltrans) and the Federal Highway Administration (FHWA). The Express Lanes are intended to improve current and projected future congestion by adding capacity that can be managed and operated in a manner consistent with the policies described in this document.

RCTC developed a set of toll policy goals that provided a foundation for the development of the policies described in this document. These goals are described in the next section, followed by a table summarizing each of the toll policies and how each policy achieves the stated goals.

Toll Policy Goals

Description:

In partnership with federal, state, regional, and local agencies, RCTC develops and oversees transportation plans, policies, funding programs, and both short-term and long-range solutions that address the county's increasing mobility, accessibility, and environmental needs. The establishment of Express Lanes on I-15 within the County has the potential to assist Riverside County in meeting many of its mobility, air quality, and funding challenges. Vital to this effort are toll policies which fulfill RCTC's goals and objectives for transportation system performance and revenue sustainability.

RCTC's toll policy goals and objectives are guidelines for developing specific policies and business rules that inform the toll collection aspects of the design and operation of the I-15 Express Lanes. Given the corridor's adjacency to the SR-91 corridor, and the more recent effort by RCTC in setting policies and goals for Express Lanes in that corridor, the toll policy goals for I-15 are similar to those developed by RCTC for the Riverside 91 Express Lanes to provide for regional consistency.

Background:

RCTC, in cooperation with the Caltrans, is proposing a project to improve traffic flow and reduce congestion on a portion of I-15. The project proposes to construct two tolled Express Lanes generally in each direction between the I-15/Cajalco Road interchange and the I-15/SR-60 interchange. All proposed improvements are anticipated to be constructed within existing Caltrans right of way, with the majority of the improvements occurring within the existing I-I5 median.

According to the I-15 Tolled Express Lane Corridor Improvement Program Draft Forecast Traffic Volume Development Report, the primary purpose of the project is to address current and future (2040) travel demand and improve traffic operations on the I-15 corridor, which has been identified as a corridor that needs capacity improvements to address existing and projected capacity deficiencies from the accelerated growth and development that has taken place in communities along the I-15 corridor and is expected to continue. As a result of the on-going accelerated growth and development, the I-15 corridor will experience increased congestion, longer commute times, increased energy consumption, air pollution, higher accident rates and the degradation of the freeway mainline, local interchanges, and the adjacent local arterials. The operational breakdown of these facilities is expected to have significant adverse impacts on the economic vitality of the region and the transport of goods and services along this corridor.

Recommendation:

RCTC staff recommends the following goals for the I-15 Express Lanes:

1. Provide Express Lane customers with a safe, reliable, and congestion free trip.

2. Deliver exceptional, consistent, and responsive customer service.

3. Enact toll policies that balance commute choice and lane availability for all customers.

4. Provide the infrastructure and an incentive for ridesharing and increased transit use as an alternative to driving alone.

5. Generate sufficient revenue to meet Express Lane financial obligations to pay current and long-term costs.

6. Use surplus revenues for transportation improvements exclusively within the Interstate 15 corridor.

Toll Policy Summary

#	Policy Topic Area	Policy Recommendation	Toll Policy Goal(s) Met	Page
1	Toll Pricing Objectives	Optimize person throughput in the corridor while meeting debt obligations.	1,3,4,5	6
2	Toll Pricing Objectives	Establish toll pricing to routinely achieve free-flow speeds of 60-65 mph, always exceeding the 45 mph federal minimum requirement.	1	6
3	Hours of Operation	Charge tolls 24 hours a day, seven days a week.	3,5	7
4	Carpool Occupancy Requirement	Define carpools as vehicles occupied by 3 or more persons.	3,4	8
5	Toll Interoperability	Adopt the national interoperability standard for automated toll collection systems when adopted by the toll industry.	2	10
6	Toll Interoperability	Adopt the new state interoperability standard for automated toll collection systems when adopted by the California Toll Operators Committee.	2	10
7	Project Development Costs	Fund project development costs by current and future Measure A sales tax, toll revenue, and state and federal grants.	3,5	12
8	Operations and Maintenance Costs	Fund operations, maintenance, and toll enforcement costs by toll revenue.	2,5	14
9	Project Repayment	Repay Measure A sales tax bonds and toll revenue bonds with future Measure A and toll revenue, respectively.	5	16
10	Use of Revenue	Use surplus revenue to fund Interstate 15 corridor transportation investments.	2,3,6	17
11	Enforcement	Enforce I-15 Express Lanes toll violations through agreement with the California Highway Patrol and any future state or federal toll violation laws.	1,2	18
12	Operations and Maintenance Responsibilities	Maintain Express Lanes and toll systems as a responsibility of RCTC.	1,2	20

#	Policy Topic Area	Policy Recommendation	Toll Policy Goal(s) Met	Page
13	Operations and Maintenance Responsibilities	Perform customer service patrol and incident management as a responsibility of RCTC in cooperation with Caltrans and other jurisdictions.	1,2	20
14	Operations and Maintenance Responsibilities	Provide customer service and the account relationships as a responsibility of RCTC.	2,5	20
15	Signage	Provide toll signage meeting the latest California Manual of Uniform Traffic Control Devices Standards.	1,2	22
16	Express Bus Integration	Encourage express bus use through toll policies and Express Lane operations.	3,4,6	23
17	Design – Facility Ingress and Egress	Design the roadway and ingress and egress locations meeting Caltrans design standards where feasible and practical.	1,2	25
18	Design – Number of Lanes	Construct and operate two Express Lanes in each direction where possible.	1,2,5	27
19	Toll Pricing Method	Use Dynamic Pricing to determine the toll price.	1,3,5	28
20	Toll Exemptions and Discounts	Provide toll discounts according to legislation and for operations and maintenance vehicles.	1,2	30
21	Toll Payment Method	Require all vehicles to have a transponder at time of travel.	1,2,4	33
22	Mobile Interface	Implement Mobile Web for FasTrak® customers, but defer the Mobile Toll Payment Application.	1,2,3	35
23	High Occupancy Vehicle Declaration Options	Identify HOV3+ carpool customers via a switchable transponder.	1,2,4	36
24	Express Lane Operations Facility	Locate the call center, customer service center and traffic management center and administration in close proximity to the Express Lanes.	2	38

1 – 2. Toll Pricing Objectives

Description:

Express lane pricing serves as a tool to regulate demand and preserve optimal operating conditions. A primary goal of express lanes is to maintain priority access for high occupancy vehicles (HOVs), buses and vanpools to achieve high person throughput. In addition, federal requirements specify minimum operating conditions for HOV and express lanes and prescribe the use of pricing as a means of meeting those requirements. Express lane pricing also generates revenue that can be used to support project development, operating and maintenance costs, and other improvements.

Recommendation:

1. ***Optimize person throughput in the corridor while meeting debt obligations.***
2. ***Establish toll pricing to routinely achieve free-flow speeds of 60-65 mph, always exceeding the 45 mph federal minimum requirement***

Background:

A common goal of express lane projects around the country is to optimize the performance of the lanes using pricing. The performance of express lanes can be measured in a number of ways, including person throughput. And although not often stated as a primary goal of express lanes, revenue generation is another measure of performance. Optimizing person throughput in express lanes is achieved by maintaining priority service for HOVs, buses and vanpools by offering toll discounts and ensuring that the express lanes maintain free-flow conditions for these vehicles.

Federal requirements define a degraded HOV or express lane facility as one that does not meet a minimum average operating speed of 45 mph for 90 percent of the time over a 180-day monitoring period during weekday peak hours. The requirements specify varying the toll charged to vehicles to bring a degraded facility into compliance. As described in Section 19, dynamic pricing will be used to manage demand in the Express Lanes. The pricing algorithm used to calculate the toll rates can be calibrated to ensure that free-flow speeds of 60-65 mph are routinely achieved in the Express Lanes. Additionally, tolls can be set to ensure that the project generates revenue that will be used to service debt obligations.

Assessment:

Optimizing person throughput is a common goal of express lane projects and is achieved by using pricing as a mechanism to maintain priority access for vehicles carrying multiple occupants. Pricing will also be used to ensure that the federal minimum operating requirements are met and that the Express Lanes generate revenue necessary to service debt obligations.

3. Hours of Operation

Description:

Express lane hours of operation define when toll collection will occur. Toll collection can occur during traditionally defined peak periods or extended peak periods (part time), or can occur 24 hours a day, 7 days a week (full-time). Under part-time operations, all passenger vehicles would be allowed to access the Express Lanes during off-peak hours. Under full-time operations, a minimum toll rate would be charged during off-peak hours.

Recommendation:

Charge tolls 24 hours a day, seven days a week.

Background:

Express lanes hours of operation generally fall into one of the following categories:

1. Part-time operations – Toll collection occurs during defined periods of the day. When toll collection is not in effect, the express lanes are open to all vehicles. Toll collection can occur during defined morning and evening peak periods (e.g., 5am-9am and 3pm-7pm) or during extended daytime hours (e.g., 5am-7pm).

2. Full time operations – Toll collection is in effect 24 hours a day, 7 days a week. During non-peak times, the toll rate is often set to a minimum rate.

All HOV lanes in the Southern California region operate full time, with the exception of SR-14 between Santa Clarita and Palmdale and SR-60 from Day Street to Redlands Boulevard. This is because Southern California freeways experience sustained hours of congestion, with relatively short off-peak hours. Under such conditions, part-time HOV operation would not be viable. Similar to the region's HOV facilities, all current and planned express lane facilities within the SCAG region are operating or will be operating with full-time tolling. The 91 Express Lanes in Orange County and the extension into Riverside County operate 24/7, and the I-15 Express Lanes project planned in San Bernardino County has also adopted a 24/7 policy. Having consistent policy helps enforcement and may contribute to a better understanding and reliance on the express lanes network whenever congestion occurs.

Assessment:

Full-time tolling on the I-15 Express Lanes is recommended to maximize efficient operation of the Express Lanes and general purpose lanes, and to be consistent with adjoining express lane facilities on the SR 91 and the planned I-15 Express Lanes in San Bernardino County.

4. Carpool Occupancy Requirement

Description:

The HOV occupancy definition establishes the minimum occupancy requirements for discounted and/or free travel within express lanes. This is important because there will be different traffic and revenue results if carpools are defined as two or more persons per vehicle (HOV-2+) or three or more persons per vehicle (HOV-3+).

Recommendation:

Define carpools as vehicles occupied by 3 or more persons.

Background:

Under Federal requirement (23 USC § 166), HOV and express lanes facilities must maintain a minimum speed of 45 mph. Caltrans has the responsibility of maintaining operations for the state's HOV lanes, which includes the authority to make operational changes (including occupancy) provided they are compliant with federal and state regulations. Multiple sections of California law pertain to HOV policies on express lanes. The specific legislative authorization given to each facility in the state typically provides that particular entity the authority to set rates and HOV policies on the respective facilities.

RCTC's application for the I-15 Express Lanes Project approved by the California Transportation Commission (CTC) states that vehicles with three or more occupants will be allowed entry into the Express Lanes at no cost initially. The Application acknowledges that it may be necessary to charge for HOV-3+ in the future as demand for the Express Lanes increases.

According to the *2013 CA HOV Lane Degradation Report* published by Caltrans, many HOV facilities in the Southern California region are currently experiencing various degrees of performance degradation with a HOV-2+ minimum occupancy requirement. As the region's express lanes network expands, and demand increases, the need to increase the minimum occupancy requirement becomes more apparent.

Currently, there are three existing and four planned (excluding this Project) express lane facilities in southern California. The current practices for carpool occupancy policy are summarized as follows:

Existing Facilities

- **Metro I-10 ExpressLanes** – HOV-3+ toll-free during peak periods; HOV-2+ toll-free all other times
- **Metro I-110 ExpressLanes** – HOV-2+ toll-free

- **OCTA 91 Express Lanes** – HOV-3+ toll-free, with the exception of eastbound PM peak period operating with discount toll rates for HOV-3+

Planned Facilities

- **OCTA 405 Express Lanes** –Pending results of the Traffic and Revenue Study
- **SANBAG I-10 Express Lanes** – HOV-3+ toll-free
- **SANBAG I-15 Express Lanes** – HOV-3+ toll-free
- **Riverside 91 Express Lanes** – HOV-3+ toll-free, with the exception of eastbound PM peak period operating with discount toll rates for HOV-3+

Assessment:

HOV-3+ is recommended as the minimum occupancy requirement for discounted travel for the I-15 Express Lanes. This is consistent with policy recommendations in the SCAG Regional Express Lanes Concept of Operations and the adjoining SR-91 in Orange/Riverside Counties and future I-15 Express Lanes in San Bernardino County.

5 – 6. Toll Interoperability

Description:

Toll interoperability refers to the ability for customers to use multiple toll facilities with a single toll account. Currently, there are various tolling protocols used across the United States to communicate between the in-vehicle toll transponders and roadside toll readers and only a few of the systems allow a customer to use the same toll transponder at other facilities across state lines. There are national and state initiatives to adopt new interoperability standards.

Recommendation:

5. ***Adopt the national interoperability standard for automated toll collection systems when adopted by the toll industry.***
6. ***Adopt the new state interoperability standard for automated toll collection systems when adopted by the California Toll Operators Committee.***

Background:

The protocol for the exchange of transponder information for toll facilities in California is specified by Title 21 of the California Code of Regulations. The transponders used by California toll agencies are commonly referred to as Title 21 transponders. These transponders are branded as FasTrak® and can be used on any of the California toll facilities. California is the only state currently using the Title 21 transponders.

Switchable Title 21

WSDOT 6C Sticker

Legacy Title 21

In 2012, the federal government passed Moving Ahead for Progress in the 21st Century, MAP-21, calling for a national toll interoperability by 2016. The International Bridge, Tunnel, and Turnpike, Authority (IBTTA) is the worldwide association representing toll facility owners and operators and the businesses that that serve them. IBTTA has formed an Interoperability Committee that is working to advance the goal of achieving national interoperability by 2016. They are in the process of selecting the transponder protocols that will undergo further testing and analysis. The Title 21 transponders are not being considered for the national standard.

