Fiscal Year 2020
Capital Improvement Plan
Adopted June 13, 2019
Introduction

The Transportation Corridor Agencies (TCA) are comprised of the Foothill/Eastern Transportation Corridor Agency (F/ETCA) and the San Joaquin Hills Transportation Corridor Agency (SJHTCA). Collectively, the Agencies have operated 51 miles of toll roads for over 25 years since the initial segment of the 241 Toll Road between Portola Parkway (North) and Portola Parkway (South) opened to traffic in 1993. Once highway segments become operational, various roadway expansions and operational improvement projects are required to keep pace with increasing traffic demands and changing conditions, land uses and demographics. These improvements make up the TCA Capital Improvement Plan (CIP).

The CIP is updated annually. The annual update focuses on new projects, changes to project status, costs and schedules, and provides a general summary of the projects completed to date. The CIP is divided into five (5) sections:

1. Capital projects under construction
2. Current capital projects
   [completion dates by 2025]
3. Future capital projects, interchanges (I/C) and other operational improvements
   [completion dates post-2025^1]
4. Future capital projects, ultimate widenings
   [completion dates post-2025^1]
5. Completed capital projects

The goal of the CIP is to identify projects and system improvements to ensure a Level of Service (LOS) D is maintained on The Toll Roads system to facilitate free flow conditions. TCA is committed to adding capacity to The Toll Roads network as transactions increase and system capacity is required to efficiently operate the network. TCA works collaboratively with the California Department of Transportation (Caltrans), regional partner agencies and other local agencies to understand land use changes and to identify effective solutions that maintain the free flow conditions on The Toll Roads.

State Routes (SR) 73, 133, 241 and 261 provide important links in the countywide and regional transportation network.

TCA is currently undertaking a systemwide traffic optimization study to understand the specific areas and segments of The Toll Roads system where improvements and capacity enhancements will be needed in order to maintain a LOS D condition. In the study, TCA is developing a timeline with five-year horizon increments in order to have a better understanding of what improvements are needed and when those projects need to be constructed.

^1 TCA is currently undertaking a systemwide traffic optimization study to develop a timeline with five-year horizon increments to determine when improvements and capacity enhancements will be needed on the system in order to maintain a LOS D condition.
Table of Contents

4 Capital Projects Under Construction
5 F/ETCA: Los Patrones Parkway
6 F/ETCA: Oso Parkway Bridge
7 F/ETCA & SJHTCA: Signage Enhancements

8 Current Capital Projects
Completion dates by 2025
9 F/ETCA: 241/91 Express Connector
10 F/ETCA: NB SR 241 at Windy Ridge Channelizers Study
11 F/ETCA: NB SR 241 Loma Lane Extension (Potential TCM Substitution Project)
12 F/ETCA & SJHTCA: SR 241 Portola Parkway Bikeway Gap Closure (Potential TCM Substitution Project)
13 SJHTCA: Catalina View Traffic Improvements

14 Future Capital Projects
Interchanges and Other Operational Improvements
Completion dates post-2025
15 F/ETCA: South County Traffic Relief Effort
16 F/ETCA: SR 241/Jeffrey Road Interchange (Study Only)
17 F/ETCA: SR 133/Great Park Interchange (Coordination Only)
18 F/ETCA & SJHTCA: Toll Plaza Facility Improvements
19 SJHTCA: SR 73 Improvements, MacArthur to I-405 (Coordination Only)
20 SJHTCA: Glenwood Interchange (Phases 2 & 3)

21 Future Capital Projects
Ultimate Widenings
Completion dates post-2025
22 F/ETCA Long Term Projects
24 SJHTCA Long Term Projects

25 Estimated Project Costs by Agency

28 Completed Projects
29 F/ETCA Completed Projects
31 SJHTCA Completed Projects

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Los Patrones Parkway
F/ETCA
(in partnership with the County of Orange and Rancho Mission Viejo [RMV])

Summary
Los Patrones Parkway is a 4-lane divided roadway that creates a 4.5-mile, north-south link between Oso Parkway and Cow Camp Road. It includes a multi-purpose pathway trail for pedestrians and cyclists that extends from Oso Parkway to Chiquita Canyon Drive.

Project Status
Phase 2 from Chiquita Canyon Drive to Cow Camp Road is under construction.

Anticipated Completion
Summer 2019

Total Project Cost
$103 Million

Project Description
The roadway consists of two 12-foot lanes with 8-foot shoulders in both directions. Los Patrones Parkway was designed and constructed as a high speed, non-signalized transportation corridor. Enhancements to the roadway were made to minimize conflicts with cross traffic and maximize traffic flow to accommodate approximately 40,000 vehicle trips per day. Design features include:

- 70-mile per hour design speed
- Access restricted and grade separated with no traffic signals
- Divided highway with median
- Sufficient right of way and median width for future widenings
- Prohibition of on-street parking

Planning/Engineering
RMV is the project sponsor with the County of Orange as the lead agency. The County of Orange imposed conditions of approval on RMV’s development plans that required RMV to enter into an agreement with F/ETCA to address funding, phasing and construction of Los Patrones Parkway. As part of this agreement, RMV and F/ETCA jointly developed the design standards for the roadway which are consistent with that of a transportation corridor.

In consideration of implementing these transportation corridor features, F/ETCA agreed to fund the cost of the design and construction of Los Patrones Parkway. F/ETCA is providing this funding pursuant to the County of Orange Major Thoroughfare and Bridge Fee Program. F/ETCA is leading the process in determining whether Los Patrones Parkway would ultimately operate as a non-tolled arterial or as a tolled component of the 241 Toll Road.

Right of Way
Upon completion of construction, RMV will turn the roadway over to the County of Orange.

