



Memorandum

To: RIHUI ZHANG
CHIEF
DIVISION OF LOCAL ASSISTANCE

SYED RAZA
DEPUTY DISTRICT 8 DIRECTOR
DIVISION OF PROGRAM/PROJECT MANAGEMENT

Date: October 4, 2019

File: P2525-0073

P2525-0074

P2525-0075

P2525-0076

P2525-0077

P2535-0133

From: MARSUE MORRILL, CPA *Marsue*
CHIEF
**INDEPENDENT OFFICE OF AUDITS
AND INVESTIGATIONS**
P.O. BOX 942874, MS-2
PHONE (916) 323-7111
FAX (916) 323-7123
TTY 711
<https://ig.dot.ca.gov>

Subject: FINAL REPORT - RIVERSIDE COUNTY, PROPOSITION 1B AUDIT

At the request of the Independent Office of Audits and Investigations, the California Department of Finance, Office of Audits and Evaluations (Finance) completed an audit of Riverside County's (County) Proposition 1B funded projects listed below. The complete audit report is attached.

<u>Project Name</u>	<u>Project Number</u>	<u>P Number</u>	<u>Fund</u>
March Inland Cargo Airport	0800000088	P2525-0073	TCIF (1)
Clay Street Grade Separation	0800000180	P2525-0074	TCIF (2)
Sunset Avenue Grade Separation	0800000600	P2525-0075	TCIF (2)
Magnolia Avenue Grade Separation	0800020163	P2525-0076	TCIF (2)
Avenue 56 Grade Separation	0813000098	P2525-0077	TCIF (2)
Fred Waring Drive Improvement	0813000147	P2535-0133	SLPP (2)

(1) Responsible party: District 8 Division of Program/Project Management

(2) Responsible party: Division of Local Assistance

Based on the audit, Finance determined that for project 0800020163, the County claimed and was reimbursed unallowable construction engineering expenditures totaling \$4,712. Plus, for projects 0800000180 and 0800020163, the County did not retain evidence that consultant contracts were publicly advertised. In addition, the Final Delivery Reports (FDR) for projects 0800000088,

0800000180, and 0813000098 were not submitted to Caltrans within six months of the projects becoming operable. Finally, the benefits/outcomes for projects 0800000088, 0800000180, 0800020163, and 0813000098 were not adequately reported in the FDRs or were not supported with documentation. Please provide our office with a corrective action plan, including time lines, by December 4, 2019.

If you have any questions, please contact Luisa Ruvalcaba, Audit Manager, by email at luisa.ruvalcaba@dot.ca.gov

Attachment

c: Dawn Cheser, Deputy Director, California Transportation Commission
Michael Beauchamp, District Director, District 8, California Department of Transportation
Ray Desselle, Deputy District Director, Planning, District 8, California Department of Transportation
Meardey Tim, Senior Project Manager, Program/Project Management, California Department of Transportation
Rambabu Bavirisetty, Chief, Office of Capital Improvement Programming, California Department of Transportation
Doris M. Alkebulan, Prop 1 B Specialist, Transportation Programming, California Department of Transportation
Daniel Burke, Audits Liaison, Division of Local Assistance, California Department of Transportation
Paula Bersola, Audits Analyst, Division of Local Assistance, California Department of Transportation
Luisa Ruvalcaba, Audit Manager, Independent Office of Audits and Investigations

P2525-0073
P2525-0074
P2525-0075
P2525-0076
P2525-0077
P2535-0133



Riverside County

Proposition 1B Bond Program

Project Numbers 0800000088, 0800000180, 0800000600,
0800020163, 0813000098, and 0813000147

Report No. 19-2660-070
September 2019

Team Members

Cheryl L. McCormick, CPA, Chief
Rebecca G. McAllister, CPA, Assistant Chief
Humberto E. Cervantes, CPA, Manager
Marilyn Standing Horse, CPA, Manager
Zachary Stacy, Manager
Angie Williams, Supervisor
Jeffrey Neller, Lead
Alan Garrett
DJ Hayer

Final reports are available on our website at <http://www.dof.ca.gov>.

You can contact our office at:

California Department of Finance
Office of State Audits and Evaluations
915 L Street, 6th Floor
Sacramento, CA 95814
(916) 322-2985



DEPARTMENT OF
FINANCE

GAVIN NEWSOM • GOVERNOR

915 L STREET ■ SACRAMENTO CA ■ 95814-3706 ■ WWW.DOF.CA.GOV

Transmitted via e-mail

September 27, 2019

Ms. MarSue Morrill, Chief,
Planning and Modal Office, Independent Office of Audits and Investigations
California Department of Transportation
1304 O Street
Sacramento, CA 95814

Dear Ms. Morrill:

Final Report—Riverside County, Proposition 1B Audit

The California Department of Finance, Office of State Audits and Evaluations, has completed its audit of the Riverside County's (County) Proposition 1B funded projects listed below:

<u>Project Number</u>	<u>P Number</u>	<u>Project Name</u>
0800000088	P2525-0073	March Inland Cargo Airport
0800000180	P2525-0074	Clay Street Grade Separation
0800000600	P2525-0075	Sunset Avenue Grade Separation
0800020163	P2525-0076	Magnolia Avenue Grade Separation
0813000098	P2525-0077	Avenue 56 Grade Separation
0813000147	P2535-0133	Fred Waring Drive Improvement

The enclosed report is for your information and use. The County's response to the report findings is incorporated into this final report. The County agreed with our findings. We appreciate their assistance and cooperation during the engagement, and their willingness to implement corrective actions. This report will be placed on our website.