Concurrent with the efforts of IBTTA, the California Toll Operators Committee (CTOC), which was formed to facilitate interoperability within California, has developed a Transition Plan to replace the legacy California protocol (referred to as "Title 21") with a newer and less expensive protocol (referred to as "6C"). This plan proposes that all toll facilities in the state be able to recognize the 6C protocol by 2018

with full transition by 2020. The 6C protocol is also one of the final protocols being evaluated for the national standard and CTOC is represented in the discussions regarding national interoperability.

Assessment:

The I-15 Express Lanes will be consistent with the interoperability standards currently being assessed at the national and state levels. In doing so, I-15 Express Lanes customers will only have to establish a single toll account to travel on all toll facilities in the state and, depending on the outcome of the national interoperability discussions, may be able to use their account to travel on toll facilities across the country.

7. Project Development Costs

Description:

The I-15 Express Lanes will require funding for project capital costs, necessary for the final design, construction, and initial deployment of the Express Lanes. Capital costs include all items necessary to build new lanes or retrofit existing lanes in order to provide an Express Lane facility, including infrastructure construction, toll collection implementation, and equipment. The funds for capital costs may come from a number of sources, including Riverside County "Measure A" sales tax revenue or state and federal grants. In addition, bonds could be issued or a federal loan obtained for capital costs that are leveraged based on these dedicated tax revenue sources and/or toll revenues from the actual Express Lane facility.

Recommendation:

Fund project development costs by current and future Measure A sales tax, toll revenue, and state and federal grants.

Background:

Riverside County Measure A Sales Tax

Measure A is a Riverside County half-cent sales tax dedicated to transportation. Voters approved the Measure A program in 1988, which has raised over $1 billion for major highway and local road projects throughout Riverside County. Voters extended Measure A in 2002, ensuring that the program will continue to fund transportation improvements through 2039.

Federal Funding

In addition to local funding through Measure A, there are multiple federal programs facilitated through the FHWA that could potentially be used to fund the I-15 Express Lanes. These programs are intended to award funds to projects that upgrade facilities in order to reduce congestion or improve safety. These sources could include, but are not limited to, the Surface Transportation Program, the Highway Safety Improvement Program, Congestion Mitigation and Air Quality funds, or a loan awarded through the Transportation Infrastructure Finance and Innovation Act (TIFIA).

State Funding

California state funding could potentially be available through the State Transportation Improvement Program (STIP). The CTC administers the STIP, which awards funds to eligible highway projects programmed by county transportation agencies.

Bonds

Many express lane projects throughout the country require some level of financing or debt. A limited tax obligation bond is issued by a government entity which is secured by a pledge of a specific tax revenue and can be used to fund certain capital improvements. However, the ability of a priced managed lane to collect toll revenue creates a dedicated funding source, which could be used to issue and repay a bond. These toll revenue bonds are the most popular to be issued by toll facilities. The authorizing statute for the I-15 Express Lanes (Streets & Highways Code Section 149.8) permits RCTC to issue bonds to finance the project.

Assessment:

Financing a project through the issuance of bonds or other means, allows for projects to offer the public more immediate benefits of transportation infrastructure, while spreading the costs of that infrastructure over the life of a project. In this way, the additional interest cost paid by the agency is outweighed by the mobility and economic benefits of having the project available more quickly. Capital costs for the I-15 Express Lanes are to be funded through current and future Riverside County Measure A sales tax revenues and project toll revenues through bond and TIFIA loan financing. Specifically, the recommendation is that sales tax revenue bonds may be issued by RCTC and repaid through Measure A sales tax revenues, while toll revenue bonds may also be issued and a TIFIA loan executed with repayment ensured through toll revenues collected by the I-15 Express Lane facility. In addition, it is recommended that additional State and Federal discretionary grant opportunities are sought to supplement project funding. RCTC's project plan of finance is currently being developed as part of project financing activities and will be brought for Board approval in the future.

8. Operations and Maintenance Costs

Description:

The I-15 Express Lanes will require funding for ongoing operation and maintenance costs associated with the project. Toll collection and dedication to enhanced traveler benefits make express lanes unique when compared to other highway projects, and often require greater resources and funding for the operation and maintenance of these services. The cost of express lane operations includes toll collection, standard operations, enhanced enforcement, incident response services, and toll system and facility maintenance. Operation and maintenance activities require a dedicated funding source in order to be viable, which could include local, state, or federal revenues, in addition to actual toll revenues collected as part of the project.

Recommendation:

Fund operations, maintenance, and toll enforcement costs by toll revenue.

Background:

As with all transportation infrastructure, a dependable and dedicated source of funding is necessary for operations and maintenance. This is especially true for express lanes, where enhanced services can be necessary to offer reliable travel time savings to toll paying customers. Express lanes are also unique in that the revenue collected from tolls is able to be used as a dedicated source of operation and maintenance funding.

The following are general express lanes operations and maintenance costs:

Toll Collection Costs

Toll collection costs include all costs associated with processing tolls payments, including the labor and materials required to manage customer accounts, perform license plate image reviews, process toll violations and provide general customer service. In addition, the cost of distributing and managing transponder inventory is included.

Standard Operation Costs

Standard operation includes costs associated with labor and equipment necessary to manage express lane operations, including personnel to monitor traffic and toll operations, generate reports, public outreach, management and oversight, etc.

Enhanced Enforcement

In order to manage express lanes demand, it is important that the vehicles using express lanes are either paying the posted toll or meeting the HOV requirement. A thorough enforcement program including the presence of the California Highway Patrol (CHP) is necessary to maintain motorist compliance.

Incident Response Services

In order to offer a dependable travel time savings, it is important that incident response resources be available to remove any disabled vehicles or objects which may prevent free-flow conditions.

Toll System and Facility Maintenance

Maintenance costs associated with express lanes include the inspection, upkeep, and replacement of the facility itself and items necessary for toll operation including roadside toll collection equipment and infrastructure, communications infrastructure, and all other hardware and software elements.

Assessment:

It is recommended that operation and maintenance costs for the I-15 Express Lanes be funded through toll revenue. Under this assumption, the resources and services necessary for Express Lanes operations will be funded from the project itself. Funding operations through project revenue will require that Express Lane tolls are set at a rate that ensures mobility and travel time benefits to customers, while also generating sufficient revenue to effectively operate the Express Lanes and meet debt obligations.

9. Project Repayment

Description:

As described in Section 7, sales tax and toll revenue bonds are anticipated to be issued by RCTC and a federal TIFIA loan executed to finance the I-15 Express Lanes development costs. Sales tax revenue bonds are to be backed by future Measure A tax revenues and toll revenue bonds are to be backed by future revenues generated by the Express Lanes. Therefore, funds for the repayment of these bonds will be obtained through revenues to be generated by the Measure A sales tax and operation of the Express Lanes.

Recommendation:

Repay Measure A sales tax bonds and toll revenue bonds with future Measure A and toll revenue, respectively.

Background:

The authorizing statute for the I-15 Express Lanes (Streets & Highways Code Section 149.8) permits RCTC to issue bonds to finance the project. It is RCTC's intent to issue bonds backed by both Measure A sales tax revenues and future toll revenues and to repay the bonds using these revenue sources.

Assessment:

Consistent with the obligations of issuing bonds, RCTC will repay bonds using revenues generated by Measure A sales taxes and Express Lane tolls.

10. Use of Revenue

Description:

Express lanes charge tolls and generate toll revenue as a normal function of operation. The I-15 Express Lanes will require an expenditure plan for all revenue, outlining what activities or functions will be funded from collected toll payments. As stated in Section 9, it is recommended that toll revenues should be used toward repayment of bond debt issued on behalf of the project and also to fund facility operations, maintenance, and enforcement. However, net excess revenue may remain after payments toward operation and maintenance costs and debt service obligations. There are multiple projects and programs which could be funded through the net excess toll revenue from the I-15 Express Lanes.

Recommendation:

Use surplus revenue to fund Interstate 15 corridor transportation investments.

Background:

The goal of most express lane facilities is to generate enough revenue to cover basic operations and maintenance, meet debt obligations (if applicable), as well as to fund replacement and upkeep to the extent that adequate revenue is available. Other facilities dedicate portions of net excess revenue to fund enhanced transit operations within the express lane facility, such as I-15 in San Diego and I-95 in South Florida. Statutes for the Metro I-110 and I-10 ExpressLanes in Los Angeles County state that toll revenue must first cover the costs incurred in connection with implementation/operation of the program. Metro reinvests surplus toll revenue into the corridor through a grant program. In addition, the 91 Express Lanes in Orange County have adopted the policy of directing net excess revenues to capital improvements within the SR-91 corridor.

The authorizing statute for the I-15 Express Lanes (Streets & Highways Code Section 149.8) permits excess toll revenues to be used for the following purposes:

(A) To enhance transit service designed to reduce traffic congestion on I-15 or to expand travel options along I-15. Eligible expenses include transit operating costs, acquisition of transit vehicles and transit capital improvements.
(B) To make operational or capacity improvements designed to reduce congestion or improve the flow of traffic on I-15. Eligible expenses include any phase of project delivery to make capital improvements to onramps, connector roads, roadways, bridges, or other structures on I-15.

Assessment:

The toll revenue collected as part of the I-15 Express Lanes operations will be used primarily to fund operation, maintenance, and enforcement costs of the facility, as well as to meet debt obligations for any revenue bonds issued as part of the project. Any remaining net excess revenue will be used to fund transportation improvements within the I-15 Express Lanes corridor consistent with authorizing statute.

11. Enforcement

Description:

Express lanes require effective enforcement policies and programs to operate successfully. Enforcement of vehicle occupancy requirements and toll payment is critical to protecting eligible vehicles' travel time savings and safety. Visible and effective enforcement promotes fairness and maintains the integrity of the facility to help gain acceptance among users and nonusers.

Recommendation:

Enforce 1-15 Express Lane toll violations through agreement with the California Highway Patrol and any future state or federal toll violation laws.

Background:

Adequate and effective enforcement policies and incident management are integral elements to express lanes operations to ensure that the facilities are operating at the intended level of performance. Enforcement of vehicle occupancy and/or toll payment requirements is critical to protecting eligible users' travel-time savings and safety. Visible and effective enforcement promotes fairness and maintains the integrity of the facility to help gain acceptance among users and non-users.

The enforcement concept for many express lane facilities around the country involves a combination of manual and automated enforcement strategies. Manual enforcement requires CHP officers to be present during the peak hours to serve as a visual deterrent and to monitor vehicles to ensure they are complying with express lane operating policies. Observation areas are provided at strategic locations for officers to park and monitor beacons that illuminate when a vehicle passes through with a switchable transponder (see Section 23 of this report) set to a high-occupancy setting. Beacon lights provide a visual cue for officers to visually inspect the vehicle to verify whether it meets the occupancy requirement. The beacons can also be used to indicate when no transponder or an invalid transponder was detected and can be strategically placed to support stationary enforcement as well as enforcement by officers driving the corridor.

CHP will also be relied upon to enforce all other moving violations, including illegal crossing of the express lanes buffer and the requirement for vehicles to have properly mounted license plates.

In addition to manual enforcement, License Plate Recognition (LPR) cameras will be located at toll points to capture the license plates of vehicles for which no transponder was detected. If the license plate is able

to be matched to an account, then the toll amount will be deducted from the account. Otherwise, the license plate information is sent to the Department of Motor Vehicles (DMV) to determine the address of the registered owner for issuance of a toll violation.

In the Southern California region, HOV and express lanes enforcements are generally conducted by the CHP in conjunction with automatic tolling systems. The four operating express lane facilities in Southern California, Metro I-10 ExpressLanes, Metro I-110 ExpressLanes, OCTA 91 Express Lanes, and SANDAG's I-15 Express Lanes are all under contract with CHP to conduct violation enforcement. These facilities also employ beacon lights and CHP observation areas where possible.

Assessment:

Given national experience, including experience with the four express lanes operated in Southern California, manual enforcement is a proven component of successful express lane operations. The presence of CHP vehicles instills confidence to customers and serves as a deterrent for those that may violate. RCTC will establish an agreement with CHP officers to enforce the I-15 Express Lanes and provide CHP the necessary tools such as enforcement beacon lights and access to transponder information to effectively enforce. In addition, LPR cameras will be used to enforce the requirement for vehicles to carry a transponder.

12 – 14. Operations and Maintenance Responsibilities

Description:

Express lanes operations and maintenance responsibilities can be managed in a number of ways. These responsibilities include the maintenance of all equipment associated with the toll system, providing oversight of operations and incident management, and providing customer service to manage customer accounts. Each of these responsibilities is integral to the overall performance and operation of the express lanes. Express lane implementing agencies can use agency staff, contract staff or share responsibilities with other agencies.

Recommendations:

12. Maintain Express Lanes and toll systems as a responsibility of RCTC.

13. Perform customer service patrol and incident management as a responsibility of RCTC in cooperation with Caltrans and other jurisdictions.

14. Provide customer service and the account relationships as a responsibility of RCTC.

Background:

Express lane operation and maintenance functions require dedicated resources to maintain hardware and software, monitor performance and manage customer accounts. These functions are described in more detail below.

Toll Systems Maintenance

The maintenance of toll systems includes the inspection, upkeep, and replacement of the items necessary for toll operations and the supporting infrastructure. Roadside toll collection equipment, communication network components, servers and workstations are all elements of a working toll system that require routine maintenance. Most express lane operating agencies enter into contracts with toll service providers to not only design and construct the toll systems, but also to operate and maintain them for some period of time. The toll system providers are required to develop maintenance tracking systems that keep track of the maintenance requirements for all elements of the toll system. These systems send alerts when there is an equipment malfunction, track maintenance response times, and keep track of equipment inventory.