Construction
Construction of the project began in 2015. Phase 1 from Oso Parkway to Chiquita Canyon Drive opened to traffic Summer 2018. Phase 2 from Chiquita Canyon Drive to Cow Camp Road is currently under construction and completion is anticipated in Summer 2019.
Oso Parkway Bridge
F/ETCA
(in partnership with the County of Orange)

Summary
The Oso Parkway Bridge Project includes the construction of a bridge structure at Oso Parkway and mainline roadway gap closure between the southern terminus of the 241 Toll Road and the northern terminus of Los Patrones Parkway.

Project Status
The project is currently under construction.

Anticipated Completion
2020

Total Project Cost
$38.7 Million

Project Description
The Oso Parkway Bridge Project will provide users of Los Patrones Parkway direct access to and from the 241 Toll Road which will pass under the new bridge. This direct access to the 241 Toll Road will enhance traffic operations and safety for the interchange and improve access to the 241 Toll Road.

Planning/Engineering
An addendum to the Final Environmental Impact Report (FEIR) 584 and 589, as certified by the County of Orange, was completed in 2016 pursuant to California Environmental Quality Act (CEQA) Guidelines Section 15164 for the Oso Bridge Project. A Project Report and final plans and specifications were reviewed and approved by Caltrans.

The project is being implemented as a partnership between TCA, County of Orange Public Works and Caltrans. The planning, design, construction management and construction are fully funded by F/ETCA.

Right of Way
N/A

Construction
County of Orange Public Works is administering the construction contract and providing construction oversight in conjunction with Caltrans. Construction commenced in August 2018 and will be completed over a 24-month construction period. Construction is anticipated to be completed in August 2020.
Signage Enhancements
F/ETCA & SJHTCA

Summary
The Signage Enhancements Project updates sign messaging throughout The Toll Roads’ system and along the approaches from the connecting highways and arterials to meet the new Caltrans standards for toll road signage.

Project Status
Construction is anticipated to begin in Summer 2019.

Anticipated Completion
Early 2020

Total Project Cost
F/ETCA $3.0 Million | SJHTCA $3.3 Million

Project Description
The project updates signage throughout The Toll Roads’ system and along the approaches from the connecting roadways to provide consistent messaging that notifies drivers they are entering an electronic toll-collection facility, explains how tolls can be paid, and incorporates current California Manual on Uniform Traffic Control Devices (CA MUTCD) recommendations for toll road signage. The Signage Enhancements Project improvements include: sign modifications; removal and/or replacement of ground mounted signs; replacement and overlays of roadside sign panels; modifications to overhead sign panels including replacements or overlays; removal of one overhead sign structure; installation of two new overhead sign structures; and removal and installation of associated guard rail.

Planning/Engineering
In December 2014, the Boards approved the commencement of design. Customer research was performed in mid-2015 and the results were incorporated into the signage modifications that are now being implemented to follow the California and Federal toll road signage recommendations as prescribed by the current CA MUTCD. Final design was completed in late 2018.

Right of Way
N/A

Construction
Installation will require periodic lane and ramp closures throughout The Toll Roads and adjacent highways and arterial interchanges. Closures will take place at night and other off-peak travel times to minimize inconvenience to drivers. The Boards awarded the construction contract in December 2018. Construction is anticipated to begin in Summer 2019 and be completed in early 2020.
Current Capital Projects
Completion dates by 2025

F/ETCA
241/91 Express Connector
Page 9

F/ETCA
NB SR 241 at Windy Ridge Channelizers Study
Page 10

F/ETCA & SJHTCA
SR 241 Portola Parkway Bikeway Gap Closure
(Potential TCM Substitution)
Page 12

F/ETCA
NB SR 241 Loma Lane Extension
(Potential TCM Substitution)
Page 11

SJHTCA
Catalina View Traffic Improvements
Page 13
241/91 Express Connector
F/ETCA

TIP ID: ORA111207
SCAG RTP PROJECT #: ORA111207

Summary
The 241/91 Express Connector Project consists of constructing a tolled connector with a single lane in each direction between the median of the 91 Express Lanes and the median of SR 241 to and from the east. F/ETCA is working with Caltrans, the lead agency, on the project.

Project Status
Staff is proceeding with the required preliminary engineering and the completion of the environmental phase.

Anticipated Completion
2023

Total Project Cost
$183 Million

Project Description
The 241/91 Express Connector will carry northbound (NB) SR 241 traffic to eastbound (EB) 91 Express Lanes and carry westbound (WB) 91 Express Lanes traffic to southbound (SB) SR 241. Outside widening would be required on the south side of SR 91 up to the Coal Canyon Undercrossing. The 241/91 Express Connector is a regionally significant median to median facility that will improve traffic flow and operations of the SR 91 general purpose lanes, 91 Express Lanes and the 241 Toll Road; reduce weaving on the SR 91, which also provides additional safety for the traveling public; increase regional throughput on the SR 91 Corridor; and provide both time savings and increased speed to those that travel the general purpose lanes of the SR 91 Corridor.

Planning/Engineering
F/ETCA is the project sponsor with Caltrans as the lead agency. A median connector between SR 241 and SR 91 was included as a project component in the Eastern Transportation Corridor environmental document.

A draft Supplemental Environmental Impact Report/Environmental Impact Statement (EIR/EIS) was released for a 60-day public comment period, which concluded on January 9, 2017. Staff is in the process of reviewing and responding to the comments received during the public review period. The final Project Report and environmental document are anticipated to be completed in 2020. Final engineering, deferred until the environmental document is certified, is anticipated to be completed in 2021.

F/ETCA will continue to coordinate and collaborate with Caltrans, local jurisdictions and agencies, and the public on the development of the project and evaluate any potential sequencing of projects in the 91 Corridor.

Right of Way
Minor right of way is needed for the project.

Construction
A 26-month construction duration is anticipated.
NB SR 241 at Windy Ridge Channelizers Study
F/ETCA

Summary
The northbound (NB) SR 241 at Windy Ridge Channelizers Study will evaluate the installation of channelizers on NB SR 241 approaching SR 91 to separate traffic heading eastbound from those heading westbound in order to mitigate queue-jumping that occurs on the NB SR 241.