If you have any questions regarding this report, please contact Zachary Stacy, Manager, at (916) 322-2985.

Sincerely,

Cheryl L. McCormick, CPA
Chief, Office of State Audits and Evaluations

cc: Ms. Luisa Ruvalcaba, Audit Manager, Planning and Modal Office, Independent Office of Audits and Investigations, California Department of Transportation

BACKGROUND, SCOPE, AND METHODOLOGY

BACKGROUND

California voters approved the Highway Safety, Traffic Reduction, Air Quality, and Port Security Bond Act of 2006 (Proposition 1B) for \$19.925 billion. These bond proceeds finance a variety of transportation programs. Although the bond funds are made available to the California Transportation Commission (CTC) upon appropriation by the Legislature, CTC allocates these funds to the California Department of Transportation (Caltrans) to implement various programs.¹

CTC awarded Riverside County (County) \$58.5 million in Proposition 1B funds from the Trade Corridors Improvement Fund (TCIF) and \$4 million from the State-Local Partnership Program (SLPP). The six bond-funded projects were:

PROGRAM DESCRIPTION¹

TCIF: \$2 billion of bond proceeds made available to the TCIF to finance infrastructure improvements along corridors that have a high volume of freight movement.

SLPP: \$1 billion of bond proceeds made available to the SLPP to finance a variety of eligible transportation projects nominated by applicant transportation agencies. For an applicant transportation agency to receive bond funds, Proposition 1B requires a dollar-for-dollar match of local funds.

March Inland Cargo Airport project (0800000088) - The County was awarded \$6.5 million in TCIF funds for the reconstruction of the Van Buren Boulevard interchange on Interstate 215.

Clay Street Grade Separation project (0800000180) - The County was awarded \$13.2 million in TCIF funds within the City of Jurupa Valley to construct an underpass at the Union Pacific Railroad at Clay Street crossing.

Sunset Avenue Grade Separation project (0800000600) - The County was awarded \$8.3 million in TCIF funds to construct an underpass at the Union Pacific Railroad crossing and reconstruct the I-10 interchange ramps to meet the new street grade in the City of Banning.

Magnolia Avenue Grade Separation project (0800020163) - The County was awarded \$17.7 million in TCIF funds to construct an overpass over the Burlington Northern Santa Fe Railroad lines in Riverside County.

Avenue 56 Grade Separation project (0813000098) - The County was awarded \$12.8 million in TCIF funds to construct an overpass over the Union Pacific Railroad lines near the City of Coachella.

Fred Waring Drive Improvement project (0813000147) - The County was awarded \$4 million in SLPP funds to widen Fred Waring Drive in the City of La Quinta, from four to six lanes and constructed a storm drain system, sound wall, and a pedestrian parkway.

Construction for these projects is complete and the projects are operational.

¹ Excerpts obtained from the bond accountability website <https://bondaccountability.dot.ca.gov/>.

The County was required to provide a dollar-for-dollar match of local funds for all six projects.

SCOPE

As requested by Caltrans, the California Department of Finance, Office of State Audits and Evaluations, audited the projects described in the Background section of this report. The Summary of Projects Reviewed, including the audit periods and the reimbursed expenditures, is presented in Appendix A.

The audit objectives were to determine whether:

1. Proposition 1B expenditures were incurred and reimbursed in compliance with the executed project agreements, Caltrans/CTC's program guidelines, and applicable state and federal regulations cited in the executed agreements.
2. Deliverables/outputs were consistent with the project scopes and schedules.
3. Benefits/outcomes, as described in the executed project agreements or approved amendments, were achieved and adequately reported in the Final Delivery Reports (FDR).

At the time of fieldwork in April 2019, construction was complete for all six projects. However, the County had not yet submitted the FDR for project 0800000600. Accordingly, we did not evaluate whether project benefits/outcomes were achieved or adequately reported for this project.

For Objective 3, many of the benefits/outcomes are not expected to be achieved until the year 2030 or 2035. Accordingly, we did not evaluate whether these project benefits/outcomes were achieved or adequately reported. Instead, we evaluated whether the estimated project benefits/outcomes described in the executed project agreements or approved amendments were adequately supported.

The County's management is responsible for ensuring accurate financial reporting; compliance with project agreements, state and federal regulations, and applicable program guidelines; and the adequacy of its job cost system to accumulate and segregate reasonable, allocable, and allowable expenditures. CTC and Caltrans are responsible for the state-level administration of the program.

METHODOLOGY

In planning the audit, we gained an understanding of the projects and respective programs, and identified relevant criteria, by reviewing the executed project agreements, Caltrans/CTC's bond program guidelines, and applicable state and federal regulations, and interviewing Caltrans and County personnel.

We conducted a risk assessment, including evaluating whether the County's key internal controls relevant to our audit objectives, such as procurement, progress payment preparation, reimbursement request preparation, and review and approval processes, were properly designed, implemented, and operating effectively. Our assessment included conducting interviews with County personnel, observing processes, and testing transactions relating to construction expenditures, contract procurement, project deliverables/outputs, and project benefits/outcomes. Deficiencies in internal controls that were identified during our audit and determined to be significant within the context of our audit objectives are included in this report.