Performance Monitoring and Incident Management

An important component of express lane operations is the ability to monitor traffic performance in real-time to ensure that the express lanes are maintaining optimum conditions. This is accomplished using roadside vehicle detection equipment and closed-circuit television cameras that send real time information to a facility where operators can monitor. Operators have the ability to override the toll system (e.g., display a message such as “HOV ONLY”) when conditions warrant and to coordinate with

Caltrans, CHP and other jurisdictions as needed. In addition, operators have the ability to dispatch tow trucks to clear incidents.

Some express lane operators choose to co-locate their express lane monitoring functions within a regional monitoring center and others choose to establish a dedicated monitoring facility. An example of a regional monitoring center is the Inland Empire Transportation Management Center (IETMC), which serves as an intermodal traffic management facility for San Bernardino and Riverside Counties and is staffed by both Caltrans and CHP personnel. The IETMC opened to service in 2011 and is located in the City of Fontana at the interchange of the I-15 and I-210.

Inland Empire Transportation

Customer Service

Customer service includes all of the functions related to account management, payment processing, transponder distribution, violation processing and providing general customer support. Some of these support activities, often referred to as “back office” activities, can take place at offsite facilities. Examples of activities that can be performed offsite include call taking and license plate image review. However, the location(s) of some customer service functions are ideally located in close proximity to the express lanes, including walk-in customer service, customer call center and transponder distribution.

Assessment:

Express lane operating agencies typically procure a contractor to carry out customer service responsibilities due to the amount of specialized systems and labor required. RCTC will contract with a toll services provider to design, implement, operate and maintain all aspects of the I-15 Express Lanes toll system. The RCTC Operations Center (see Section 24) will serve as the hub of all customer, maintenance, and operating activities.

15. Signage

Description:

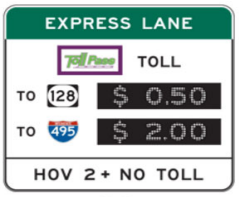
The California Manual of Uniform Traffic Control Devices (California MUTCD) provides uniform standards and specifications for all traffic signage in California. The most recent version of the California MUTCD, published in 2014, includes signing guidelines and requirements for express lane facilities. These requirements are intended to standardize the way that express lanes throughout the state are signed to make it easier for the traveling public to understand express lane operating requirements.

Recommendation:

Provide toll signage meeting the latest California Manual of Uniform Traffic Control Devices standards.

Background:

The general signing requirements for all new highway projects, including express lanes, must comply with the 2014 California MUTCD. The California MUTCD includes requirements for different types of express lane configurations and operating requirements. Of particular relevance to the I-15 Express Lanes, are those signs that depict a restricted access facility where all vehicles in the express lanes are required to have a FasTrak® account.



Example Pricing Sign

Express lane signs included in the California MUTCD generally fall into the following categories:

- Overhead-mounted signs designating the start and end of the express lanes as well as intermediate access points.
- Overhead-mounted pricing signs that display the toll amount to given downstream locations. In accordance with the guidance in the MUTCD, pricing signs display the current toll to no more than two downstream destinations. Changeable message elements will be used to indicate the toll rate to travel to the destination shown. These signs will also specify the HOV occupancy requirement and that a FasTrak® account is required for vehicles to use the facility.
- Median mounted and overhead signs that display the carpool occupancy requirement, the FasTrak® account requirement and hours of operation.

Assessment:

The I-15 Express Lanes signage will conform to the standards in the California MUTCD. The design and implementation of the signage will be the result of several sign workshops and plan reviews that will include Caltrans and the FHWA.

16. Express Bus Integration

Description:

Transit is an important component in express lanes. If managed through variable pricing to maintain a minimum level of service, express lanes create efficient and reliable transit corridors compared to previously congested freeways. Of the existing HOV and express lanes facilities in the southern California region, most are already served by express bus services. Operating express bus service on express lanes offers several key benefits:

- Shortens Travel Times
- Improves Travel Time Reliability
- Lowers Operating Costs
- Increases Person Throughput
- Encourages Carpooling and Transit Use
- Addresses Equity Concerns
- Builds Public Support

Recommendations:

Encourage express bus use through toll policies and Express Lane operations.

Background:

Currently, the Riverside Transit Agency (RTA) provides eight express bus services throughout Riverside County, with one route (CommuterLink Express 206) providing service along I-15 between Temecula and Corona. The CommuterLink Express – Route 206 (Temecula-Murrieta-Lake Elsinore-North Main Corona Metrolink Station) runs daily during weekdays on approximately 30-minute headways, and the general fare costs $3.00 each way (free with valid Metrolink Pass). Route 206 provides connections for commuters travelling from Riverside County to other regions via the North Main Corona Metrolink station.

RTA CommuterLink Express services
Nicholas Ventrone / The Transit Coalition

In anticipation of the 91 Express Lanes extension in Riverside County, the RTA already has two new RapidLink express bus routes programmed for deployment in 2017. These two routes, RapidLink 200 and 205, will provide connections between Riverside and Anaheim as well as Temecula and Anaheim via the 91 Express Lanes. The proposed I-15 Express Lanes will provide the opportunity for further expansion of express bus services along the corridor.

Similar to express bus benefits, the I-15 Express Lanes can provide opportunities for enhancing and promoting carpooling/vanpooling by commuters. Currently, there are eight Caltrans Park and Ride lots along the I-15 corridor within Riverside County. Of the eight existing lots, three are located within the I-15 Express Lanes Project corridor:

- Canyon Community Church Park And Ride (1504 Taber Street, Corona) – 75 spaces
- Norco @ 6th Street Park And Ride (3945 Old Hamner Road, Norco) – 100 spaces
- Mira Loma Park and Ride (12105 Limonite Avenue, Mira Loma) – 76 spaces

Specialized Transit Services

It should be noted that not only will the fixed route bus service discussed benefit from the I-15 Express Lanes, but also the Specialized Transportation Program funded by RCTC via Measure A funding along with federal funding from the Job Access Reverse Commute (JARC) and New Freedom (NF) programs. These specialized transit services (Dial-A-Ride paratransit) will most likely use the I-15 Express Lanes. In addition, a handful of non-profit and special criteria providers that operate specialized transportation will also benefit from using the I-15 Express Lanes.

Physical and Policy Considerations

Many of the physical design considerations for integrating bus service are similar to express lanes and HOV lanes, which have well-established design criteria. Besides the physical design, each express lane project has a unique set of policies in place that influences how well transit is integrated in a particular corridor. Establishing a set of policies that improves transit service and capacity is also often essential in building public support for often controversial toll lane projects and helps to neutralize the perception that Express Lanes are “Lexus Lanes” that primarily benefit those with higher incomes.

Assessment:

Encouraging transit and offering benefits for express bus service is a key component of the I-15 Express Lanes project. Coordination with RTA will take place during the design of the Express Lanes to ensure that transit needs are taken into consideration.

17. Design – Facility Ingress and Egress

Description:

This policy is related to the design of access locations, where vehicles can enter and exit the I-15 Express Lanes. Regulating access is one of the fundamental tools to manage traffic flow in the express lanes, and therefore, it is important to select the access points and design treatment early in the planning phase along with the separation type to help minimize weaving conditions.

Recommendation:

Design the roadway and ingress and egress locations meeting Caltrans design standards where feasible and practical.

Background:

Access treatments for express lane facilities fall into the following three categories:

Grade-separated direct access drop ramps Grade-separated drop ramps provide access to and from the express lanes using dedicated grade direct access ramps. These types of ramps generally provide access from adjacent freeways/arterials and park and ride facilities for express bus operations, and are desirable where sufficient right-of-way and high traffic volumes in both the express lanes and general purpose lanes warrant the need for such exclusive access. An example of a grade-separated drop ramp is the SR-91 eastbound direct connector to the southbound I-15 and vice versa being constructed as part of RCTC's SR-91 Corridor Improvement Project.

At-grade limited access

At-grade limited access provides access to and from the express lanes at designated locations, typically through at-grade access openings that serve as ingress, egress or combined ingress and egress. Physical barriers or painted striping separates the express lanes from the adjacent general purpose lanes between access locations. Three different approaches for providing at-grade limited access include:

At-grade limited access configuration on LA Metro ExpressLanes

- Weave zones – provides combined ingress and egress by short breaks to the physical barriers or striping at designated locations.
- Weave lanes – similar to weave zones, except movement is facilitated by a change lane, which isolates the weaving from both the express lanes and the general purpose lanes, thereby minimizing the potential for unstable flow.
- Merge lanes – provide dedicated and separated ingress and egress (acceleration and deceleration) lanes. The merge lanes allow drivers the opportunity to adjust their speeds to match

the lane they are merging into. This design treatment further reduces the potential for unstable flow, as conflicts are avoided in the access lane.

Continuous access

Continuous access allows vehicles to enter and exit the express lanes for the entire stretch without any specific ingress/egress treatments. The striping that separates the express lanes from the general purpose lanes are generally skip striped.

Assessment:

A limited access configuration is recommended for the I-15 Express Lanes because it can reduce toll evasion, ensure greater access control, and is consistent with the access configuration of existing Southern California HOV and express lanes. Further, a limited access configuration is less complicated to design and has a far lower construction cost than direct access ramps and does not require as much toll equipment as may be required for continuous access. Vehicles will be able to access the express lanes at intermediate access points that provide access to local exits and interchanges. Between these points, access will be restricted to prevent weaving and improve overall mobility. A map of proposed access locations is accessible at http://i15project.info/express_lanes_access.php.

18. Design – Number of Lanes

Description:

The number of express lanes to be implemented for a particular project is dependent upon several variables, including traffic congestion, occupancy requirements and availability of existing right of way. The Project Approval Document for the I-15 Express Lanes generally includes a two lane configuration in each direction based on traffic and engineering analysis. This configuration is intended to add capacity, improve operations and fits within existing right of way.

Recommendation:

Construct and operate two Express Lanes in each direction where possible.

Background:

A number of criteria must be considered when evaluating the capacity needs of an express lanes project. These include existing and projected traffic congestion, toll discount policies, and the cost and availability of right of way. Some express lane projects simply convert an existing HOV lane to an express lane, others convert an existing lane and construct an additional lane (e.g., LA Metro I-10 ExpressLanes), and others construct an entirely new lane or lanes (e.g., I-680SB Express Lane in the Bay Area).

Two lane configuration on LA Metro I-10 ExpressLanes

There are currently no existing HOV lanes within the I-15 project limits. The preliminary engineering performed as part of the project identified a need for a two lane configuration in each direction to serve future traffic demand. This configuration fits within the existing right of way and helps to ensure that the facility will be able to sustain a high level of service.

Assessment:

The recommendation for a two lane configuration in each direction where possible is consistent with the project schematics and serves projected traffic demand while fitting within existing right of way.

19. Toll Pricing Method

Description:

Express lanes use pricing to manage the number of toll paying customers using the facility. Managing the number of users allows the express lanes to meet performance goals such as those described in Section 1 and Section 2. Variable pricing is to be used to manage traffic, whereby the cost to use the express lanes is directly related to the level of demand for the express lanes. As demand increases, raising the tolls will help manage demand in order to maintain federal performance requirements. Conversely, the price decreases as demand decreases to incentivize more vehicles to utilize the available capacity. Two variable pricing methods are currently in use on facilities across the country: time-of-day pricing and dynamic pricing.

Recommendation:

Use Dynamic Pricing to determine the toll price.

Background:

Time-of-Day Pricing

Time-of-day pricing employs a fixed toll rate schedule with different toll rates by travel direction, time of day and day of the week. Time-of-day pricing is actively used on the 91 Express Lanes and on express lanes in Denver and Houston. Time-of-day pricing is effective when traffic patterns remain relatively consistent over time. For instance, if congestion reaches the same level at the same time every Monday, then a static price that is capable of maintaining the desired level of traffic volume can be used for that time period.

With time-of-day pricing, tolls vary according to a fixed schedule, with different prices charged based on direction of travel, day of the week, and hour of the day. The toll rates are determined based on historical travel conditions in the corridor, and vary according to demand and congestion. The performance of express lane facilities using time-of-day pricing requires evaluation on a regular basis to ensure that free flow conditions are being maintained in the express lanes. If travel conditions on the express lanes deteriorate over time, the rates should be increased. Similarly, rates can also be lowered when the express lanes are found to have excess capacity that is not being used effectively. On the 91 Express Lanes, performance is monitored daily and evaluated every three months.

Dynamic Pricing

Dynamic pricing employs toll rates that vary in real time based on actual travel conditions detected in the corridor. Dynamic pricing is actively used on most California express lanes, including I-10 and I-110 (Los Angeles), I-15 (San Diego), I-680 (Alameda County), and I-880 / SR-237 (San Jose). Dynamic pricing is effective on facilities that have a high level of variability in congestion throughout each day and from day to day. For instance, if a facility does not have a peak period that is consistent from one day to the next or has a high rate of incidents that impact traffic, dynamic pricing allows for the adjustment of the price to match the actual real-time traffic conditions.

Dynamic pricing provides a real-time monitoring and response capability for express lane operations. Dynamic pricing requires capital investment for both the algorithm and the traffic detection system and also requires ongoing monitoring and maintenance of the pricing algorithm and traffic detection system. Like the time-of-day pricing, dynamic pricing requires variable message signs to communicate price to customers.

Assessment:

In order to be responsive to real-time traffic conditions that may vary from day to day, it is recommended that the I-15 Express Lanes use dynamic pricing. Despite the higher capital costs of deployment as compared to time-of-day pricing, dynamic pricing will be valuable to manage traffic and ensure the facility provides reliable travel at all times. The ability to readily adjust pricing and manage demand through dynamic pricing will allow for flexibility, particular in the critical area of overlap with the 91 Express Lanes that use time-of-day pricing.