Project Status
Conceptual planning is in-progress.

Anticipated Completion
2019

Total Project Cost
TBD

Project Description
The intent of this project is to mitigate queue-jumping that occurs on the NB SR 241 approaching SR 91 by installing channelizers between the No. 2 lane and the No. 3 lane to separate the traffic heading eastbound from those heading westbound.

Planning/Engineering
F/ETCA, in consultation with Caltrans, has begun conceptual layouts to determine the feasibility of the project. The study is anticipated to be completed in 2019.

Right of Way
No right of way impacts are anticipated.

Construction
TBD
NB SR 241 Loma Lane Extension
(Potential Transportation Control Measure [TCM] Substitution Project)

F/ETCA

Summary
The northbound (NB) SR 241 Loma Lane Extension Project provides lane improvements on NB SR 241 approaching Santiago Canyon Road. The project widens the NB lanes and includes grading of slopes and installation of retaining walls.

Project Status
F/ETCA is working with Caltrans to determine the next steps for the delivery of this project.

Anticipated Completion
2021

Total Project Cost
$7.2 M

Project Description
The NB SR 241 Loma Lane Extension project will extend the existing lane between Post Mile (PM) 30.5 and Santiago Canyon Road, just south of the junction with SR 261. Traffic volume has been steadily increasing within the project area. The project is needed to improve traffic operations in the NB direction of SR 241.

Planning/Engineering
A Project Study Report/Project Report (PSR/PR) and an addendum to the Eastern Transportation Corridor environmental document and permits were prepared for the SR 241 Loma Segment Widening Project, from Post Mile (PM) 27.6 to PM 33.6, which encompasses these project limits. F/ETCA is working with Caltrans to determine the next steps for the delivery of this project.

The Toll Roads are designated TCMs in the Southern California Association of Governments (SCAG) and the South Coast Air Quality Management District (SCAQMD) approved plans. TCMs assist the Southern California region with meeting greenhouse gas (GHG) reduction targets. As such, some of TCA’s previously planned widenings are not needed until post-2021. To comply with its commitment to deliver projects that assist with reducing GHG emissions by December 2021, and are consistent with regionally approved plans, F/ETCA is evaluating this project as a potential TCM substitution project.

If determined to be a feasible TCM substitution, F/ETCA will work in concert with OCTA and SCAG to complete the required inter-agency approvals, including the California Air Resources Board and the U.S. Environmental Protection Agency (EPA).

Right of Way
TBD

Construction
Construction completion is anticipated in 2021.
SR 241 Portola Parkway Bikeway Gap Closure
(Potential Transportation Control Measure [TCM] Substitution Project)
F/ETCA & SJHTCA

Summary
The SR 241 Portola Parkway Bikeway Gap Closure Project proposes to construct a Class IV Bikeway adjacent to Northbound (NB) SR 241 between the northern terminus of Portola Parkway (South) in the City of Lake Forest to the SR 241/Portola Parkway (North) Interchange in the City of Irvine.

Project Status
Conceptual layout and stakeholder outreach is in progress.

Anticipated Completion
2021

Total Project Cost
F/ETCA $5.1 Million | SJHTCA $5.1 Million

Project Description
The project is located in the north-central portion of Orange County where the Lake Forest and Irvine city limits meet at SR 241. The project proposes to construct a Class IV Bikeway to eliminate a gap in the existing bikeway system that presently exists as a result of Portola Parkway (South) terminating at the western boundary of the City of Lake Forest and not extending west to the SR 241/Portola Parkway interchange as shown on the Orange County Master Plan of Arterial Highways (MPAH).

The project is needed to complete this portion of the County's planned regional bike trail system.

The project will include improvements to an existing dirt vehicle path, outside widening of the NB lanes of SR 241 and the NB exit ramp to Portola Parkway.

Planning/Engineering
The Class IV Bikeway will be designed following the Caltrans Highway Design Manual and Design Information Bulletin 98-01.

The Toll Roads are designated TCMs in the Southern California Association of Governments (SCAG) and the South Coast Air Quality Management District (SCAQMD) approved plans. TCMs assist the Southern California region with meeting greenhouse gas (GHG) reduction targets. As such, some of TCA's previously planned widenings are not needed until post-2021. To comply with its commitment to deliver projects that assist with reducing GHG emissions by December 2021, and are consistent with regionally approved plans, TCA is evaluating this project, an active transportation project that will assist with reducing vehicle miles traveled, as a potential TCM substitution project.

If determined to be a feasible TCM substitution, TCA will work in concert with OCTA and SCAG to complete the required inter-agency approvals, including the California Air Resources Board and the U.S. Environmental Protection Agency (EPA).

Right of Way
TBD

Construction
Construction completion is anticipated in 2021.
Catalina View Traffic Improvements
SJHTCA
TIP ID: 10254
SCAG RTP Project #: 10254

Summary
The Catalina View Traffic Improvements Project consists of adding a fourth lane and making operational improvements on SR 73 leading up to and through the Catalina View Toll Point to relieve traffic congestion experienced in this area during the morning and afternoon peak periods. These improvements would be consistent with the planned Ultimate Widening of the SR 73.

Project Status
The next steps for delivery of this project are being evaluated.

Anticipated Completion
TBD

Total Project Cost
TBD

Project Description
An increase in congestion on the SR 73 has been experienced in the mainline lanes during the morning and afternoon peak periods in the vicinity of the Catalina View Toll Point. A potential solution to relieve the traffic congestion is to increase the roadway capacity by adding a fourth lane and making operational improvements to SR 73, from the SR 133 to the Sand Canyon Undercrossing north of the Catalina View Toll Point.

Planning/Engineering
Preliminary engineering and environmental studies were previously completed and will need to be revalidated. Upon completion of this revalidation, final design will commence.