Additionally, we assessed the reliability of the County's Microsoft Excel funding source tracking spreadsheet. The County created tracking spreadsheets because the County's financial system, PeopleSoft, does not have a module to track projects' funding sources. To assess the reliability of the data in the tracking spreadsheet, we interviewed County personnel, examined existing reports, reviewed system controls, and performed data testing. We determined the data was sufficiently reliable to address the audit objectives.

We determined a reliability assessment of the data from PeopleSoft was not necessary because other sufficient evidence was available to address the audit objectives.

Based on the results of our planning, we developed specific methods for gathering evidence to obtain reasonable assurance to address the audit objectives. Our methods are detailed in the Table of Methodologies on the following page.

Table of Methodologies

Audit Objective	Methods
<p>Objective 1: To determine whether the County's Proposition 1B expenditures were incurred and reimbursed in compliance with the executed project agreements, Caltrans/CTC's program guidelines, and applicable state and federal regulations cited in the executed agreements.</p>	<ul style="list-style-type: none"> • Projects 0800000180, 0800020163, and 0813000098: Reviewed contractor procurement records to verify compliance with the Caltrans Local Assistance Procedures Manual (LAPM) requirements to ensure the project was appropriately advertised and awarded to the lowest, responsible bidder by reviewing project advertisements, bidding documents, and contracts. • Projects 0800000180 and 0800020163: Reviewed construction engineering procurement records to verify compliance with the Caltrans LAPM requirements to ensure the project was appropriately advertised and awarded to the most qualified consultant by reviewing project advertisements, consultant proposal and presentation scoring sheets, and contracts. • For all six projects: Selected significant and high-risk cost category expenditures to verify compliance with the selected project requirements. Specifically, expenditures were selected from the construction category for all projects and the construction engineering category for projects 0800000180, 0800020163, 0813000098, and 0813000147. <ul style="list-style-type: none"> ○ From each project's largest reimbursement claim, selected the most quantitatively significant construction progress payments. One line item from each progress payment was selected to determine if the reimbursed construction expenditures were allowable, authorized, project-related, incurred within the allowable time frame, and supported, by reviewing accounting records, progress payments, canceled checks, and comparing to relevant criteria. ○ Projects 0800000180 and 0800020163: Selected the most quantitatively significant consultant expenditures from the largest reimbursement claim. Determined if the selected reimbursed consultant expenditures were allowable, authorized, project-related, incurred within the allowable time frame, and supported, by reviewing accounting records, consultant invoices, canceled checks, and comparing to relevant criteria. ○ Projects 0813000098 and 0813000147: Selected the most quantitatively significant County labor expenditures from the largest reimbursement claim. Determined if the selected reimbursed County labor expenditures were accurate by recalculating salary rates and hours worked, supported by approved timesheets, incurred within the grant period, and charged to the correct project. We also verified timesheet hours agreed to labor reports, and labor reports agreed to reimbursement claims. • Local funding match: Selected one to four transactions from each project from the County funding source tracking spreadsheet and determined if the selected match expenditures were allowable, authorized, project-related, incurred within the allowable time frame, and supported, by reviewing accounting records, reimbursement claims, and comparing project reimbursed amounts with project expenditure reports. • Projects 0813000098 and 0813000147: Evaluated whether other revenue sources were used to reimburse expenditures claimed for reimbursement under the project agreements by inquiring with County personnel; reviewing vendor activity reports, the County funding source tracking spreadsheet, and project progress payments; and performed analytical procedures to ensure there were no duplicate payments.

Audit Objective	Methods
<p>Objective 2: To determine whether deliverables/outputs were consistent with the project scopes and schedules.</p>	<ul style="list-style-type: none"> • For all six projects: Determined whether the project deliverables/outputs were consistent with the project scopes by reviewing the Project Programming Requests and other supporting documentation. • Projects 0800000088, 0800000180, and 0800020163: Conducted site visits to verify project existence and to confirm consistency with the project scope. • Projects 0800000600, 0813000098, and 0813000147: Reviewed Google Maps street images and construction photos provided by the County to verify project existence and to confirm consistency with the project scope. • For all six projects: Evaluated whether the deliverables/outputs were on schedule by reviewing quarterly progress reports submitted to Caltrans. • For all six projects: Evaluated whether the project deliverables/outputs were completed on schedule as described in the Project Programming Request by reviewing the FDRs (with the exception of project 0800000600) and the Notice of Completions.
<p>Objective 3: To determine whether benefits/outcomes, as described in the executed project agreements or approved amendments, were achieved and adequately reported in the Final Delivery Reports.</p>	<ul style="list-style-type: none"> • Projects 0800000088, 0800000180, 0800020163, and 0813000098: Determined whether the project benefits/outcomes for safety, velocity, throughput, and reliability were achieved, by comparing the actual project benefits/outcomes in the FDRs with the expected project benefits/outcomes described in the executed project agreements or approved amendments. • Projects 0800000088, 0800000180, 0800020163, and 0813000098: Evaluated whether the projected benefits/outcomes for safety, velocity, throughput, and reliability were adequately reported in the FDRs by reviewing project reports and interviewing County personnel. • Projects 0800000088, 0800000180, 0800020163, and 0813000098: Evaluated whether the estimated project benefits/outcomes for congestion and emissions reductions described in the executed project agreements or approved amendments were adequately supported by reviewing independent engineering studies. • Project 0813000147: Determined whether the project benefits/outcomes were achieved by comparing the project benefits/outcomes reported in the FDR with the expected project benefits/outcomes described in the executed project agreement; and by reviewing project reports and interviewing County personnel.