20. Toll Exemptions and Discounts

Description:

Toll discounts and exemptions are required by legislation, law and by agreement with project partners. Discounts have an impact on revenue, operations, customer service center systems and enforcement. It is important to establish toll discounts or exemptions at an early stage to allow for the evaluation of operational impacts and for inclusion in system design.

Recommendation:

Provide toll discounts according to legislation and for operations and maintenance vehicles.

Background:

A review of project agreements and legislation suggested that the following vehicle types require evaluation for toll discounts.

Transit

One of the primary goals of express lane facilities is to offer enhanced transit service. California Vehicle Code defines qualifying mass transit, paratransit and vanpool vehicles, including those that are publically or privately funded. These vehicles will be allowed to travel toll-free in the I-15 Express Lanes at all times. With the passage of the Fixing America's Surface Transportation Act (the FAST Act) on December 4, 2015, U.S. Code was amended to enable privately-owned buses servicing the public to utilize toll facilities under the same rates, terms and conditions as other public transportation vehicles. RCTC will establish agreements with operators to facilitate toll-free travel at all times.

High-Occupancy Vehicles

The application for the I-15 Express Lanes project approved by the CTC and the Federal Agreement between RCTC, FHWA and Caltrans provide direction with regard to the tolling of HOVs. In both instances, HOVs are defined as vehicles with three or more occupants (HOV-3+). The authorizing statute for the Express Lanes (Streets & Highways Code Section 149.8) also specifies free travel for HOV-3+ vehicles initially upon opening.

There is no mechanism to regulate the demand of HOV-3+ vehicles when there is a 100% toll discount. As the HOV-3+ volume becomes an increasingly larger percentage of the total I-15 Express Lanes traffic, it will become increasingly difficult for the dynamic pricing algorithm to effectively manage demand and preserve free flow operations in the I-15 Express Lanes. Therefore, it is recommended that the speeds in the I-15 Express Lanes be monitored to determine when the lanes are being degraded. If the average speed in the Express Lanes drops to 60 mph three or more times in a thirty day period after three months of operation, the HOV-3+ discount will be reduced to 50%. The 100% discount will be in place for at least

the first three months of operation to allow for customers to adjust to the new facility and to incentivize use of the I-15 Express Lanes by carpoolers.

Motorcycles

California Vehicle Code 21655.5(b) provides for free passage on preferential lanes for motorcycles. Motorcycle toll transactions will be processed either through a transponder or by reading their license plate.

~~**Zero Emission Vehicles (ZEVs)**~~

~~Legislation (AB 1721), enacted as California Vehicle Code Section 5205.5, allows motorists driving ZEVs displaying a DMV-issued Clean Air Vehicle decal to travel in express lanes with a toll-free or reduced rate toll. The statute does not mandate the rate of reduction. The existing legislation is set to expire January 1, 2019 ahead of the I-15 Express Lanes planned opening.~~

~~Similar to the treatment of HOV-3+ vehicles, T~~the toll discount for ZEVs ~~will be 15% upon opening of the Express Lanes.~~reduced to 50% if average ~~speeds drop below 60 mph more than three times in a thirty day period after three months of operation.~~

White and Green Clean Air Vehicle Decals for HOV Lane Use
State of California / Dept. of Motor Vehicles

Emergency Vehicles

California Vehicle Code 23301.5 provides for toll exemption for specifically identifiable emergency vehicles being driven while responding to or returning from an urgent or emergency call, engaged in an urgent or emergency response, or engaging in a fire station coverage assignment directly related to an emergency response. The common method of processing these tolls is through a "non-revenue" account where the transaction is processed by the back office and posted to the account in order to provide a method of monitoring usage. RCTC will establish agreements with the local emergency providers that will outline the specific rules for these non-revenue accounts.

Maintenance and Operation Vehicles

In order to facilitate access to express lanes for the purposes of performing various maintenance tasks or performing operational checks and testing, it is common for tolling authorities to grant toll-exemption for vehicles being driven for these maintenance purposes. The common method of processing these tolls is through a "non-revenue" account where the transaction is processed by the back office and posted to the account in order to provide a method of monitoring usage.

Assessment:

In general, vehicles that are eligible to utilize HOV lanes in accordance with applicable federal or state law will be allowed discounted access to the I-15 Express Lanes. This includes buses (public transit and

privately operated tour buses), vanpools, motorcycles, HOV 3+ vehicles, ~~ZEVs,~~ emergency vehicles, law enforcement vehicles, and operation and maintenance vehicles. The following discount policies are recommended for each of these vehicle types:

- In-service public transit vehicles, private buses, vanpools, and motorcycles will be 100% discounted (toll free) at all times.
- All HOV-3+ and zero-emission vehicles (ZEVs) will be 100% discounted (toll free) for the first three months of operation. The discount will be reduced to 50% if the average speed in the Express Lanes drops below 60 mph three or more times in a thirty day period after three months of operation.
- Emergency, law enforcement and Express Lanes maintenance vehicles will be 100% discounted (toll free) at all times.

21. Toll Payment Method

Description:

Electronic toll collection systems use automatic vehicle identification (AVI) technology to toll vehicles. These AVI systems use in-vehicle transponders and/or LPR cameras to identify vehicles for toll payment. Some facilities require that all vehicles have a transponder as the primary means of toll collection and use LPR cameras as a backup to capture vehicles that don't have a transponder or that have a transponder that fails to be detected. Other facilities allow vehicles to travel without a transponder and use LPR cameras as the primary means of toll collection; this system is known as pay by plate tolling.

License-plate tolling equipment
Craig F. Walker / The Denver Post

Recommendation:

Require all vehicles to have a transponder at time of travel.

Background:

Transponder-Based Toll Collection

Electronic toll collection using transponders is a proven technology with high accuracy. The cost associated with the systems needed to process transponder transactions is lower than systems which allow for toll payment by license plate. In addition, as California transitions from the legacy battery-operated transponders to the new, less expensive 6C transponders, the cost for a transponder based toll collection system will decrease even further making transponder based toll collection a far more efficient method of collecting tolls.

Most toll facilities that rely on transponders for toll collection also include LPR cameras to capture vehicles without a transponder to minimize revenue leakage. The license plate images are used to associate the transaction with a toll account when a transponder is not read or to look up the registered owner's address for collection of the toll through a toll violation process.

As described in Section 23, HOVs are able to use switchable transponders to indicate their vehicle occupancy status and receive the appropriate toll discount.

Pay by Plate

Pay by plate utilizes LPR cameras and Optical Character Recognition technology to identify a vehicle's license plate number. The automatically generated plate number is independently verified and validated by toll operators in the customer service center, thereby increasing operational costs per toll transaction. This technology is currently being used on Transportation Corridor Agencies (TCA) toll facilities in Orange County, on all toll facilities in the Denver Metro Area (including express lanes), all Dallas / Ft. Worth area toll facilities (including express lanes), Loop 375 express lanes in El Paso, and on the SR-520 and I-405

express lanes in the Seattle area. The license plate numbers are collected and the name and addresses of the registered users are requested from the state DMV, from which bills for all the tolls incurred during a specific period are aggregated and sent out to collect payment. Pay by plate tolling not only requires more processing costs, but it results in more revenue loss due to unidentifiable plates and registered owners and lengthens the amount of time to collect toll revenue.

In a pay by plate scenario, HOVs are required to register their license plate in advance of making a trip so the toll system can apply the appropriate toll discount.

Assessment:

Because toll payment by transponder is a proven, accurate solution with a lower transaction cost as compared to pay by plate, it is recommended that RCTC open the I-15 Express Lanes with a requirement that all vehicles have a transponder. Opening with a transponder requirement will encourage motorists to open an account and obtain a transponder. LPR cameras will be used to enforce this requirement and identify vehicles that don't carry a transponder. This policy also allows HOVs to declare their status using a switchable transponder as described in Section 23.

22. Mobile Interface

Description:

Easy access to express lanes information is important to gain customer understanding and compliance. Most toll facilities across the country maintain a website where users can find information about the toll policies and access account information and many of these websites are accessible in a mobile format. In addition, some facilities provide mobile applications that allow users to review recent toll activity and pay tolls without a transponder.

Recommendation:

Implement Mobile Web for FasTrak® customers, but defer the Mobile Toll Payment Application.

Background:

Toll facilities across the country provide different mobile interfaces for customers as described below.

Mobile Website

Many websites currently include desktop and mobile versions. The mobile versions are intended to be viewed from a mobile device such as a smartphone or tablet and typically include the same functionality as the desktop site. A mobile website for express lanes could allow customers to access general express lane information (operating policies, requirements for use, etc.) and to access account information.

Mobile Toll Payment Application

Depending upon business rules, some toll facilities allow users to user mobile devices to pay tolls without the use of a transponder. For example, the TCA facilities in Southern California allow users to pay tolls from a mobile application within five days before or after a trip is made.

Transportation Corridor Agency Mobile Application Interface

Assessment:

RCTC will require all users to carry a transponder (see Section 21), which is inconsistent with the idea of allowing users to pay tolls using a mobile application. Therefore, a Mobile Payment Application will not be deployed. However, users will have access to a mobile website to access Express Lanes information and to make changes or payments to their account.

23. High Occupancy Vehicle Declaration Options

Description:

The primary function of HOV declaration is two-fold: 1) provide a mechanism to easily separate toll payers from those eligible to receive toll discounts, and 2) enable the efficient and effective enforcement of occupancy violations. Two methods of occupancy declaration were considered: the use of self-declaration lanes and switchable transponders.

Recommendation:

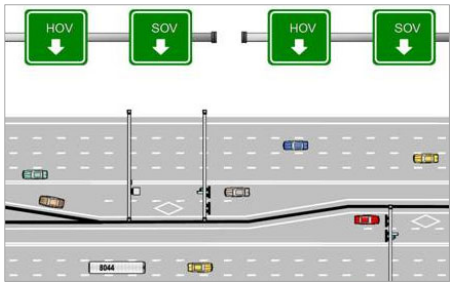
Identify HOV-3+ carpool customers via a switchable transponder.

Background:

There are different ways that express lanes can require toll-paying and toll-free vehicles to use the express lanes. In Southern California, the carpool declaration options generally fall under the "declaration lane" method (as used by the OCTA 91 Express Lanes and the Riverside 91 Express Lanes currently under construction), and the switchable transponder method (as deployed on the I-110 and I-10 ExpressLanes in Los Angeles County).

Self-Declaration Lanes

Many first generation express lanes involved conversion of pre-existing, barrier-separated HOV lanes with adequate right-of-way for positive separation between toll payers and carpoolers. Known as the "declaration lane" option, this was the mechanism designed and implemented on SR-91 in Orange County, the first express lanes facility which opened in 1995. It will also be utilized on the 91 Express Lanes that are under construction in Riverside County. Declaration lane solutions require eligible carpools to diverge from the main travel lanes to a separated lane at toll zones. These vehicles are charged an appropriate discounted or zero-value toll, and (if present) occupancy is validated by enforcement personnel via visual scan. Vehicles without a transponder are considered violators – the same as if they traveled through the main toll lanes without a transponder.



Single occupancy vehicles (SOV) lane tolling zone with separate declaration lane
FHWA Office of Operation/ Proposed I-95 Managed Lanes

Switchable Transponders

This method provides a technological method for declaring carpool status on the express lanes through a "switchable" transponder, as implemented on I-10 and I-110 in Los Angeles. Switchable transponders allow the customer to self-declare their occupancy status on the transponder itself. The Los Angeles transponder transmits multiple identifications (IDs), in order to associate the correct toll for a vehicle

based upon its occupancy status. These IDs can be associated with a single occupancy vehicle, HOV-2, and HOV-3+ setting directly on the transponder. For compliant HOVs, the user declares the vehicle's status on the transponder (e.g., sliding the switch to "HOV2" or "HOV3+"), and the appropriate toll rate would be collected. If the same vehicle is being operated without the required occupancy, it would be required to declare appropriately on the transponder and the correct toll would be collected. If no transponder is present (or if it is malfunctioning), LPR (mounted on gantries or median poles) would be used to collect full toll payment from the user (regardless of occupancy status).

Example Switchable Transponder

Assessment:

It is recommended that the I-15 Express Lanes use switchable transponders for declaring occupancy. Switchable transponders have been successfully deployed on other toll facilities in the state and nationally. Also, as compared to declaration lanes, switchable transponders are more inexpensive to deploy and do not require drivers to make weaving maneuvers while in the Express Lanes, which may improve operational efficiency. With the enforcement strategy described in Section 11, CHP will have the tools necessary to enforce the proper use of the switchable transponder so that violation rates can be kept to a minimum.

24. Express Lane Operations Facility

Description:

The I-15 Express Lanes will require a facility to house various components of the operations, including a walk-in customer service center, customer call center, back office operations, image processing, finance and administration, system administration and maintenance and traffic management center. RCTC will provide the facility and the toll systems provider will supply the equipment, systems and staff to perform the services.

Recommendation:

Locate the call center, customer service center and traffic management center and administration in close proximity to the Express Lanes.

Background:

As described in Sections 12-14, RCTC will have the responsibility for I-15 Express Lanes maintenance, traffic management and customer service functions. These functions would ideally be located in a single facility to centralize I-15 Express Lanes operations and create synergies associated with co-located services.

Four toll agencies operate in Southern California and each of them has a facility or facilities which house the toll operations functions. Toll programs across the nation have experimented with remote staff working from a contractor owned or sub-contracted facility. While this model has been successful for some, it has the potential to degrade service, complicate supervisory functions and prohibit the synergy gained from co-location of services.

The 91 Express Lanes toll operations staff is being provided under a joint agreement with OCTA. The 91 Express Lanes call center and walk in staff are located at a leased facility near SR-91 and McKinley Street in the city of Corona. The other toll operation services are located in a leased facility near SR-91 and Weir Canyon Road in the city of Anaheim. RCTC's agreement with OCTA to share toll operation services expires in June of 2021. RCTC is currently procuring a toll operator for the I-15 Express Lanes which will require a facility to house the toll operator and RCTC toll operations staff, equipment and walk-in customer service location.