Right of Way
TBD

Construction
TBD
Future I/C and Other Operational Improvements

1 TCA is currently undertaking a systemwide traffic optimization study to develop a timeline with five-year horizon increments to determine when improvements and capacity enhancements will be needed on the system in order to maintain a LOS D condition.

F/ETCA & SJHTCA
Toll Plaza Facility Improvements
Page 18

F/ETCA
SR 241/Jeffrey Road Interchange (Study Only)
Page 16

F/ETCA
South County Traffic Relief Effort
Page 15

SJHTCA
SR 73 Improvements, MacArthur to I-405 (Phases 2 & 3)
Page 20

F/ETCA
SR 133/Great Park Interchange (Coordination Only)
Page 17

SJHTCA
SR 73 Improvements, MacArthur to I-405 (Coordination Only)
Page 19
South County Traffic Relief Effort

F/ETCA

SCAG RTP Project #: ORA052
SANDAG RTP Project #: TCA-01

Summary
The South County Traffic Relief Effort includes identifying options that address South Orange County’s future needs for mobility and accessibility, and providing improvements that meet those needs. Regional planning efforts to date, demonstrate the need for additional transportation improvements to relieve existing and future congestion on Interstate 5 and local arterials in South Orange County. F/ETCA, in partnership with other transportation agencies, is evaluating those needs to identify an acceptable solution.

Project Status
The Project Approval/Environmental Document (PA/ED) phase is currently underway with the scoping meetings and initiation of technical studies commencing in Fiscal Year (FY) 2020.

Anticipated Completion
TBD

Total Project Cost
Ranges from $500 Million to $2.1 Billion

(A range of costs is provided at this stage to reflect the alternatives presented in the Project Study Report-Project Development Support (PSR-PDS). A preferred alternative will be selected during the PA/ED Phase.)

Planning/Engineering
The Caltrans’ PSR-PDS was completed in FY 2019. F/ETCA, in coordination with Caltrans, will begin the formal environmental study phase that will include public scoping meetings. The preparation of an Environmental Impact Report and Environmental Impact Statement (EIR/EIS) will commence upon completion of the scoping process. Inclusive of the EIR/EIS, activities involve the preparation of technical studies that evaluate the project alternative’s effects on air quality, biology, cultural resources, water quality and several other topical areas. Preparation of the technical studies will be the primary focus for FY 2020.

F/ETCA will continue to coordinate and collaborate with Caltrans, local jurisdictions and agencies, and the public on the development of the project.

Right of Way
TBD

Construction
Construction will begin after a preferred alternative is selected and the environmental process is completed. The anticipated date for completion is still to be determined.
SR 241/Jeffrey Road Interchange
(Study Only)
F/ETCA

Summary
The SR 241/Jeffrey Road Interchange Study will evaluate options for a new interchange at Jeffrey Road and SR 241 in the City of Irvine.

Project Status
Preparation of a Project Study Report-Project Development Support (PSR-PDS) is underway.

Anticipated Completion
TBD (study only)

Total Project Cost
TBD (study only)

Project Description
The study includes the evaluation of a new interchange at Jeffrey Road and SR 241 in the City of Irvine. The study will evaluate options for providing access to and from the Frank R. Bowerman Landfill from SR 241 to reduce truck traffic congestion on Sand Canyon Avenue, which currently serves as the designated truck route to the landfill.

Planning/Engineering
F/ETCA, acting as the sponsoring agency, has begun the preparation of a PSR-PDS to evaluate an interchange at Jeffrey Road and SR 241 as a potential access point to the Frank R. Bowerman Landfill from SR 241. The extension of Jeffrey Road, north of Portola Parkway to SR 241, is included in the County of Orange Master Plan of Arterial Highways (MPAH). This interchange was included in the original Eastern Transportation Corridor environmental document.

If this project moves beyond the study phase, the project will be programmed for environmental planning, design, and construction.

Right of Way
TBD (study only)

Construction
TBD (study only)
SR 133/Great Park Interchange
(Coordination Only)
F/ETCA

Summary
The SR 133/Great Park Interchange Project is under development by Five Points Communities, in partnership with the City of Irvine, to study the potential for a new interchange on SR 133 at Great Park Boulevard (Trabuco Road).

Project Status
Project Study Report-Project Development Support (PSR-PDS) is underway (by others).

Anticipated Completion
TBD (by others)

Total Project Cost
TBD (by others)

Project Description
Five Points Communities, in partnership with the City of Irvine, is studying the potential for a new interchange on the 133 Toll Road at Great Park Boulevard (Trabuco Road). The intent of this new access is to alleviate traffic demand at the nearby Sand Canyon Avenue/Interstate 5 (I-5) interchange.

Planning/Engineering
Preparation of a PSR-PDS document is underway by Five Points Communities. F/ETCA, as a stakeholder, is coordinating with Five Points Communities and the City of Irvine as the project development process continues. A traffic and revenue study is being conducted by F/ETCA to understand the traffic associated with the proposed interchange and any changes in traffic volumes on The Toll Roads.
Toll Plaza Facility Improvements  
F/ETCA & SJHTCA

Summary
Toll Plaza Facility Improvements Project consists of researching possible uses for toll booths and other toll plaza buildings, including the removal of toll booths and related equipment at toll plazas throughout the system.

Project Status
Conceptual planning has not yet commenced.

Anticipated Completion
TBD

Total Project Cost
F/ETCA TBD | SJHTCA TBD

Project Description
A study is proposed to research possible uses for toll booths and other toll plaza buildings throughout the system. The recommendations developed as part of the study will be brought before the F/ETCA and SJHTCA Boards for further action.

With the transition to All Electronic Toll (AET) collection on The Toll Roads, cash toll booths are no longer required. The removal of toll booths will provide standard lane and shoulder geometry at the toll plazas. The toll booths and related equipment on multi-lane ramps were removed in 2017 as part of the AET Project. The removal of toll booths and related equipment at single lane ramps and mainline toll plazas are still pending.