We conducted this performance audit in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

CONCLUSION

Based on the procedures performed and evidence gathered, we obtained reasonable assurance the Proposition 1B expenditures, except as noted in Finding 1, were incurred and reimbursed in compliance with the executed project agreements, Caltrans/CTC's program guidelines, and applicable state and federal regulations cited in the executed agreements. Further, the County met its local funding match requirement for the six projects.

We also obtained reasonable assurance the project deliverables/outputs were consistent with the project scope; however, as noted in Finding 2, the FDR for projects 0800000088, 0800000180, and 0813000098 were not submitted timely. Further, all six projects were behind schedule; however, the County appropriately informed Caltrans and CTC of the delays.

Additionally, except as noted in Finding 3, the completed project benefits/outcomes were adequately reported in the FDRs and the County achieved the expected project benefits/outcomes as described in the project agreements or approved amendments. For project 0800000600, a FDR had not been submitted as of April 2019.

FINDINGS AND RECOMMENDATIONS

Finding 1: Fiscal and Procurement Controls Need Improvement

As the recipient of Proposition 1B funds, the County should implement stronger fiscal and procurement controls to ensure compliance with project agreements and Caltrans/CTC's program guidelines. Specifically, we noted the following:

- The County claimed and was reimbursed unallowable construction engineering expenditures totaling \$4,712 for project 0800020163. The questioned expenditures were for a disputed median property, a right-of-way acquisition issue. However, the project agreement did not include a budget for the right-of-way cost category and the CTC Financial Allocation Amendment and Vote List specifically state only construction and construction engineering costs would be eligible for reimbursement. The County stated they requested reimbursement for the right-of-way costs because they believed all costs were eligible.

TCIF Program Guidelines, section 6, states the CTC expects TCIF funding will be limited to the costs of construction. Additionally, Caltrans' LAPM, Chapter 5.3, states, "Construction engineering is the supervision and inspection of construction activities, additional skidding functions considered necessary for effective control of the construction operations, testing materials incorporated into construction, checking shop drawing, and measurements needed for the preparation of pay estimates. Construction engineering must be authorized to be eligible for reimbursement."

- The County did not retain evidence that consultant contracts, for projects 0800000180 and 0800020163, were publicly advertised. Project files were stored in numerous boxes in multiple locations, contributing to the County's inability to locate the requested support.

Properly documenting the public advertising of consultant contracts reduces the risks of improperly awarded contracts.

In accordance with Caltrans' LAPM, section 10, the solicitation process for consultant services shall be by public advertisement or any other public forum. Additionally, Caltrans' LAPM, section 19.2, requires project records to be retained for a period of three years from state payment of the final voucher, or a four-year period from the date of the final payment under the contract, whichever is longer.

Recommendations:

- A. Remit \$4,712 to Caltrans.
- B. Develop and maintain an adequate review process to ensure only eligible construction engineering expenditures are claimed for reimbursement.
- C. Publicly advertise when soliciting for consultant services and retain all project documents for the specified timeframes as required.

Finding 2: FDRs Not Submitted Timely

FDRs for projects 0800000088, 0800000180, and 0813000098 were not submitted to Caltrans within six months of the projects becoming operable (construction contract acceptance date). FDRs for these projects were due April 2017, November 2017, and November 2017, but were submitted October 2017, November 2018, and November 2018, respectively. According to the County, FDRs were delayed due to workload, finalizing billings, calculating final project costs, and the time needed to gather and prepare the required information.

TCIF Program Guidelines, section 17, requires a FDR to be provided within six months of the project becoming operable. The guidelines state a project becomes operable at the end of the construction phase when the construction contract is accepted.

Late submission of reports decreases transparency of the status of projects and prevents Caltrans/CTC from timely reviewing the completed projects' scope, final costs, schedule, and performance outcomes/benefits.

Recommendations:

- A. Read and review program guidelines to ensure a clear understanding of the requirements.
- B. Submit FDRs for completed projects to Caltrans within the specified timeframes as required. If necessary, submit a Supplemental FDR to report any additional project expenditures.

Finding 3: Improvements Needed in Reporting Project Benefits/Outcomes

The benefits/outcomes for projects 0800000088, 0800000180, 0800020163, and 0813000098 were not adequately reported in the FDRs or were not supported with documentation. Specifically:

- For project 0800000088, the County did not adequately report the benefits/outcomes for safety. Specifically, the County understated the number of collisions for the actual safety benefit/outcome. The FDR reported one traffic collision; however, supporting documentation provided by the County indicated three collisions occurred during the following year after construction was completed.

The County also did not provide supporting documentation for the projected congestion and emissions reduction benefits/outcomes reported. The County projected congestion reduction of up to 338 hours of truck delay at the northbound intersection and 907 hours at the southbound intersection in 2035. The County also projected an emissions benefit of 4,065 tons per year of a combined PM10, ROG, NOx, and CO₂ in 2035. However, the County could not provide supporting documentation for the projected congestion and emission reductions. According to the County, the unsupported benefits/outcomes may have come from incomplete accident history data and an earlier document that is no longer available.