Assessment:

I-15 Express Lanes operations and maintenance are the responsibility of RCTC. To ensure that the goals for the I-15 Express Lanes are met, RCTC will be best served by co-locating the required services in a facility in close proximity to the I-15 Express Lanes. The 91 Express Lanes have set the precedent for local operations and customer service. Therefore, it is recommended that the customer service, traffic management and other administrative functions be located in the local area adjacent to the I-15 corridor, with a specific site to be determined. This facility will be referred to as the RCTC Operations Center, or ROC.

AGENDA ITEM 9

RIVERSIDE COUNTY TRANSPORTATION COMMISSION	
DATE:	August 18, 2025
TO:	Toll Policy and Operations Committee
FROM:	Silva Mardrussian, Customer Service Manager
THROUGH:	Jennifer Crosson, Toll Operations Director
SUBJECT:	Agreement for Express Lanes Consulting Services

STAFF RECOMMENDATION:

This item is for the Committee to recommend the Commission take the following action(s):

1) Award Agreement No. 25-31-101-00 to HNTB Corporation (HNTB) for express lanes consulting services for a five-year term, and two, two-year options to extend the agreement, in an amount not to exceed $15,000,000; and
2) Authorize the Chair or Executive Director, pursuant to legal counsel review, to execute the agreement, including option years, on behalf of the Commission.

BACKGROUND INFORMATION:

The Commission began operating the 91 Express Lanes in March 2017, the 15 Express Lanes in April 2021, and the 15/91 Express Lanes Connector in November 2023. In 2019, the Commission awarded a contract to HNTB for express lanes consulting services. The contract included a five-year base term with two one-year extension options. The current HNTB contract ends December 3, 2025, and has a one-year extension option available. The HNTB contract has averaged $1.25 million in annual services.

HNTB subject matter experts have provided support with request for proposal (RFP) development, operational oversight, financial reconciliation, Back-Office System (BOS) transition, system enhancements, civil design work, construction management services and roadside technical support.

DISCUSSION:

The current toll consultant, HNTB, has provided valuable support to Commission staff. Given the specialized and technical nature of express lanes operation, the support of a consultant firm is essential to the success of the express lanes program. In April 2024, the Commission approved an extension of our Toll Services Provider contract and an update to the on-road toll system equipment and software. The toll system update will require the support of our toll consultant firm. The system update effort is scheduled to begin in December 2025. With the current HNTB agreement expiring December 3, 2025, staff felt it was important to release an RFP prior to the

commencement of the toll system update to ensure consistency in toll consultant support despite having a one-year option extension remaining on the current agreement.

Staff developed a statement of services based on both current operational demands and long-term goals. The statement of services includes seven task categories:

1. Planning, Policy, and Industry Representation Support
2. Customer Service and Operations Support
3. Operational Financial Support
4. On Road Toll System and Operations Support
5. Facility and Roadway Engineering Support
6. IT & Technology Support
7. Customer Education, Marketing, and Graphic Support

The statement of services is included in the attachment to this report as Exhibit A and provides a detailed description of the tasks. The services that can be performed under this agreement range from simple short-term tasks such as assisting with the development of express lanes policies under Task 1 to longer-term tasks such as a system-wide update of toll equipment under Task 4. The express lanes consultant will provide staff with access to a wide variety of toll subject matter experts to support the various services detailed in the statement of services.

The agreement is a task order contract, requiring the development and approval of a task for each assignment. Each task will include a description of work to be performed, a schedule, assigned staff, not-to-exceed cost and deliverables.

Procurement Process

Staff determined the weighted factor method of source selection to be the most appropriate approach. This method allowed the Commission to evaluate the proposals based on cost and other non-price factors. Non-price factors include elements such as qualifications of firm, qualifications of personnel, understanding and approach, and the ability to respond to the Commission's needs for express lanes consulting services as set forth under the terms of RFP No. 25-31-101-00.

RFP No. 25-31-101-00 for Express Lanes Consulting Services was released by staff on May 21, 2025. The RFP was posted on the Commission's PlanetBids website, which is accessible through the Commission's website. Through PlanetBids, seven firms downloaded the RFP, and three of these firms are located in Riverside County. Staff responded to all questions submitted by potential proposers prior to the June 4, 2025, clarification deadline date. Five firms – AtkinsRéalis (Los Angeles), DKS Associates (Anaheim), HNTB Corporation (Ontario), Jacobs Engineering Group Inc. (Ontario) and Parsons Transportation Group (Corona) - submitted responsive proposals prior to the 2:00 p.m. submittal deadline on June 30, 2025. Utilizing the evaluation criteria set forth in the RFP, the five proposals were evaluated and scored by an evaluation committee comprised of Commission staff.

As a result of the evaluation committee's assessment of the written proposals and according to the terms of the RFP, the evaluation committee recommends a contract award to HNTB to provide the express lanes consulting services for a five-year term, and two, two-year options to extend the agreement, as this firm earned the highest total evaluation score. A summary of the proposed costs submitted with the written proposals and the total evaluation score rankings are presented in the following table:

Firm	Total Cost	Overall Ranking
HNTB Corporation	$14,856,000	1
Jacobs Engineering Group Inc.	$12,803,000	2
AtkinsRéalis	$11,661,000	3
Parsons Transportation Group	$11,770,000	4
DKS Associates	$14,017,000	5

The proposals were evaluated in four areas: qualifications of firm/team, qualifications of personnel, understanding and approach and cost. HNTB received the highest score in all areas, but price. HNTB's proposal reflected their firm's national experience in the toll industry, the expertise of their staff in all areas of the seven tasks, their understanding of the work required and an approach to serving the Commission in an effective and efficient manner. HNTB has subject matter experts available in every proposed task and has demonstrated a clear understanding of the work to be performed under this agreement. The evaluation of cost was based on a number of hours for each labor category provided by the Commission over the term of the agreement. While HNTB had the highest calculated cost, the actual cost will be based on the actual hours performed at the proposed rate for each staff category.

HNTB has performed well across a wide breadth of services under its current agreement with the Commission. Staff finds the HNTB subject matter experts to be highly efficient in their work and knowledgeable in their respective areas of expertise. The HNTB program manager has been responsive to the Commission's needs and managed the administrative elements of the current agreement without issue. Staff is pleased to recommend the continuation of HNTB's services with the award of the new Express Lanes Toll Consultant Services agreement. Staff has determined that consultant support is essential to the success of the Commission's express lanes program.

STAFF RECOMMENDATION:

As a result of the evaluation committee's assessment of the written proposals, the evaluation committee recommends the award of Agreement No. 25-31-101-00 to HNTB for express lanes consulting services for a five-year term, and two, two-year options to extend the agreement, in an amount not to exceed $15,000,000.

FISCAL IMPACT:

The Fiscal Year 2025/26 Budget includes funding for express lanes consulting services in the amount of $1,250,000. Funding in future fiscal years will be included within each annual proposed budget.

Financial Information					
In Fiscal Year Budget:	Yes N/A	Year:	FY 2025/26 FY 2026/27+	Amount:	$1,250,000 $13,750,000
Source of Funds:	Toll Revenue			Budget Adjustment:	No N/A
GL/Project Accounting No.:	(009199/913033/009104/001599/001503/009103/001504) – 65520 00000 0000 (515/591) 31 65520 15 and 91 Express Lanes				
Fiscal Procedures Approved:				Date:	08/04/2025

Attachment: HNTB Draft Professional Services Agreement No. 25-31-101-00

Agreement No. 25-31-101-00

RIVERSIDE COUNTY TRANSPORTATION COMMISSION
AGREEMENT FOR ON-CALL EXPRESS LANES
CONSULTING SERVICES WITH HNTB Corporation

1. PARTIES AND DATE.

This Agreement is made and entered into this_ day of _____, 2025, by and between the RIVERSIDE COUNTY TRANSPORTATION COMMISSION ("the Commission") and HNTB Corporation ("Consultant"), a **CORPORATION**.

2. RECITALS.

2.1 Commission is the County Transportation Commission for Riverside County, with responsibility for, among other things, implementing or allocating funding for various transportation programs and projects throughout the County of Riverside ("County").

2.2 Consultant desires to perform and assume responsibility for the provision of certain professional consulting services required by Commission. Consultant represents that it is a professional consultant, experienced in providing **On Call Express Lanes Consulting services** to public clients, is licensed in the State of California, if required, and is familiar with the plans of Commission.

2.3 Services shall be provided on the terms and conditions set forth in this Agreement and in the task order(s) to be solicited, awarded and authorized by Commission as further described in this Agreement ("Task Order") for future projects as set forth herein and in each Task Order (each such project shall be designated a "Project" under this Agreement).

3. TERMS.

3.1 General Scope of Services. Consultant promises and agrees to furnish to Commission all labor materials, tools, equipment, services, and incidental and customary work necessary to fully and adequately provide professional consulting services and advice on various issues affecting the decisions of Commission regarding the Project and on other programs and matters affecting Commission, hereinafter referred to as "Services". The Services are generally described in Exhibit "A" attached hereto and incorporated herein by reference. The Services shall be more particularly described in the

individual Task Orders issued pursuant to this Agreement. All Services shall be subject to, and performed in accordance with, this Agreement, the relevant Task Order, the exhibits attached hereto and incorporated herein by reference, and all applicable local, state and federal laws, rules and regulations.

3.2 Task Orders; Commencement of Services. Services under this Agreement shall be requested by the Commission pursuant to Task Order requests. Commission's Task Order Authorization and Consultant's commencement of the Services shall indicate the Parties' agreement to the terms of the relevant Task Order.

Consultant shall not commence performance of any services or work until this Agreement has been approved by Commission, and a Task Order has been authorized as detailed in this Section. No payment will be made for any services or work performed prior to approval of this Agreement, and receipt of Commission's Task Order Authorization.

3.3 Term. The term of this Agreement shall be from **December 1, 2025, and for a five-year base period through November 30, 2030, with a two–two-year extension options for a total period of performance of up to nine years**, unless earlier terminated as provided herein. Consultant shall complete the Services within the term of this Agreement and shall meet any other established schedules and deadlines set forth in a Task Order. The Commission, at its sole discretion, may extend this Agreement for two additional, two- year option terms.

3.4 Schedule of Services. Consultant shall perform the Services expeditiously, in accordance with the Schedule of Services set forth in a Task Order. Consultant represents that it has the professional and technical personnel required to perform the Services in conformance with such conditions. In order to facilitate Consultant's conformance with the Schedule, Commission shall respond to Consultant's submittals in a timely manner. Upon request of the Commission, Consultant shall provide a more detailed schedule of anticipated performance to meet the Schedule of Services.

3.5 Independent Contractor; Control and Payment of Subordinates. The Services shall be performed by Consultant under its supervision. Consultant will determine the means, method and details of performing the Services subject to the requirements of this Agreement. Commission retains Consultant on an independent contractor basis and Consultant is not an employee of Commission. Consultant retains the right to perform similar or different services for others during the term of this Agreement. Any additional personnel performing the Services under this Agreement on behalf of Consultant shall not be employees of Commission and shall at all times be under Consultant's exclusive direction and control. Consultant shall pay all wages, salaries, and other amounts due such personnel in connection with their performance of Services under this Agreement and as required by law. Consultant shall be responsible for all reports and obligations

respecting such additional personnel, including, but not limited to: social security taxes, income tax withholding, unemployment insurance, and workers' compensation insurance. Consultant hereby indemnifies and holds the Commission harmless, pursuant to the indemnification provisions contained in this Agreement, from any and all claims that may be made against the Commission based upon any contention by any third party that an employer-employee relationship exists by reason of this Agreement.

3.6 Conformance to Applicable Requirements; Coordination. All work prepared by Consultant shall be subject to the approval of Commission. Consultant agrees to work closely with Commission staff in the performance of Services and shall be available to Commission's staff, consultants and other staff at all reasonable times.

3.7 Substitution of Personnel. Consultant has represented to Commission that certain personnel will perform and coordinate the Services under this Agreement. Should one or more of such personnel become unavailable, Consultant may substitute other personnel of at least equal competence and experience upon written approval of Commission. In the event that Commission and Consultant cannot agree as to the substitution of personnel, Commission shall be entitled to terminate this Agreement for cause, pursuant to provisions of Section 3.16 of this Agreement. The key personnel for performance of this Agreement are as follows: **Kevin A. Haboian and Monica Castellanos.**

3.8 Commission's Representative. Commission hereby designates **EXECUTIVE DIRECTOR,** or his or her designee, to act as its representative for the performance of this Agreement ("Commission's Representative"). Commission's representative shall have the power to act on behalf of Commission for all purposes under this Agreement. Consultant shall not accept direction from any person other than Commission's Representative or his or her designee.

3.9 Consultant's Representative. Consultant hereby designates **Kevin A. Haboian,** or his or her designee, to act as its representative for the performance of this Agreement ("Consultant's Representative"). Consultant's Representative shall have full authority to represent and act on behalf of the Consultant for all purposes under this Agreement. The Consultant's Representative shall supervise and direct the Services, using his or her best skill and attention, and shall be responsible for all means, methods, techniques, sequences and procedures and for the satisfactory coordination of all portions of the Services under this Agreement.

3.10 Standard of Care; Licenses. Consultant shall perform the Services under this Agreement in a skillful and competent manner, consistent with the standard generally recognized as being employed by professionals in the same discipline in the State of California. Consultant represents and maintains that it is skilled in the professional calling necessary to perform the Services. Consultant warrants that all employees and subcontractors shall have sufficient skill and experience to perform the Services assigned to them. Finally, Consultant represents that it, its employees and subcontractors have all licenses, permits, qualifications and approvals of whatever nature that are legally required

to perform the Services and that such licenses and approvals shall be maintained throughout the term of this Agreement. Consultant shall perform, at its own cost and expense and without reimbursement from Commission, any Services necessary to correct errors or omissions which are caused by the Consultant's failure to comply with the standard of care provided for herein, and shall be fully responsible to the Commission for all damages and other liabilities provided for in the indemnification provisions of this Agreement arising from the Consultant's errors and omissions.