Planning/Engineering
A Toll Plaza Facilities Reuse Study was conducted in 2016 to explore the feasibility of various reuses for the toll plazas and booths throughout the system. No preliminary concepts have been developed yet from the study.

Conceptual planning has not yet commenced.

Right of Way
No right of way impacts are anticipated.

Construction
The schedule has not been determined.
SR 73 Improvements, MacArthur to I-405
(Coordination Only)
SJHTCA

Summary
The SR 73 Improvements, MacArthur to I-405, Project is under development by OCTA to study the option of adding one HOV lane in each direction from MacArthur Boulevard to Interstate 405 (I-405). SJHTCA as a stakeholder will coordinate with OCTA on this study including the potential option to add managed lanes on SR 73 between Bison Avenue and Bear Street with a tie-in to the SR 73/I-405 Express Connector to provide managed lane continuity between the 73 Toll Road and the 405 Express Lanes.

Project Status
Preliminary study is planned by OCTA (by others).

Anticipated Completion
TBD (by others)

Total Project Cost
TBD (by others)
Glenwood Interchange
(Phases 2 & 3)
SJHTCA

Summary
The Glenwood Interchange Project, Phase 2, completes the interchange movements with ramps to and from SR 73 to the south. The future Phase 3 is an expansion and reconfiguration of the northbound on-ramp from Glenwood and provides for more intersection and mainline capacity by braiding the northbound on-ramp with the El Toro Road off-ramp.

Project Status
The schedules for Phases 2 and 3 have not been determined.

Anticipated Completion
TBD

Total Project Cost
$23.6 Million
Future Capital Projects
Ultimate Widenings
Completion dates post-2025¹

¹ TCA is currently undertaking a systemwide traffic optimization study to develop a timeline with five-year horizon increments to determine when improvements and capacity enhancements will be needed on the system in order to maintain a LOS D condition.

F/ETCA
ETC (SRs 133, 241, 261)
Ultimate Widenings

F/ETCA
SR 241 Loma Segment Widening, from PM 27.6 to PM 33.6

F/ETCA
FTC-N (SR 241)
Ultimate Widenings

F/ETCA
SR 241 SB Widening, between Santa Margarita and Bake Parkway

SJHTCA
SJHTC (SR 73)
Ultimate Widenings
## Future Capital Projects: Ultimate Widenings

### Foothill/Eastern Transportation Corridor Agency

<table>
<thead>
<tr>
<th>Project</th>
<th>Anticipated Completion</th>
<th>Total Project Cost</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>F/ETCA</strong>&lt;br&gt;SR 241 Southbound Widening, between Santa Margarita Parkway and Bake Parkway (PM 18.3 to PM 23.10)</td>
<td>TBD</td>
<td>$85 Million</td>
<td>The SR 241 Southbound Widening, between Santa Margarita Parkway and Bake Parkway, proposes to add one lane in the southbound direction for 4.8 miles, from south of the Melinda Road Undercrossing (UC) to north of the Bake Parkway UC. Project includes the widening of the northbound and southbound Upper Oso Reservoir and the Aliso Creek Bridges and construction of limited pavement widening in the northbound direction between these two bridges. <strong>Project Status</strong>&lt;br&gt;An addendum to the original Foothill Transportation Corridor – North environmental document, Final Supplemental EIR No. 423, March 1990, was completed in 2011.</td>
</tr>
<tr>
<td><strong>F/ETCA</strong>&lt;br&gt;SR 241 Loma Segment Widening, from PM 27.6 to PM 33.6 (SR 133 to north of SR 261)</td>
<td>TBD</td>
<td>$55 Million</td>
<td>The SR 241 Loma Segment Widening, from Post Mile (PM) 27.6 to PM 33.6, proposes to widen six miles of the existing SR 241 between SR 133 and north of SR 261 that includes the addition of one lane in each direction. <strong>Project Status</strong>&lt;br&gt;A PSR-PR and an addendum to the Eastern Transportation Corridor environmental document and permits were completed in 2011.</td>
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## Future Capital Projects: Ultimate Widenings

### Foothill/Eastern Transportation Corridor Agency

<table>
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<tr>
<th>Project</th>
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</tr>
</thead>
<tbody>
<tr>
<td>F/ETCA Eastern Transportation Corridor (ETC) (SRs 133, 241, 261), from SR 91 to SR 241/FTC-N and I-5, Ultimate Widenings</td>
<td>TBD</td>
<td>$859 Million</td>
<td>Over the past two decades, The Toll Roads have become an integral part of the regional transportation system in Orange County. Customer surveys show that people depend on The Toll Roads for reliability in the travel time it takes to reach their destination. As regional travel demand grows, and the freeway and arterial system become more congested, The Toll Roads system can sometimes experience congestion as well. In order to preserve dependable travel times, occasionally system expansion projects become warranted. The transportation corridor system is designed to be expanded with additional lanes as traffic demands and volumes grow. Space is also provided within the median for either additional travel lanes and/or potential transit facilities as the County of Orange and surrounding communities mature. Since the original construction of the corridors, there have been several changes to several key factors that influence travel demand. These factors include residential and non-residential development changes, shifts in population and employment, changes to the arterial highway system and changes in commuter behavior.</td>
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<tr>
<td>TIP ID &amp; SCAG RTP Project #: ORA050</td>
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<td>Foothill Transportation Corridor – North (FTC-N) (SR 241), from Oso Parkway to ETC, Ultimate Widenings</td>
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### Project Status

TCA is currently undertaking a systemwide traffic optimization study to understand the specific areas and segments of The Toll Roads’ system where improvements and capacity enhancements will be needed in order to maintain a LOS D condition. TCA is developing a timeline in five (5) year horizon increments in order to have a better understanding of what improvements are needed and when those projects need to be constructed.
Future Capital Projects: Ultimate Widenings