- For project 0800000180, the emissions reduction benefit/outcome was incorrectly reported. The FDR listed an emissions benefit of six tons per year of combined PM10, ROG, NOx, and CO₂ in 2030. However, the independent engineer study indicates the combined emissions benefit should have been 14.13 tons per year. The County agreed the emissions benefit was incorrect but stated the unsupported benefit/outcome may have come from an earlier document that is no longer available.
- For project 0800020163, the emissions reduction benefit/outcome was incorrectly reported. The FDR listed an emission benefit of 15 tons per year of combined PM10, ROG, NOx, and CO₂ in 2030. However, the independent engineer study indicates the combined emissions benefit should have been 11 tons per year. The County agreed the emissions benefit was incorrect but stated the unsupported benefit/outcome may have come from an earlier document that is no longer available.
- For project 0813000098, the County did not adequately report the benefits/outcomes for throughput. The FDR stated the volume of freight trains will increase from 71 to 107 trains by 2030. However, supporting documentation provided by the County indicates the number of freight trains will increase from 36 to 54 trains by 2030. The County was not able to support the misreported projection and stated the unsupported benefit/outcome may be due to two railway lines using the tracks instead of one railway line.

Additionally, the County did not provide supporting documentation for the projected congestion and emissions reduction benefits/outcomes reported. The County projected a congestion reduction elimination of up to 25 vehicle daily hours of delay on the system. The County also projected the emissions benefit to eliminate 8,600 grams/day of CO₂, 0.7 grams/day of CH₄, and 0.89 grams/day of PM2.5. However, the County could not provide supporting documentation for the projected congestion and emission reductions. According to the County, the unsupported benefits/outcomes may have come from an earlier document that is no longer available.

TCIF Guidelines, section 17, requires, within six months of the project becoming operable, the implementing agency will provide a FDR to CTC on the scope of the completed project, including performance outcomes derived from the project as compared to those described in the project agreements. Inaccurate and incomplete information on the FDRs decreases the transparency of the project outcomes and prevents CTC from determining whether project benefits/outcomes were met.

Recommendations:

- A. Read and review the project agreements and program guidelines to ensure a clear understanding of the requirements.
- B. Maintain documentation to support project benefits/outcomes reported on the FDRs.
- C. Submit Supplemental Final Delivery Reports that accurately address all project benefits/outcomes, including pre and post comparable metrics.

APPENDIX A

The following acronyms are used throughout Appendix A.

- Americans with Disabilities Act: ADA
- Average Daily Traffic: ADT
- Burlington Northern Santa Fe Railroad: BNSF
- California Department of Transportation: Caltrans
- California Transportation Commission: CTC
- Federal Railroad Administration: FRA
- Final Delivery Report: FDR
- Level of Service: LOS
- North American Free Trade Agreement: NAFTA
- Northbound: NB
- Riverside County: County
- Southbound: SB
- State Route: SR
- State Highway: SH
- State-Local Partnership Program: SLPP
- Trade Corridors Improvement Fund: TCIF
- Union Pacific Railroad: UPRR

Summary of Projects Reviewed

Project Number	Expenditures Reimbursed	Project Status	Expenditures In Compliance	Deliverables/ Outputs Consistent	Benefits/ Outcomes Achieved ²	Benefits/ Outcomes Adequately Reported ²	Page
0800000088	\$ 6,448,479	C	Y	Y	P	P	A-1
0800000180	\$13,107,679	C	Y	Y	P	P	A-2
0800000600	\$ 7,356,934	C	Y	Y	N/A	N/A	A-3
0800020163	\$14,293,782	C	P	Y	P	P	A-4
0813000098	\$12,802,000	C	Y	Y	P	P	A-5
0813000147	\$ 3,639,595	C	Y	Y	Y	Y	A-6

Legend

C = Complete

Y = Yes

P = Partial

N/A = Not Applicable, at the time of our audit fieldwork in April 2019, the FDR had not been submitted and was due June 11, 2019.

² Project benefits/outcomes for congestion and emissions reduction were expected to be achieved in the year 2030 or 2035; therefore, we did not evaluate whether these benefits/outcomes were achieved or adequately reported.

Project Number: 0800000088

Project Name: March Inland Cargo Airport

Program Name: TCIF

Project Description: Reconstruct the Van Buren Boulevard Interchange on I-215 from Post Mile 32.3 north of Oleander Boulevard to just south of Cactus Avenue at Post Mile 35.93 in Riverside County.

Audit Period: August 12, 2008 through August 23, 2016 for audit objective 1³
August 12, 2008 through October 16, 2017 for audit objectives 2 and 3⁴

Project Status: Construction is complete and the project is operational.

Schedule of Proposition 1B Expenditures

Proposition 1B Expenditures	Reimbursed
Construction	\$6,448,479
Total Proposition 1B Expenditures	\$6,448,479

Results:

Compliance—Proposition 1B Expenditures

Proposition 1B expenditures were incurred and reimbursed in compliance with the executed project agreements, Caltrans/CTC's program guidelines, and applicable state and federal regulations cited in the executed agreements. Additionally, the match requirement was met.

Deliverables/Outputs

The construction phase of the project was completed in October 2016. At the time of our site visit in April 2019, project deliverables/outputs were consistent with the project scope. As stated in Finding 2, the project's FDR was due in April 2017, but was submitted in October 2017, six months late. Additionally, the project was behind schedule and completed 29 months late. The County appropriately updated Caltrans and CTC of the delay.

Benefits/Outcomes

Actual project benefits/outcomes related to velocity, throughput, and reliability were adequately reported in the FDR. Additionally, for these categories, the County achieved the expected project benefits/outcomes as described in the executed project agreements. Actual project benefits/outcomes related to safety, congestion reduction, and emissions reduction were not adequately reported in the FDR. As stated in Finding 3, the County misreported the actual benefit/outcome for safety and the project benefits/outcomes for congestion and emissions reduction expected to be achieved in 2035, were not supported.