3.11 Laws and Regulations. Consultant shall keep itself fully informed of and in compliance with all local, state and federal laws, rules and regulations in any manner affecting the performance of the Project or the Services, including all Cal/OSHA requirements, and shall give all notices required by law. Consultant shall be liable for all violations of such laws and regulations in connection with Services. If the Consultant performs any work knowing it to be contrary to such laws, rules and regulations and without giving written notice to Commission, Consultant shall be solely responsible for all costs arising therefrom. Consultant shall defend, indemnify and hold Commission, ITS officials, directors, officers, employees and agents free and harmless, pursuant to the indemnification provisions of this Agreement, from any claim or liability arising out of any failure or alleged failure to comply with such laws, rules or regulations.

3.12 Insurance.

3.12.1 Time for Compliance. Consultant shall not commence work under this Agreement until it has provided evidence satisfactory to the Commission that it has secured all insurance required under this section, in a form and with insurance companies acceptable to the Commission. In addition, Consultant shall not allow any subcontractor to commence work on any subcontract until it has secured all insurance required under this section.

3.12.2 Minimum Requirements. Consultant shall, at its expense, procure and maintain for the duration of the Agreement insurance against claims for injuries to persons or damages to property which may arise from or in connection with the performance of the Agreement by the Consultant, its agents, representatives, employees or subcontractors. Consultant shall also require all of its subcontractors to procure and maintain the same insurance for the duration of the Agreement. Such insurance shall meet at least the following minimum levels of coverage:

(A) Minimum Scope of Insurance. Coverage shall be at least as broad as the latest version of the following: (1) *General Liability*: Insurance Services Office Commercial General Liability coverage (occurrence form CG 0001 or exact equivalent); (2) *Automobile Liability*: Insurance Services Office Business Auto Coverage (form CA 0001, code 1 (any auto) or exact equivalent); and (3) *Workers' Compensation and Employer's Liability*: Workers' Compensation insurance as required by the State of California and Employer's Liability Insurance.

(B) Minimum Limits of Insurance. Consultant shall maintain limits no less than: (1) *General Liability:* $2,000,000 per occurrence for bodily injury, personal injury and property damage. If Commercial General Liability Insurance or other form with general aggregate limit is used, either the general aggregate limit shall apply separately to this Agreement/location or the general aggregate limit shall be twice the required occurrence limit; (2) *Automobile Liability:* $1,000,000 per accident for bodily injury and property damage; and (3) *if Consultant has an employees, Workers' Compensation and Employer's Liability:* Workers' Compensation limits as required by the Labor Code of the State of California. Employer's Practices Liability limits of $1,000,000 per accident.

3.12.3 Professional Liability. Consultant shall procure and maintain, and require its sub-consultants to procure and maintain, for a period of five (5) years following completion of the Project, errors and omissions liability insurance appropriate to their profession. Such insurance shall be in an amount not less than $1,000,000 per claim. This insurance shall be endorsed to include contractual liability applicable to this Agreement and shall be written on a policy form coverage specifically designed to protect against acts, errors or omissions of the Consultant. "Covered Professional Services" as designated in the policy must specifically include work performed under this Agreement. The policy must "pay on behalf of" the insured and must include a provision establishing the insurer's duty to defend.

3.12.4 Insurance Endorsements. The insurance policies shall contain the following provisions, or Consultant shall provide endorsements on forms approved by the Commission to add the following provisions to the insurance policies:

(A) General Liability.

(i) Commercial General Liability Insurance must include coverage for (1) bodily Injury and property damage; (2) personal Injury/advertising Injury; (3) premises/operations liability; (4) products/completed operations liability; (5) aggregate limits that apply per Project; (6) explosion, collapse and underground (UCX) exclusion deleted; (7) contractual liability with respect to this Agreement; (8) broad form property damage; and (9) independent consultants coverage.

(ii) The policy shall contain no endorsements or provisions limiting coverage for (1) contractual liability; (2) cross liability exclusion for claims or suits by one insured against another; or (3) contain any other exclusion contrary to this Agreement.

(iii) The policy shall give the Commission, its directors, officials, officers, employees, and agents insured status using ISO endorsement forms 20 10 10 01 and 20 37 10 01, or endorsements providing the exact same coverage.

(iv) The additional insured coverage under the policy shall be "primary and non-contributory" and will not seek contribution from the

Commission's insurance or self-insurance and shall be at least as broad as CG 20 01 04 13, or endorsements providing the exact same coverage.

(B) Automobile Liability. The automobile liability policy shall be endorsed to state that: (1) the Commission, its directors, officials, officers, employees and agents shall be covered as additional insureds with respect to the ownership, operation, maintenance, use, loading or unloading of any auto owned, leased, hired or borrowed by the Consultant or for which the Consultant is responsible; and (2) the insurance coverage shall be primary insurance as respects the Commission, its directors, officials, officers, employees and agents, or if excess, shall stand in an unbroken chain of coverage excess of the Consultant's scheduled underlying coverage. Any insurance or self-insurance maintained by the Commission, its directors, officials, officers, employees and agents shall be excess of the Consultant's insurance and shall not be called upon to contribute with it in any way.

(C) Workers' Compensation and Employers Liability Coverage.

(i) Consultant certifies that he/she is aware of the provisions of Section 3700 of the California Labor Code which requires every employer to be insured against liability for workers' compensation or to undertake self-insurance in accordance with the provisions of that code, and he/she will comply with such provisions before commencing work under this Agreement.

(ii) The insurer shall agree to waive all rights of subrogation against the Commission, its directors, officials, officers, employees and agents for losses paid under the terms of the insurance policy which arise from work performed by the Consultant.

(D) All Coverages.

(i) Defense costs shall be payable in addition to the limits set forth hereunder.

(ii) Requirements of specific coverage or limits contained in this section are not intended as a limitation on coverage, limits, or other requirement, or a waiver of any coverage normally provided by any insurance. It shall be a requirement under this Agreement that any available insurance proceeds broader than or in excess of the specified minimum insurance coverage requirements and/or limits set forth herein shall be available to the Commission, its directors, officials, officers, employees and agents as additional insureds under said policies. Furthermore, the requirements for coverage and limits shall be (1) the minimum coverage and limits specified in this Agreement; or (2) the broader coverage and maximum limits of coverage of any insurance policy or proceeds available to the named insured; whichever is greater.

(iii) The limits of insurance required in this Agreement may be satisfied by a combination of primary and umbrella or excess insurance. Any umbrella or excess insurance shall contain or be endorsed to contain a provision that such coverage shall also apply on a primary and non-contributory basis for the benefit of the Commission (if agreed to in a written contract or agreement) before the Commission's own insurance or self-insurance shall be called upon to protect them as a named insured. The umbrella/excess policy shall be provided on a "following form" basis with coverage at least as broad as provided on the underlying policy(ies).

(iv) All required insurance coverages, except for the professional liability coverage, shall contain or be endorsed to include a waiver of subrogation in favor of the Commission, its directors, officials, officers, employees and agents or shall specifically allow Consultant or others providing insurance evidence in compliance with these specifications to waive their right of recovery prior to a loss. Consultant hereby waives its own right of recovery against the Commission, and shall require similar written express waivers and insurance clauses from each of its subconsultants.

(v) Consultant shall provide the Commission at least thirty (30) days prior written notice of cancellation of any policy required by this Agreement, except that the Consultant shall provide at least ten (10) days prior written notice of cancellation of any such policy due to non-payment of premium. If any of the required coverage is cancelled or expires during the term of this Agreement, the Consultant shall deliver renewal certificate(s) including the General Liability Additional Insured Endorsement to the Commission at least ten (10) days prior to the effective date of cancellation or expiration.

(vi) The retroactive date (if any) of each policy is to be no later than the effective date of this Agreement. Consultant shall maintain such coverage continuously for a period of at least three years after the completion of the work under this Agreement. Consultant shall purchase a one (1) year extended reporting period A) if the retroactive date is advanced past the effective date of this Agreement; B) if the policy is cancelled or not renewed; or C) if the policy is replaced by another claims-made policy with a retroactive date subsequent to the effective date of this Agreement.

(vii) The foregoing requirements as to the types and limits of insurance coverage to be maintained by Consultant, and any approval of said insurance by the Commission, is not intended to and shall not in any manner limit or qualify the liabilities and obligations otherwise assumed by the Consultant pursuant to this Agreement, including but not limited to, the provisions concerning indemnification.

(viii) If at any time during the life of the Agreement, any policy of insurance required under this Agreement does not comply with these specifications or is canceled and not replaced, Commission has the right but not the duty to obtain the insurance it deems necessary and any premium paid by Commission will be

promptly reimbursed by Consultant or Commission will withhold amounts sufficient to pay premium from Consultant payments. In the alternative, Commission may cancel this Agreement. The Commission may require the Consultant to provide complete copies of all insurance policies in effect for the duration of the Project.

(ix) Neither the Commission, nor any of its directors, officials, officers, employees or agents shall be personally responsible for any liability arising under or by virtue of this Agreement.

3.12.5 Deductibles and Self-Insurance Retentions. Any deductibles or self-insured retentions must be declared to and approved by the Commission. If the Commission does not approve the deductibles or self-insured retentions as presented, Consultant shall guarantee that, at the option of the Commission, either: (1) the insurer shall reduce or eliminate such deductibles or self-insured retentions as respects the Commission, its directors, officials, officers, employees and agents; or, (2) the Consultant shall procure a bond guaranteeing payment of losses and related investigation costs, claims and administrative and defense expenses.

3.12.6 Acceptability of Insurers. Insurance is to be placed with insurers with a current A.M. Best's rating no less than A:VIII, licensed to do business in California, and satisfactory to the Commission.

3.12.7 Verification of Coverage. Consultant shall furnish Commission with original certificates of insurance and endorsements effecting coverage required by this Agreement on forms satisfactory to the Commission. The certificates and endorsements for each insurance policy shall be signed by a person authorized by that insurer to bind coverage on its behalf. All certificates and endorsements must be received and approved by the Commission before work commences. The Commission reserves the right to require complete, certified copies of all required insurance policies, at any time.

3.12.8 Subconsultant Insurance Requirements. Consultant shall not allow any subcontractors or subconsultants to commence work on any subcontract until they have provided evidence satisfactory to the Commission that they have secured all insurance required under this section. Policies of commercial general liability insurance provided by such subcontractors or subconsultants shall be endorsed to name the Commission as an additional insured using ISO form CG 20 38 04 13 or an endorsement providing the exact same coverage. If requested by Consultant, the Commission may approve different scopes or minimum limits of insurance for particular subcontractors or subconsultants.

3.13 Safety. Consultant shall execute and maintain its work so as to avoid injury or damage to any person or property. In carrying out its Services, the Consultant shall at all times be in compliance with all applicable local, state and federal laws, rules and regulations, and shall exercise all necessary precautions for the safety of employees appropriate to the nature of the work and the conditions under which the work is to be performed. Safety precautions as applicable shall include, but shall not be limited to: (A)

adequate life protection and life saving equipment and procedures; (B) instructions in accident prevention for all employees and subcontractors, such as safe walkways, scaffolds, fall protection ladders, bridges, gang planks, confined space procedures, trenching and shoring, equipment and other safety devices, equipment and wearing apparel as are necessary or lawfully required to prevent accidents or injuries; and (C) adequate facilities for the proper inspection and maintenance of all safety measures.

3.14 Fees and Payment.

3.14.1 Compensation. Consultant shall receive compensation, including authorized reimbursements, for all Services rendered under this Agreement at the rates set forth in Exhibit "B" attached hereto.

The total amount payable by Commission per Task Order shall not exceed the amount set forth in each Task Order. The total compensation for all Task Orders issued under this Agreement shall not exceed **Fourteen million eight hundred fifty-six thousand dollars ($14,856,000)** without written approval of Commission's Executive Director ("Total Compensation").

Extra Work may be authorized, as described below, and if authorized, will be compensated at the rates and manner set forth in this Agreement.

3.14.2 Payment of Compensation. Consultant shall submit to Commission a monthly statement which indicates work completed and hours of Services rendered by Consultant. The statement shall describe the amount of Services and supplies provided since the initial commencement date, or since the start of the subsequent billing periods, as appropriate, through the date of the statement. Separate statements itemizing all costs are required for all work performed under each Task Order. Commission shall, within 45 days of receiving such statement, review the statement and pay all approved charges thereon.

3.14.3 Reimbursement for Expenses. Consultant shall not be reimbursed for any expenses unless authorized in writing by Commission.

3.14.4 Extra Work. At any time during the term of this Agreement, Commission may request that Consultant perform Extra Work. As used herein, "Extra Work" means any work which is determined by Commission to be necessary for the proper completion of the Project, but which the parties did not reasonably anticipate would be necessary at the execution of this Agreement. Consultant shall not perform, nor be compensated for, Extra Work without written authorization from Commission's Executive Director.

3.15 Accounting Records. Consultant shall maintain complete and accurate records with respect to all costs and expenses incurred and fees charged under this Agreement. All such records shall be clearly identifiable. Consultant shall allow a

representative of Commission during normal business hours to examine, audit, and make transcripts or copies of such records and any other documents created pursuant to this Agreement. Consultant shall allow inspection of all work, data, documents, proceedings, and activities related to the Agreement for a period of three (3) years from the date of final payment under this Agreement.