San Joaquin Hills Transportation Corridor Agency

<table>
<thead>
<tr>
<th>Project</th>
<th>Anticipated Completion</th>
<th>Total Project Cost</th>
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</tr>
</thead>
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<tr>
<td>SJHTCA</td>
<td>TBD</td>
<td>$344 Million</td>
<td>Over the past two decades, The Toll Roads have become an integral part of the regional transportation system in Orange County. Customer surveys show that people depend on The Toll Roads for reliability in the travel time it takes to reach their destination. As regional travel demand grows, and the freeway and arterial system become more congested, The Toll Roads system can sometimes experience congestion as well. In order to preserve dependable travel times, occasionally system expansion projects become warranted. The transportation corridor system is designed to be expanded with additional lanes as traffic demands and volumes grow. Space is also provided within the median for either additional travel lanes and/or potential transit facilities as the County of Orange and surrounding communities mature. Since the original construction of the corridors, there have been several changes to several key factors that influence travel demand. These factors include residential and non-residential development changes, shifts in population and employment, changes to the arterial highway system and changes in commuter behavior.</td>
</tr>
</tbody>
</table>

**Project Status**

TCA is currently undertaking a systemwide traffic optimization study to understand the specific areas and segments of The Toll Roads system where improvements and capacity enhancements will be needed in order to maintain a LOS D condition. TCA is developing a timeline in five (5) year horizon increments in order to have a better understanding of what improvements are needed and when those projects need to be constructed.
### Estimated Project Cost by Agency (in $1,000)

#### Foothill/Eastern Transportation Corridor Agency

<table>
<thead>
<tr>
<th>Project Description</th>
<th>FY18 &amp; Prior</th>
<th>FY19 Actual Plus Projected</th>
<th>FY20 Proposed Budget</th>
<th>FY21 &amp; Later</th>
<th>Total Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Under Construction</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Los Patrones Parkway</td>
<td>$15,000</td>
<td></td>
<td></td>
<td></td>
<td>$103,000</td>
</tr>
<tr>
<td>Oso Parkway Bridge</td>
<td>$12,595</td>
<td>$8,257</td>
<td>$17,812</td>
<td>$0</td>
<td>$38,664</td>
</tr>
<tr>
<td>Signage Enhancements</td>
<td>$369</td>
<td>$666</td>
<td>$1,995</td>
<td>$0</td>
<td>$3,030</td>
</tr>
<tr>
<td><strong>Current Completion dates by 2025</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>241/91 Express Connector</td>
<td>$12,704</td>
<td>$1,271</td>
<td>$6,478</td>
<td>$162,705</td>
<td>$183,158</td>
</tr>
<tr>
<td>NB SR 241 at Windy Ridge Channelizers Study</td>
<td>$0</td>
<td>$25</td>
<td>$600</td>
<td>TBD</td>
<td>TBD</td>
</tr>
<tr>
<td>NB SR 241 Loma Lane Extension (<em>Potential TCM Substitution Project</em>)</td>
<td>$0</td>
<td>$100</td>
<td>$471</td>
<td>$6,629</td>
<td>$7,200</td>
</tr>
<tr>
<td>SR 241 Portola Parkway Bikeway Gap Closure (<em>Potential TCM Substitution Project</em>)</td>
<td>$0</td>
<td>$50</td>
<td>$449</td>
<td>$4,601</td>
<td>$5,100</td>
</tr>
<tr>
<td><strong>Future I/C and Other Operational Improvements Completion dates post-2025</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>South County Traffic Relief Effort</td>
<td>$19,806</td>
<td>$3,807</td>
<td>$13,841</td>
<td>TBD</td>
<td>ranges from $500M to $2.1B</td>
</tr>
<tr>
<td>SR 241/ Jeffrey Road Interchange (<em>Study Only</em>)</td>
<td>$262</td>
<td>$17</td>
<td>$0</td>
<td>TBD</td>
<td>TBD</td>
</tr>
<tr>
<td>SR 133/Great Park Interchange (<em>Coordination Only</em>)</td>
<td>$28</td>
<td>$8</td>
<td>$30</td>
<td>TBD</td>
<td>TBD</td>
</tr>
<tr>
<td>Toll Plaza Facility Improvements</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>TBD</td>
<td>TBD</td>
</tr>
</tbody>
</table>
## Estimated Project Cost by Agency (in $1,000)

### Foothill/Eastern Transportation Corridor Agency

<table>
<thead>
<tr>
<th>Project</th>
<th>FY18 &amp; Prior</th>
<th>FY19 Actual Plus Projected</th>
<th>FY20 Proposed Budget</th>
<th>FY21 &amp; Later</th>
<th>Total Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Future Ultimate Widening dates post-2025</td>
<td>$3,902</td>
<td>$0</td>
<td>$0</td>
<td>$81,098</td>
<td>$85,000</td>
</tr>
<tr>
<td>SR 241 Southbound Widening, between Santa Margarita Parkway and Bake Parkway (PM 18.3 to PM 23.10)</td>
<td>$961</td>
<td>$3</td>
<td>$0</td>
<td>$54,036</td>
<td>$55,000</td>
</tr>
<tr>
<td>SR 241 Loma Segment Widening, from PM 27.6 to PM 33.6 (SR 133 to north of SR 261)</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$859,000</td>
<td>$859,000</td>
</tr>
<tr>
<td>ETC (SRs 133, 241, 261) Ultimate Widening &amp; FTC-N (SR 241) Ultimate Widening</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$859,000</td>
<td>$859,000</td>
</tr>
<tr>
<td><strong>F/ETCA Total</strong></td>
<td><strong>$65,627</strong></td>
<td><strong>$14,204</strong></td>
<td><strong>$41,676</strong></td>
<td><strong>TBD</strong></td>
<td><strong>TBD</strong></td>
</tr>
</tbody>
</table>

Footnote

1. TCA is currently undertaking a systemwide traffic optimization study to develop a timeline with five-year horizon increments to determine when improvements and capacity enhancements will be needed on the system in order to maintain a LOS D condition.