³ The audit period end date reflects the billing period end date of the last reimbursement claim submitted to Caltrans.

⁴ The audit period end date reflects the FDR submission date.

Project Benefits/Outcomes Category	Expected Benefits/Outcomes	Benefits/Outcomes Reported per FDR	Benefits/Outcomes Achieved
Safety	<p>The proposed improvements includes right turn lanes and receiving lanes along Van Buren Boulevard, as well as auxiliary lanes along I-215. These improvements separate and eliminate the conflict between the through traffic and the traffic entering and exiting the freeway. This would reduce rear-end and side swipe type accidents. The project will also improve overall efficiency of the interchange which would reduce accidents attributed to traffic congestion.</p> <p>Safety improvements also include increasing vertical sight distance along Van Buren Boulevard, adding sidewalks, increasing curb return radius for truck turns, and upgrading of all guardrails to current standards.</p>	<p>Project construction was completed August 27, 2015. In the year prior to construction, from 8/12/2011 through 8/11/2012, there were four reported collisions on Van Buren Boulevard between the SB ramps and the NB ramps. Each of the collisions were rear end type. In the one year post construction, from 10/1/2015 to 9/30/2016, there was one reported collision on Van Buren Boulevard within the limits of the new interchange.⁵ The reduction in collisions is attributable to the reduction in congestion, elimination of conflict points, and improved sight distances. The interchange now includes ADA compliant sidewalks and pedestrian ramps and includes provisions for bicyclists at each intersection. Other safety improvements include widened shoulders, new traffic signals to current standards, guard rail, and increased curb return radii for truck turns. The interchange improvements were also designed to accommodate Extra Legal Load vehicles.</p>	Yes
Velocity	<p>Improves congested speed at the ramps from an average of 23 mph to 39 mph. The proposed design speed for Van Buren Boulevard at the I-215/Van Buren interchange is 40 mph, which is improved over the original concept of 30 mph.</p>	<p>The new overcrossing bridge includes seven lanes (three through and one left turn lane) which provides ample capacity and allows for free flow speeds to be reached at up to 50 mph.</p>	Yes

⁵ There were three post construction collisions based on the evidence gathered during our audit. See Finding 3 for more information.

Project Benefits/Outcomes Category	Expected Benefits/Outcomes	Benefits/Outcomes Reported per FDR	Benefits/Outcomes Achieved
Throughput	The proposed project will improve intersection capacity at the I-215/Van Buren Boulevard interchange. The project will also provide auxiliary lanes between Van Buren and Cactus Avenue. These improvements will increase capacity and improve the operational efficiency for trucks.	The interchange now includes auxiliary lanes north and south of the on and off ramps, providing added capacity for merge and diverge operations. This design improves operations for the significant number of large trucks and vehicles utilizing the interchange. The ramp intersections have been widened to provide multiple through and turn lanes and upgraded traffic signals, greatly improving operations and safety.	Yes
Reliability	The NB and SB ramps intersection to Van Buren Boulevard will be improved from LOS F to LOS B and C in 2035.	Traffic counts taken at the NB and SB intersection ramps in September 2017 were analyzed. Both NB and SB intersection ramps are operating at LOS A in the AM and PM peak hours.	Yes
Congestion Reduction	Improvement will result in savings of up to 338 hours of truck delay at the NB intersection and 907 hours at the SB intersection in 2035.	Both NB and SB intersection ramps are operating at LOS A in the AM and PM peak hours, which indicates greatly reduced delays compared to pre-construction, LOS F delays.	Not Applicable Expected to be achieved in 2035
Emissions Reduction	The emissions benefit of the project in 2035 is calculated to be 4,065 tons per year of a combined PM10, ROG, NOx, and CO ₂ .	The emissions associated with the traffic improvement to LOS A at the NB and SB intersection ramps would be reduced. This is due to more efficient vehicle circulation and less truck and vehicle idling at these intersections.	Not Applicable Expected to be achieved in 2035

Project Number: 0800000180

Project Name: Clay Street Grade Separation

Program Name: TCIF

Project Description: Construct a grade separation within the City of Jurupa Valley at the UPRR at the Clay Street crossing between Van Buren Boulevard and Limonite Avenue.

Audit Period: October 29, 2008 through September 30, 2017 for audit objective 1⁶
October 29, 2008 through November 15, 2018 for audit objectives 2 and 3⁷

Project Status: Construction is complete and the project is operational.

Schedule of Proposition 1B Expenditures

Proposition 1B Expenditures	Reimbursed
Construction	\$10,145,640
Construction Engineering	2,962,039
Total Proposition 1B Expenditures	\$13,107,679

Results:

Compliance—Proposition 1B Expenditures

Proposition 1B expenditures were incurred and reimbursed in compliance with the executed project agreements, Caltrans/CTC's program guidelines, and applicable state and federal regulations cited in the executed agreements. Additionally, the match requirement was met. However, as stated in Finding 1, the County did not retain evidence that consultant contracts were publicly advertised.

Deliverables/Outputs

The construction phase of the project was completed in May 2017. At the time of our site visit in April 2019, project deliverables/outputs were consistent with the project scope. As stated in Finding 2, the project's FDR was due in November 2017, but was submitted in November 2018, 12 months late. Additionally, the project was behind schedule and completed ten months late. The County appropriately updated Caltrans and CTC of the delay.