3.16 Termination of Agreement.

3.16.1 Grounds for Termination. Commission may, by written notice to Consultant, terminate the whole or any part of this Agreement at any time and without cause by giving written notice to Consultant of such termination, and specifying the effective date thereof. Commission may terminate Services under a Task Order, at any time, for any or no reason, with the effective date of termination to be specified in the notice of termination of Task Order. Upon termination, Consultant shall be compensated only for those services which have been fully and adequately rendered to Commission through the effective date of the termination, and Consultant shall be entitled to no further compensation. Consultant may not terminate this Agreement except for cause.

3.16.2 Effect of Termination. If this Agreement or any Task Order is terminated as provided herein, Commission may require Consultant to provide all finished or unfinished Documents and Data, as defined below, and other information of any kind prepared by Consultant in connection with the performance of Services under this Agreement. Consultant shall be required to provide such document and other information within fifteen (15) days of the request.

3.16.3 Additional Services. In the event this Agreement or any Task Order is terminated in whole or in part as provided herein, Commission may procure, upon such terms and in such manner as it may determine appropriate, services similar to those terminated.

3.17 Delivery of Notices. All notices permitted or required under this Agreement shall be given to the respective parties at the following address, or at such other address as the respective parties may provide in writing for this purpose:

CONSULTANT:
HNTB Corporation
3633 Inland Empire Blvd.
Ste. 955
CA 91764
Attn: Kevin A. Haboian

COMMISSION:
Riverside County
Transportation Commission
4080 Lemon Street, 3rd Floor Ontario,
Riverside, CA 92501
Attn: Executive Director

Such notice shall be deemed made when personally delivered or when mailed, forty-eight (48) hours after deposit in the U.S. Mail, first class postage prepaid and addressed to the party at its applicable address. Actual notice shall be deemed adequate notice on the date actual notice occurred, regardless of the method of service.

3.18 Ownership of Materials/Confidentiality.

3.18.1 Documents & Data. This Agreement creates an exclusive and perpetual license for Commission to copy, use, modify, reuse, or sub-license any and all copyrights and designs embodied in plans, specifications, studies, drawings, estimates, materials, data and other documents or works of authorship fixed in any tangible medium of expression, including but not limited to, physical drawings or data magnetically or otherwise recorded on computer diskettes, which are prepared or caused to be prepared by Consultant under this Agreement ("Documents & Data").

Consultant shall require all subcontractors to agree in writing that Commission is granted an exclusive and perpetual license for any Documents & Data the subcontractor prepares under this Agreement.

Consultant represents and warrants that Consultant has the legal right to grant the exclusive and perpetual license for all such Documents & Data. Consultant makes no such representation and warranty in regard to Documents & Data which were prepared by design professionals other than Consultant or provided to Consultant by the Commission.

Commission shall not be limited in any way in its use of the Documents & Data at any time, provided that any such use not within the purposes intended by this Agreement shall be at Commission's sole risk.

3.18.2 Intellectual Property. In addition, Commission shall have and retain all right, title and interest (including copyright, patent, trade secret and other proprietary rights) in all plans, specifications, studies, drawings, estimates, materials, data, computer programs or software and source code, enhancements, documents, and any and all works of authorship fixed in any tangible medium or expression, including but not limited to, physical drawings or other data magnetically or otherwise recorded on computer media ("Intellectual Property") prepared or developed by or on behalf of Consultant under this Agreement as well as any other such Intellectual Property prepared or developed by or on behalf of Consultant under this Agreement.

The Commission shall have and retain all right, title and interest in Intellectual Property developed or modified under this Agreement whether or not paid for wholly or in part by Commission, whether or not developed in conjunction with Consultant, and whether or not developed by Consultant. Consultant will execute separate written assignments of any and all rights to the above referenced Intellectual Property upon request of Commission.

Consultant shall also be responsible to obtain in writing separate written assignments from any subcontractors or agents of Consultant of any and all right to the above referenced Intellectual Property. Should Consultant, either during or following

termination of this Agreement, desire to use any of the above-referenced Intellectual Property, it shall first obtain the written approval of the Commission.

All materials and documents which were developed or prepared by the Consultant for general use prior to the execution of this Agreement and which are not the copyright of any other party or publicly available and any other computer applications, shall continue to be the property of the Consultant. However, unless otherwise identified and stated prior to execution of this Agreement, Consultant represents and warrants that it has the right to grant the exclusive and perpetual license for all such Intellectual Property as provided herein.

Commission is further granted by Consultant a non-exclusive and perpetual license to copy, use, modify or sub-license any and all Intellectual Property otherwise owned by Consultant which is the basis or foundation for any derivative, collective, insurrectional, or supplemental work created under this Agreement.

3.18.3 Confidentiality. All ideas, memoranda, specifications, plans, procedures, drawings, descriptions, computer program data, input record data, written information, and other Documents and Data either created by or provided to Consultant in connection with the performance of this Agreement shall be held confidential by Consultant. Such materials shall not, without the prior written consent of Commission, be used by Consultant for any purposes other than the performance of the Services. Nor shall such materials be disclosed to any person or entity not connected with the performance of the Services or the Project. Nothing furnished to Consultant which is otherwise known to Consultant or is generally known, or has become known, to the related industry shall be deemed confidential. Consultant shall not use Commission's name or insignia, photographs of the Project, or any publicity pertaining to the Services or the Project in any magazine, trade paper, newspaper, television or radio production or other similar medium without the prior written consent of Commission.

3.18.4 Infringement Indemnification. Consultant shall defend, indemnify and hold the Commission, its directors, officials, officers, employees, volunteers and agents free and harmless, pursuant to the indemnification provisions of this Agreement, for any alleged infringement of any patent, copyright, trade secret, trade name, trademark, or any other proprietary right of any person or entity in consequence of the use on the Project by Commission of the Documents & Data, including any method, process, product, or concept specified or depicted.

3.19 Cooperation; Further Acts. The Parties shall fully cooperate with one another, and shall take any additional acts or sign any additional documents as may be necessary, appropriate or convenient to attain the purposes of this Agreement.

3.20 Attorney's Fees. If either party commences an action against the other party, either legal, administrative or otherwise, arising out of or in connection with this Agreement, the prevailing party in such litigation shall be entitled to have and recover from the losing party reasonable attorney's fees and costs of such actions.

3.21 Indemnification. To the fullest extent permitted by law, Consultant shall defend (with counsel of Commission's choosing), indemnify and hold Commission, its directors, officials, officers, employees, consultants, volunteers, and agents free and harmless from any and all claims, demands, causes of action, costs, expenses, liability, loss, damage or injury, in law or equity, to property or persons, including wrongful death, in any manner arising out of or incident to alleged negligent acts, omissions, or willful misconduct of Consultant, its officials, officers, employees, agents, consultants, and contractors arising out of or in connection with the performance of the Services, the Project or this Agreement, including without limitation the payment of consequential damages, expert witness fees, and attorneys fees and other related costs and expenses. Consultant shall defend, at Consultant's own cost, expense and risk, any and all such aforesaid suits, actions or other legal proceedings of every kind that may be brought or instituted against Commission, its directors, officials, officers, employees, consultants, agents, or volunteers. Consultant shall pay and satisfy any judgment, award or decree that may be rendered against Commission, or its directors, officials, officers, employees, consultants, agents, or volunteers, in any such suit, action or other legal proceeding. Consultant shall reimburse Commission, and its directors, officials, officers, employees, consultants, agents, and/or volunteers, for any and all legal expenses and costs, including reasonable attorney's fees, incurred by each of them in connection therewith or in enforcing the indemnity herein provided. Consultant's obligation to indemnify shall not be restricted to insurance proceeds, if any, received by Commission, its directors, officials officers, employees, consultants, agents, or volunteers.

If Consultant's obligation to defend, indemnify, and/or hold harmless arises out of Consultant's performance as a "design professional" (as that term is defined under Civil Code section 2782.8), then, and only to the extent required by Civil Code section 2782.8, which is fully incorporated herein, Consultant's indemnification obligation shall be limited to claims that arise out of, pertain to, or relate to the negligence, recklessness, or willful misconduct of the Consultant, and, upon Consultant obtaining a final adjudication by a court of competent jurisdiction, Consultant's liability for such claim, including the cost to defend, shall not exceed the Consultant's proportionate percentage of fault.

Consultant's obligations as set forth in this Section shall survive expiration or termination of this Agreement.

3.22 Entire Agreement. This Agreement contains the entire Agreement of the parties with respect to the subject matter hereof, and supersedes all prior negotiations, understandings or agreements. This Agreement may only be supplemented, amended, or modified by a writing signed by both parties.

3.23 Governing Law. This Agreement shall be governed by the laws of the State of California. Venue shall be in Riverside County.

3.24 Time of Essence. Time is of the essence for each and every provision of this Agreement.

3.25 Right to Employ Other Consultants. The Commission reserves the right to employ other consultants in connection with the Project.

3.26 Successors and Assigns. This Agreement shall be binding on the successors and assigns of the parties, and shall not be assigned by Consultant without the prior written consent of Commission.

3.27 Prohibited Interests and Conflicts.

3.27.1 Solicitation. Consultant maintains and warrants that it has not employed nor retained any company or person, other than a bona fide employee working solely for Consultant, to solicit or secure this Agreement. Further, Consultant warrants that it has not paid nor has it agreed to pay any company or person, other than a bona fide employee working solely for Consultant, any fee, commission, percentage, brokerage fee, gift or other consideration contingent upon or resulting from the award or making of this Agreement. For breach or violation of this warranty, Commission shall have the right to rescind this Agreement without liability.

3.27.2 Conflict of Interest. For the term of this Agreement, no member, officer or employee of Commission, during the term of his or her service with Commission, shall have any direct interest in this Agreement, or obtain any present or anticipated material benefit arising therefrom.

3.27.3 Conflict of Employment. Employment by the Consultant of personnel currently on the payroll of the Commission shall not be permitted in the performance of this Agreement, even though such employment may occur outside of the employee's regular working hours or on weekends, holidays or vacation time. Further, the employment by the Consultant of personnel who have been on the Commission payroll within one year prior to the date of execution of this Agreement, where this employment is caused by and or dependent upon the Consultant securing this or related Agreements with the Commission, is prohibited.

3.27.4 Employment Adverse to the Commission. Consultant shall notify the Commission, and shall obtain the Commission's written consent, prior to accepting work to assist with or participate in a third-party lawsuit or other legal or administrative proceeding against the Commission during the term of this Agreement.

3.28 Equal Opportunity Employment. Consultant represents that it is an equal opportunity employer and it shall not discriminate against any employee or applicant for employment because of race, religion, color, national origin, ancestry, sex or age. Such non-discrimination shall include, but not be limited to, all activities related to initial employment, upgrading, demotion, transfer, recruitment or recruitment advertising, layoff or termination. Consultant shall also comply with all relevant provisions of Commission's Disadvantaged Business Enterprise program, Affirmative Action Plan or other related Commission programs or guidelines currently in effect or hereinafter enacted.

3.29 Subcontracting. Consultant shall not subcontract any portion of the work or Services required by this Agreement, except as expressly stated herein, without prior written approval of the Commission. Subcontracts, if any, shall contain a provision making them subject to all provisions stipulated in this Agreement.

3.30 Prevailing Wages. By its execution of this Agreement, Consultant certified that it is aware of the requirements of California Labor Code Sections 1720 et seq. and 1770 et seq., as well as California Code of Regulations, Title 8, Section 16000 et seq. ("Prevailing Wage Laws"), which require the payment of prevailing wage rates and the performance of other requirements on certain "public works" and "maintenance" projects. If the Services are being performed as part of an applicable "public works" or "maintenance" project, as defined by the Prevailing Wage Laws, and if the total compensation is $1,000 or more, Consultant agrees to fully comply with such Prevailing Wage Laws. The Commission shall provide Consultant with a copy of the prevailing rate of per diem wages in effect at the commencement of this Agreement. Consultant shall make copies of the prevailing rates of per diem wages for each craft, classification or type of worker needed to execute the Services available to interested parties upon request, and shall post copies at the Consultant's principal place of business and at the project site. Consultant shall defend, indemnify and hold the Commission, its elected officials, officers, employees and agents free and harmless from any claims, liabilities, costs, penalties or interest arising out of any failure or alleged failure to comply with the Prevailing Wage Laws.

3.30.1 DIR Registration. If the Services are being performed as part of an applicable "public works" or "maintenance" project, then pursuant to Labor Code Sections 1725.5 and 1771.1, the Consultant and all subconsultants must be registered with the Department of Industrial Relations. If applicable, Consultant shall maintain registration for the duration of the Project and require the same of any subconsultants. This Project may also be subject to compliance monitoring and enforcement by the Department of Industrial Relations. It shall be Consultant's sole responsibility to comply with all applicable registration and labor compliance requirements.

3.31 Employment of Apprentices. This Agreement shall not prevent the employment of properly indentured apprentices in accordance with the California Labor Code, and no employer or labor union shall refuse to accept otherwise qualified employees as indentured apprentices on the work performed hereunder solely on the ground of race, creed, national origin, ancestry, color or sex. Every qualified apprentice shall be paid the standard wage paid to apprentices under the regulations of the craft or trade in which he or she is employed and shall be employed only in the craft or trade to which he or she is registered.

If California Labor Code Section 1777.5 applies to the Services, Consultant and any subcontractor hereunder who employs workers in any apprenticeable craft or trade shall apply to the joint apprenticeship council administering applicable standards for a certificate approving Consultant or any sub-consultant for the employment and training of apprentices. Upon issuance of this certificate, Consultant and any sub-consultant shall

employ the number of apprentices provided for therein, as well as contribute to the fund to administer the apprenticeship program in each craft or trade in the area of the work hereunder.

The parties expressly understand that the responsibility for compliance with provisions of this Section and with Sections 1777.5, 1777.6 and 1777.7 of the California Labor Code in regard to all apprenticeable occupations lies with Consultant.