2. Los Patrones Parkway “FY19 & Later” funded through fee credits.

3. A range of costs is provided at this stage to reflect the alternatives presented in the PSR-PDS. A preferred alternative will be selected during the PA/ED Phase.
## Estimated Project Cost by Agency (in $1,000)

### San Joaquin Hills Transportation Corridor Agency

<table>
<thead>
<tr>
<th>Project</th>
<th>FY18 &amp; Prior</th>
<th>FY19 Actual Plus Projected</th>
<th>FY20 Proposed Budget</th>
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<tbody>
<tr>
<td><strong>Under Construction</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Signage Enhancements</td>
<td>$311</td>
<td></td>
<td>$2,264</td>
<td></td>
<td>$3,294</td>
</tr>
<tr>
<td><strong>Current Completion dates by 2025</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SR 241 Portola Parkway Bikeway Gap Closure (Potential TCM Substitution Project)</td>
<td>$0</td>
<td>$50</td>
<td>$449</td>
<td>$4,601</td>
<td>$5,100</td>
</tr>
<tr>
<td>Catalina View Traffic Improvements</td>
<td>$26</td>
<td></td>
<td>$0</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Future I/C and Other Operational Improvements Completion dates post-2025</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Toll Plaza Facility Improvements</td>
<td>$0</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SR 73 Improvements, MacArthur to I-405 (Coordination Only)</td>
<td>$0</td>
<td></td>
<td>$200</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Glenwood Interchange (Phases 2 &amp; 3)</td>
<td>$0</td>
<td></td>
<td></td>
<td>$23,600</td>
<td>$23,600</td>
</tr>
<tr>
<td><strong>Future Ultimate Widenings Completion dates post-2025</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SJHTC (SR 73) Ultimate Widenings</td>
<td>$0</td>
<td></td>
<td></td>
<td>$344,000</td>
<td>$344,000</td>
</tr>
</tbody>
</table>

**SJHTCA Total** | $337 | $769 | $2,913 | | |

### Footnote

1 TCA is currently undertaking a systemwide traffic optimization study to develop a timeline with five-year horizon increments to determine when improvements and capacity enhancements will be needed on the system in order to maintain a LOS D condition.
Completed Capital Projects

F/ETCA (SRs 133, 241, 261)
ETC Initial Build and FTC-N Initial Build

F/ETCA
Windy Ridge FasTrak Lane Widening

F/ETCA
Toll Plaza Water & Wastewater

F/ETCA
SR 133 Widening

F/ETCA
SR 241 Tomato Springs Toll Plaza Third FasTrak Lanes

F/ETCA
SR 241 NB Widening

SJHTCA
SR 73 Northbound Roadway Widening

F/ETCA
Arroyo Trabuco Creek SB Bridge Widening

F/ETCA
SMP NB On-Ramp Widening

F/ETCA
SR 241 Banderas Bridge Overcrossing

SJHTCA (SR 73)
SJHTC Initial Build

F/ETCA & SJHTCA
Landscaping Enhancements

F/ETCA & SJHTCA
All-Electronic Tolling

F/ETCA
Wildlife Safety Fence

SJHTCA
Glenwood Interchange Phase I

Completed Capital Projects | 28
## Completed Projects

**Foothill/Eastern Transportation Corridor Agency**

<table>
<thead>
<tr>
<th>Project</th>
<th>Year</th>
<th>Cost</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>F/ETCA Eastern Transportation Corridor (ETC) and Foothill Transportation Corridor – North (FTC-N) Initial Builds</td>
<td>1993</td>
<td>$1.5 Billion</td>
<td>Construction of 133, 261, &amp; 241 Toll Roads extend from SR 91 in the north to I-5 in the west, the Laguna Freeway (SR 133) to the southeast and Oso Parkway to the south. The initial approximately 34.1-mile project included the purchase of right of way and construction of two – three lanes, plus climbing and auxiliary lanes with sufficient median to add additional lanes and/or transit later.</td>
</tr>
</tbody>
</table>

### Enhancements to the Initial Projects

<table>
<thead>
<tr>
<th>Project</th>
<th>Year</th>
<th>Cost</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>F/ETCA SR 241 Banderas Bridge Overcrossing</td>
<td>2002</td>
<td>$1.2 M</td>
<td>Construction of a new overcrossing of SR 241 between Antonio Parkway and Santa Margarita Parkway. The project was sponsored by the City of Rancho Santa Margarita to provide improved traffic circulation within the City. F/ETCA contributed $1.22 million as its fair share of the project costs.</td>
</tr>
<tr>
<td>F/ETCA Santa Margarita Northbound Parkway On-Ramp Widening</td>
<td>2005</td>
<td>$11.6 M</td>
<td>Addition of a second lane to the Santa Margarita Northbound Parkway on-ramp to address high peak-hour traffic volumes. Project included widening the 1,500-foot long Arroyo Trabuco Creek Northbound Bridge to the Ultimate Corridor configuration.</td>
</tr>
<tr>
<td>F/ETCA Arroyo Trabuco Creek Southbound Bridge Widening</td>
<td>2005</td>
<td>$8.5 M</td>
<td>Widening of the Arroyo Trabuco Creek southbound bridge to its Ultimate Corridor configuration during the widening of the Santa Margarita Parkway Northbound on-ramp thereby allowing both northbound and southbound structures to be widened to their Ultimate Corridor width at the same time. This strategy allowed only one disruption of the Arroyo Trabuco Creek below the bridge. The project was designed and constructed including the addition of a second exit lane to Santa Margarita Parkway.</td>
</tr>
<tr>
<td>F/ETCA SR 241 Northbound Widening, Arroyo Trabuco Creek to Bake Parkway</td>
<td>2003</td>
<td>$15.3 M</td>
<td>Addition of one additional lane in the median of SR 241 northbound from Arroyo Trabuco Creek to Bake Parkway including the widening of five twin northbound and southbound bridges (Portola Parkway South UC, Serrano Equestrian UC, Lake Forest Dr. UC, Bake Parkway UC, Melinda Road UC) to their Ultimate Corridor configuration.</td>
</tr>
</tbody>
</table>
## Completed Projects