Benefits/Outcomes

Actual project benefits/outcomes related to safety, velocity, throughput, and reliability were adequately reported in the FDR. Additionally, for these categories, the County achieved the expected project benefits/outcomes as described in the executed project agreements. The project benefit/outcome for congestion reduction expected to be achieved in 2030, as described in the executed project agreement or amendments, was adequately supported. However, as stated in Finding 3, the County could not provide documentation supporting the projected emissions reduction benefit/outcome, which is expected to be achieved in 2030.

⁶ The audit period end date reflects the billing period end date of the last reimbursement claim submitted to Caltrans.

⁷ The audit period end date reflects the FDR submission date.

Project Benefits/Outcomes Category	Expected Benefits/Outcomes	Benefits/Outcomes Reported per FDR	Benefits/Outcomes Achieved
Safety	<p>Elimination of at-grade crossing will improve public safety by eliminating the potential for train versus automobile/truck/pedestrian accidents. Recent accident data obtained from the FRA and the County for a 10-year period shows two accidents reported involving trains (one fatality and one injury) and eight accidents reported (one fatality and three injuries) were vehicle-to-vehicle within 100 feet of the crossing area, which may have been due to frequent interruption in the normal flow of traffic. The project will eliminate the need for pedestrians to walk across the mainline tracks. These improvements will eliminate the number of rear-end vehicular accidents at the crossing. The proposed project will also improve public safety and emergency vehicles response time.</p>	<p>Elimination of at-grade crossing and construction of this grade separation has improved public safety by eliminating the interface between automobiles/trucks/pedestrians and trains. Recent accident data obtained from the FRA and the County for the one-year period of time subsequent to the opening of the grade separation confirms zero accidents reported involving trains. There have been three vehicle-to-vehicle accidents (one injury accident) within 100 feet of the crossing. The project has eliminated the need for pedestrians to walk across the mainline tracks. These improvements removed the possibility of vehicular accidents involving the train tracks. The project has improved public safety and emergency vehicle response times by eliminating delays caused by long trains or due to the rerouting of emergency vehicles because of lengthy train crossings.</p>	Yes
Velocity	<p>Elimination of at-grade crossing will improve train velocity by eliminating the potential for train versus automobile/truck/pedestrian accidents and associated delays to investigate and clear tracks. The proposed project will also eliminate idling of trucks and passenger cars at the crossing. Although the train speed limit at this crossing is 65 mph for the freight and 70 mph for the passenger trains, these trains pass through with a much lower speed, roughly 25 to 30 mph, in this area. After the improvements are complete, both freight and passenger trains will be able to operate at their maximum designated speed for the area and will also improve the volume of trains traveling through this crossing. Vehicular traffic on Clay Street will also be able to flow at 45 mph speed without the interruptions of train traffic.</p>	<p>Construction of this grade separation has improved train velocity by eliminating the potential for train versus automobile/truck/pedestrian accidents and associated delays to investigate and clear tracks. Additionally, the project has eliminated idling of trucks and passenger cars caused by train crossings. Freight and passenger trains are now able to operate at their maximum designated speed for the area of 65 mph for freight and 70 mph for passenger trains, improving the volume of trains traveling through this crossing. Vehicular traffic on Clay Street is also able to flow at the 45 mph posted speed limit without interruptions caused by train traffic.</p>	Yes

Project Benefits/Outcomes Category	Expected Benefits/Outcomes	Benefits/Outcomes Reported per FDR	Benefits/Outcomes Achieved
Throughput	This grade separation project will improve the operational efficiency by eliminating accidents and associated delays. Currently, 30 freight and 12 Metrolink commuter trains pass through the Clay Street crossing daily and is projected to increase to 45 freight and 28 Metrolink commuter trains by 2030. Width of new bridge will allow for UPRR to add an additional track without modification.	Construction of this grade separation has improved operational efficiency by eliminating accidents and associated delays from occurring by eliminating the interface between automobiles/trucks/pedestrians and trains. Construction of this grade separation provides for the projected 50 percent increase in freight train traffic and the 125 percent increase of Metrolink commuter trains. The width of the new bridge allows UPRR to add an additional track without further modification to the bridge.	Yes
Reliability	This project will improve freight train movement and reliability by eliminating the potential for accidents. These accidents create costly schedule impacts to other trains when the operation on rail shuts down for several hours to investigate and clear the accident. Response times will be greatly enhanced for emergency vehicles.	Construction of this grade separation has improved freight train movement and reliability by eliminating the potential for accidents between trains and automobiles/trucks/pedestrians. Such accidents create costly schedule impacts to other trains on this line when the operation on this rail shuts down for several hours due to investigating and clearing of accidents. The project has improved public safety and emergency response times by eliminating delays caused by lengthy train crossings or due to the rerouting of emergency vehicles because of lengthy train crossings.	Yes
Congestion Reduction	On average, 42 freight and passenger trains pass through the Clay Street rail crossing each day causing 84.3 minutes of delays at this crossing which are forecast to double to 163.5 minutes by 2030. The vehicle hours of delay per day were 42.5 in 2005 and are projected to increase to 131.8 vehicle hours of delay per day by 2030.	Construction of this grade separation eliminated vehicular train congestion caused by the train crossing at this location. The grade separation currently eliminates approximately 116 vehicle hours of delay per day and is on target to meet the 2030 vehicle hours of delay by allowing traffic to free flow beneath the railroad crossing. The time savings will continue to increase as traffic and train volumes increase.	Not Applicable Expected to be achieved in 2030