3.32 No Waiver. Failure of Commission to insist on any one occasion upon strict compliance with any of the terms, covenants or conditions hereof shall not be deemed a waiver of such term, covenant or condition, nor shall any waiver or relinquishment of any rights or powers hereunder at any one time or more times be deemed a waiver or relinquishment of such other right or power at any other time or times.

3.33 Eight-Hour Law. Pursuant to the provisions of the California Labor Code, eight hours of labor shall constitute a legal day's work, and the time of service of any worker employed on the work shall be limited and restricted to eight hours during any one calendar day, and forty hours in any one calendar week, except when payment for overtime is made at not less than one and one-half the basic rate for all hours worked in excess of eight hours per day ("Eight-Hour Law"), unless Consultant or the Services are not subject to the Eight-Hour Law. Consultant shall forfeit to Commission as a penalty, $50.00 for each worker employed in the execution of this Agreement by him, or by any sub-consultant under him, for each calendar day during which such workman is required or permitted to work more than eight hours in any calendar day and forty hours in any one calendar week without such compensation for overtime violation of the provisions of the California Labor Code, unless Consultant or the Services are not subject to the Eight-Hour Law.

3.34 Subpoenas or Court Orders. Should Consultant receive a subpoena or court order related to this Agreement, the Services or the Project, Consultant shall immediately provide written notice of the subpoena or court order to the Commission. Consultant shall not respond to any such subpoena or court order until notice to the Commission is provided as required herein, and shall cooperate with the Commission in responding to the subpoena or court order.

3.35 Survival. All rights and obligations hereunder that by their nature are to continue after any expiration or termination of this Agreement, including, but not limited to, the indemnification and confidentiality obligations, and the obligations related to receipt of subpoenas or court orders, shall survive any such expiration or termination.

3.36 No Third Party Beneficiaries. There are no other intended third party beneficiaries of any right or obligation assumed by the Parties.

3.37 Labor Certification. By its signature hereunder, Consultant certifies that it is aware of the provisions of Section 3700 of the California Labor Code which require every employer to be insured against liability for Workers' Compensation or to undertake

self-insurance in accordance with the provisions of that Code, and agrees to comply with such provisions before commencing the performance of the Services.

3.38 Counterparts. This Agreement may be signed in counterparts, each of which shall constitute an original.

3.39 Incorporation of Recitals. The recitals set forth above are true and correct and are incorporated into this Agreement as though fully set forth herein.

3.40 Invalidity; Severability. If any portion of this Agreement is declared invalid, illegal, or otherwise unenforceable by a court of competent jurisdiction, the remaining provisions shall continue in full force and effect.

3.41 Conflicting Provisions. In the event that provisions of any attached exhibits conflict in any way with the provisions set forth in this Agreement, the language, terms and conditions contained in this Agreement shall control the actions and obligations of the Parties and the interpretation of the Parties' understanding concerning the performance of the Services.

3.42 Headings. Article and Section Headings, paragraph captions or marginal headings contained in this Agreement are for convenience only and shall have no effect in the construction or interpretation of any provision herein.

3.43 Assignment or Transfer. Consultant shall not assign, hypothecate, or transfer, either directly or by operation of law, this Agreement or any interest herein, without the prior written consent of the Commission. Any attempt to do so shall be null and void, and any assignees, hypothecates or transferees shall acquire no right or interest by reason of such attempted assignment, hypothecation or transfer.

3.44 Authority to Enter Agreement. Consultant has all requisite power and authority to conduct its business and to execute, deliver, and perform the Agreement. Each Party warrants that the individuals who have signed this Agreement have the legal power, right, and authority to make this Agreement and bind each respective Party.

3.45 Electronically Transmitted Signatures. A manually signed copy of this Agreement which is transmitted by facsimile, email or other means of electronic transmission shall be deemed to have the same legal effect as delivery of an original executed copy of this Agreement for all purposes. This Agreement may be signed using an electronic signature.

[Signatures on following page]

SIGNATURE PAGE
TO
RIVERSIDE COUNTY TRANSPORTATION COMMISSION
AGREEMENT FOR ON-CALL EXPRESS LANES
CONSULTING SERVICES WITH HNTB Corporation

IN WITNESS WHEREOF, this Agreement was executed on the date first written above.

RIVERSIDE COUNTY TRANSPORTATION COMMISSION	**CONSULTANT [HNTB Corporation]**
By: _____	By: _____
Aaron Hake, Executive Director	Signature
	_____
	Name
	_____
	Title
Approved as to Form:	Attest:
By: _____	By: _____
Best Best & Krieger LLP	
General Counsel	Its: _____

* A corporation requires the signatures of two corporate officers.

One signature shall be that of the chairman of board, the president or any vice president and the second signature (on the attest line) shall be that of the secretary, any assistant secretary, the chief financial officer or any assistant treasurer of such corporation.

If the above persons are not the intended signators, evidence of signature authority shall be provided to RCTC.

EXHIBIT "A"

SCOPE OF SERVICES

Exhibit A – SCOPE OF SERVICES

The Commission is seeking a consultant to support Toll Operations staff in managing the operation of the Commission's Express Lanes. The Consultant shall have experience and personnel to support work within the following tasks:

Task 1: Planning, Policy, and Industry Representation Support	The Consultant shall support the Commission's Express Lanes with planning and policy work which requires balancing the Commission's financial obligations and program goals with regional policy and other related requirements. The Commission may request assistance with a wide range of planning and industry representation work including but not limited to: Develop concepts of operation and prepare white papers. Provide research and recommendations regarding tolling concepts. Prepare and submit relevant project award packages. Participate in assigned committees. Provide support with all aspects of the California Toll Operators Committee (CTOC). Provide training and staff development to Commission staff.
Task 2: Customer Service and Operations Support	The Consultant shall support a wide range of tasks related to customer service operations which can include back-office systems. The Commission may request support including but not limited to: Support the development of Request for Proposals (RFP's) which may include independent cost estimates, statement of work, pricing and evaluation criteria. Assist with development and review of existing business rules, customer correspondence, and standard operating procedures. Perform operational assessments and reporting. Manage and deliver operational initiatives. Coordinate and participate in design and implementation efforts related to all elements of a back- office system delivery. Provide support with software updates to ensure proper configuration, documentation, and validation testing. Provide support with review and validation of test plans and procedures for functional and system verification, performance monitoring and requirement adherence. Assist with the transition of toll transaction systems, system integration, on-site testing, commissioning testing, image capture/processing, information exchange between systems, software/firmware updates, hardware upgrades, and any other hardware/software within the scope of Express Lanes operations.

	Provide cyber-security verification, testing, compliance, audits, QA/QC, oversight, quarterly security audits, support for PCI compliance, and enhancements. Provide unsolicited updates related to customer service and back-office system advances. Provide local staff support to assist Commission staff in the daily oversite of the customer service operation.
Task 3: Operational Financial Support	The Consultant shall support the Commission with a comprehensive operational financial support to ensure accuracy, compliance, and efficiency in financial management processes: Provide support for any financial reconciliation activities/processes. Perform thorough reviews of account reconciliations to ensure completeness, accuracy, and alignment with accounting standards. Examine journal entries for proper documentation, classification, and adherence to internal policies and financial reporting standards. Assess and update existing SOPs, ensuring they reflect current practices and promote consistency in financial operations. Identify and recommend enhancements to financial workflows to improve efficiency, internal controls, and reporting accuracy. Support staff with the annual financial audit and review of the SOC audit.
Task 4: On Road Toll System and Operations Support	The Consultant shall support the Commission with a wide range on road toll system and operations support. The Commission may request support including but not limited to: Provide oversight and assistance with data collection for the monitoring of performance on the Express Lanes which may include traffic counts, travel time runs, assessments of violations rates, occupancy counts, image review/audit, vehicle counts by class/type (e.g., clean air vehicles, enforcement vehicles), monitoring speeds. Provide independent critical evaluation and assessment of the performance of the dynamic tolling algorithm/strategy, upgrades or changes to the on-road toll system, and new equipment/hardware that will improve the Express Lanes performance. Develop and support the preparation of request for qualifications or proposals for roadway systems. Perform Performance Measurement System (PeMS) data collection and analysis. Support general performance monitoring including but not limited to independent auditing of images, traffic performance reports, transaction reconciliation and trip posting, and/or sign/price verification. Track trends and monitor/identify areas of concern or elevated risk. Present findings, results, conclusions, and recommendations. Provide local staff to assist with field verification activities such as witness field tests, operational tests, demonstrations, system operations, and other confirmation/verification activities. Provide advice and assistance with the 6C, CTOC or National Interoperability technical specification reviews.
Task 5: Facility and Roadway Engineering Support	The Consultant shall support the Commission with a wide range of facility and civil roadway support. The Commission may request support including but not limited to: Develop and support request for qualifications or proposals (pole, sign; pavement, barrier wall, crash cushions installation, replacement or modification).

	Design roadway signs or replacements for reproduction and installation. Provide analysis on state and federal MUTCD. Provide local staff to support and oversee civil contractor compliance and adherence to contract requirements and safety protocols, including field verification activities. Review and provide analysis of pavement management reports and pavement management plan provided by others. Develop engineering plans with engineering signature/stamp of approval. Develop and support Category Exempt documentation. Support Caltrans District 8 permit submission and review process. Provide traffic engineering reviews (traffic operations analysis) of degraded segments of the Express Lanes including the creation and use of video and drone recordings and provide recommendations for physical improvements. Provide local staff to assist with field verification activities such as pavement/median barrier markings, inspections and contractor oversite, safety assessments, and contract compliance. Develop and implement long term asset management, repair, and replacement plan for structures and pavement lifecycle/asset for forecasting. Provide guidance, expert advice, and support for activities associated with facility standards compliance and accessibility (e.g., ADA compliance). The contractor shall have properly equipped and fully insured vehicles for highway testing. These vehicles must be equipped with all necessary equipment to support roadside testing activities, ensuring compliance with safety regulations.
Task 6: IT & Technology Support	The Consultant shall support the Commission with the assessment, planning, implementation and management of the toll systems and other systems not provided for in the traditional back-office and roadside systems. The Commission could request assistance with a wide range of technology and system support including but not limited to: Provide unsolicited or solicited analysis and technical evaluations on new technology and systems, including but not limited to artificial intelligence, machine learning and other transportation innovations. Provide oversight of system deployment, installation and testing. Provide analysis and/or audit on system generated data or reports, contract compliance related to system/network maintenance, cyber-security and PCI compliance. Review and recommend system design, network architecture, system interfaces and cloud solution designs. Review system plans, documents, drawings, etc. Provide support with software/computer programming using Power BI, database management/SQL, Python, Javascript, HTML/CSS, Java, C, and C++. Provide advice and technical assistance with CTOC and other national/regional groups related to technology or interoperability.
Task 7: OPTIONAL This task will get executed upon RCTC approval.	The Consultant shall support the Commission's efforts to educate customers and prepare various customer related materials. The Commission may request support including but not limited to: Conduct market research and analysis.

Customer Education, Marketing and Graphic Support	Conduct focus groups to gain user perspective on specific tolling concepts, customer communication and education. Develop designs for logos, maps, artwork, website graphics, customer mailings, transponder kits, transponders and maps. Develop creative concepts and key messaging for customer communication, advertising, collateral, education, including maps, diagrams, photographs, and videos. Create advertising content and purchase radio and billboard advertising space. Create videos and provide photos and drone recordings of the Express Lanes operation.

The Consultant will provide needed support on short-term tasks and long-term tasks related to the oversite of the operation. The Consultant will serve as both the subject matter expert and as staff augmentation. The Commission is seeking a Consultant, that will embrace a collaborative "Partnering" attitude and approach both with Commission and its Contractor staff. The Commission seeks to be an Express Lanes operator that provides state-of-the-art systems and excellent customer service; that operates in a financially prudent manner; and improves the motorists driving experience within the corridors in which we operate. As the Commission is responsible for live operations, the Commission often has tasks that require the immediate support of the Consultant. The Commission expects that the Consultant will have staff readily available to begin work on assigned tasks immediately.

Where a task has been indicated as "local staff" it is expected that the assigned personnel are available to work from the Commission provided offices and that reimbursement for travel will not be provided. The local staff shall provide their own equipment and office supplies. The Commission staff will assist with the training and development of local staff as it relates to the work performed within this Scope of Services. All other staff will require travel approval from the Commission prior to engagement in a task.

Commission staff will request Consultant support through the Consultant Project Manager. Staff and the Project Manager will develop a scope or work, timeframe, and cost for each assigned task. The Project Manager will seek staff approval for the proposed staff. The process for developing tasks is intended to be informal and for the purpose of managing the work and the associated budget.
Shortly after the award of this Agreement the Commission staff will facilitate a series of meetings to ensure there is a seamless transition between the current Consultant and the newly awarded Consultant.

The Consultant Project Manager shall schedule and manage regular meetings with Commission staff to review the status of tasks and assigned personnel. The Consultant Project Manager will ensure invoices and status reports meet the Commission's requirements.

Through the course of this Agreement the Consultant will have access to secure systems and data. The Consultant staff may be required to sign non-disclosure agreements and other security documents to protect the privacy of our customers and intellectual property of our Contractors.

EXHIBIT "B"

COMPENSATION

EXHIBIT "B"

COMPENSATION SUMMARY[1]

YEAR	PROJECT	COST
Year 1	ServicesExpress Lanes Consulting Services	$ 1,540,930.00
Year 2		$ 1,540,930.00
Year 3		$ 1,540,930.00
Year 4		$ 1,540,930.00
Year 5		$ 1,540,930.00
Year 6		1,700,050.00
Year 7		1,700,050.00
Year 8		1,875,625.00
Year 9		1,875,625.00
	TOTAL COSTS	**$ 14,856,000.00**

[1] Commission authorization pertains to total contract award amount. Compensation adjustments between consultants may occur; however, the maximum total compensation authorized may not be exceeded.