**Foothill/Eastern Transportation Corridor Agency**

<table>
<thead>
<tr>
<th>Project</th>
<th>Year</th>
<th>Cost</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>F/ETCA</strong> SR 241 Tomato Springs Toll Plaza Third FasTrak Lanes</td>
<td>2004</td>
<td>$3.1 M</td>
<td>Addition of one lane in each direction between NB SR 241/ SB SR 133 connector and Portola Parkway (North) OC. These lanes were added to address increasing traffic volumes and FasTrak usage at this location. Project included the reconfiguration of the lane delineation between the toll plaza and the adjacent SR 133 Interchange to encourage FasTrak as the predominant toll payment method.</td>
</tr>
<tr>
<td><strong>F/ETCA</strong> Landscaping Enhancements</td>
<td>2004</td>
<td>$5.0 M</td>
<td>Installation of landscaping enhancements on SR 241 and SR 261 Corridors.</td>
</tr>
<tr>
<td><strong>F/ETCA</strong> Toll Plaza Water &amp; Wastewater</td>
<td>2002</td>
<td>$0.2 M</td>
<td>Improvements to the toll plaza water and wastewater systems at three mainline toll plazas on SRs 241, 261 and 133, including one new connection to a public sewer.</td>
</tr>
<tr>
<td><strong>F/ETCA</strong> SR 133 Widening Merge/Diverge Project, I-5 to SR 241</td>
<td>2005</td>
<td>$5.4 M</td>
<td>Addition of one mixed flow lane in each direction from I-5 to SR 241 along with median guard rail for most of the 2.5-mile project length.</td>
</tr>
<tr>
<td><strong>F/ETCA</strong> Windy Ridge FasTrak Lane Widening</td>
<td>2009</td>
<td>$10.6 M</td>
<td>Addition of a third FasTrak lane in each direction in the median of SR 241 through the Windy Ridge Mainline Toll Plaza from south of the Southern California Edison (SCE) wildlife undercrossing to north of the Windy Ridge wildlife undercrossing (3.0 miles). SCE UC Southbound Bridge and Windy Ridge UC Northbound Bridge built to their Ultimate Corridor configuration.</td>
</tr>
<tr>
<td><strong>F/ETCA</strong> All-Electronic Tolling</td>
<td>2014</td>
<td>$14.4 M</td>
<td>Conversion of the toll collection facilities to All Electronic Toll collection. Project included various modifications to mainline toll plazas and signage. Additionally, the project included removal of toll booths and related equipment on multi-lane ramps where traffic passed on both sides of the existing toll booths.</td>
</tr>
<tr>
<td><strong>F/ETCA</strong> Wildlife Safety Fence</td>
<td>2016</td>
<td>$10.4 M</td>
<td>Construction of six (6) miles of wildlife safety fence along the northbound and southbound lanes of SR 241 from the Chapman/Santiago Canyon Road interchange to SR 91.</td>
</tr>
</tbody>
</table>
# Completed Projects

## San Joaquin Hills Transportation Corridor Agency

### Initial Projects

<table>
<thead>
<tr>
<th>Project</th>
<th>Year</th>
<th>Cost</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>SJHTCA</td>
<td>1996</td>
<td>$1.2 Billion</td>
<td>Construction of an approximately 17.4-mile extension of SR 73 from Jamboree Road in the City of Newport Beach to I-5 in San Juan Capistrano as a tolled facility. The initial project included three lanes in each direction, plus climbing and auxiliary lanes with sufficient median to add additional lanes and/or transit later. Additionally, constructed the extension and realignment of Ford Road (completed 1995). This 1.65-mile project extended and realigned Ford Road (now known as Bonita Canyon Drive) between MacArthur Blvd and Newport Coast Drive.</td>
</tr>
</tbody>
</table>

### Enhancements to the Initial Projects

<table>
<thead>
<tr>
<th>Project</th>
<th>Year</th>
<th>Cost</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>SJHTCA</td>
<td>2003</td>
<td>$8.5 M</td>
<td>Construction of ramps to and from the north at Glenwood/Pacific Park Drive on SR 73. Work was performed under a design-build contract. Just under $6.7 million was received by the San Joaquin Hills Transportation Corridor Agency in grant funding for the project.</td>
</tr>
<tr>
<td>SJHTCA</td>
<td>2004</td>
<td>$2.3 M</td>
<td>Installation of landscaping enhancements at interchanges along SR 73.</td>
</tr>
<tr>
<td>SJHTCA</td>
<td>2009</td>
<td>$15.0 M</td>
<td>Addition of a fourth lane to the northbound mainline in two locations: (1) from the former lane drop north of Aliso Viejo Parkway to north of the Laguna Canyon Road entrance ramp, a distance of 2.4 miles, and (2) from the Catalina View Mainline Toll Plaza cash lane merge, to the MacArthur Boulevard exit, a distance of 3.3 miles. Ford Road/Bonita Canyon Drive Undercrossing Northbound Bridge, Newport Coast Drive Undercrossing Northbound Bridge, and Wildlife UC No. 2 Northbound Bridge built to their Ultimate Corridor configuration.</td>
</tr>
<tr>
<td>SJHTCA</td>
<td>2014</td>
<td>$7.9 M</td>
<td>Conversion of the toll collection facilities to All Electronic Toll collection. Project included various modifications to mainline toll plazas and signage. Additionally, the project included removal of toll booths and related equipment on multi-lane ramps where traffic passed on both sides of the existing toll booths.</td>
</tr>
</tbody>
</table>