Project Benefits/Outcomes Category	Expected Benefits/Outcomes	Benefits/Outcomes Reported per FDR	Benefits/Outcomes Achieved
Emissions Reduction	The emissions benefit of the project in 2030 is calculated to be six tons per year of combined PM10, ROG, NOx, and CO ₂ . Additionally, noise from train horns is eliminated for a population of 9,227 within 6,400 feet of the project.	With completion of this grade separation, we are on target to meet year 2030 emissions reduction projections. Additionally, the need for train horns at this location have been eliminated by construction of this grade separation and have directly reduced acoustical impacts to nearly 10,000 people in the proximity of this location.	Not Applicable Expected to be achieved in 2030

Project Number: 0800000600

Project Name: Sunset Avenue Grade Separation

Program Name: TCIF

Project Description: In the City of Banning on Sunset Avenue at I-10 from south of Ramsey Street to south of Lincoln Street - lower Sunset Avenue to construct an underpass at the UPRR crossing and reconstruct the I-10 interchange ramps to meet the new street grade.

Audit Period: September 1, 2008 through March 31, 2018 for audit objective 1⁸
September 1, 2008 through December 11, 2018 for audit objectives 2 and 3⁹

Project Status: Construction is complete and the project is operational.

Schedule of Proposition 1B Expenditures

Proposition 1B Expenditures	Reimbursed
Construction	\$6,979,786
Construction Engineering	377,148
Total Proposition 1B Expenditures	\$7,356,934

Results:

Compliance—Proposition 1B Expenditures

Proposition 1B expenditures were incurred and reimbursed in compliance with the executed project agreements, Caltrans/CTC's program guidelines, and applicable state and federal regulations cited in the executed agreements. Additionally, the match requirement was met.

Deliverables/Outputs

The construction phase of the project was completed in December 2018. Based on our review of the completed project using Google Maps street images and construction photos provided by the County, the project deliverables/outputs were consistent with the project scope. The project's FDR is due in June 2019. The project was behind schedule and completed 33 months late. The County appropriately updated Caltrans and CTC of the delay.

Benefits/Outcomes

Actual project benefits/outcomes have not been reported because the FDR has not been submitted.

⁸ The audit period end date reflects the billing period end date of the last reimbursement claim submitted to Caltrans.

⁹ The audit period end date reflects the Notice of Completion submission date.

Project Number: 0800020163

Project Name: Magnolia Avenue Grade Separation

Program Name: TCIF

Project Description: Construct a grade separation for the BNSF lines at Magnolia Avenue in Riverside County.

Audit Period: October 29, 2008 through June 30, 2017 for audit objective 1¹⁰
October 29, 2008 through November 15, 2018 for audit objectives 2 and 3¹¹

Project Status: Construction is complete and the project is operational.

Schedule of Proposition 1B Expenditures

Proposition 1B Expenditures	Reimbursed	Unallowable Expenditures
Construction	\$11,772,791	\$ 0
Construction Engineering	2,520,991	4,712
Total Proposition 1B Expenditures	\$14,293,782	\$4,712

Results:

Compliance—Proposition 1B Expenditures

Proposition 1B expenditures were incurred and reimbursed in compliance with the executed project agreements, Caltrans/CTC's program guidelines, and applicable state and federal regulations cited in the executed agreements, except for \$4,712 of unallowable construction engineering expenditures as stated in Finding 1. Also as stated in Finding 1, the County did not retain evidence that consultant contracts were publicly advertised. The County met its match requirement.

Deliverables/Outputs

The construction phase of the project was completed in July 2018. At the time of our site visit in April 2019, project deliverables/outputs were consistent with the project scope. The project's FDR was submitted timely in November 2018. However, the project was behind schedule and completed 25 months late. The County appropriately updated Caltrans and CTC of the delay.

Benefits/Outcomes

Actual project benefits/outcomes related to safety, velocity, throughput, and reliability were adequately reported in the FDR. Additionally, for these categories, the County achieved the expected project benefits/outcomes as described in the executed project agreements. The project benefit/outcome for congestion reduction expected to be achieved in 2030, as described in the executed project agreement or amendments, was adequately supported. However, as stated in Finding 3, the County could not provide documentation supporting the projected emissions reduction benefit/outcome, which is expected to be achieved in 2030.

¹⁰ The audit period end date reflects the billing period end date of the last reimbursement claim submitted to Caltrans.

¹¹ The audit period end date reflects the Notice of Completion submission date.

Project Benefits/Outcomes Category	Expected Benefits/Outcomes	Benefits/Outcomes Reported per FDR	Benefits/Outcomes Achieved
Safety	<p>Elimination of at-grade crossing will improve public safety by eliminating the potential for train versus automobile/truck/ pedestrian accidents. Recent accident data obtained from the FRA and the County for a 10-year period shows 12 accidents reported involving trains (one fatality and one injury) and 24 accidents reported (one fatality and 12 injuries) were vehicle-to-vehicle within 100 feet of the crossing area which may have been due to frequent interruption in the normal flow of traffic. The potential for vehicle or pedestrian versus train accidents are expected to increase as vehicular and train volumes increase. The project will eliminate the need for pedestrians to walk across the mainline tracks. These improvements will eliminate the number of rear-end vehicular accidents at the crossing. The proposed project will also improve public safety and emergency vehicles response time.</p>	<p>The low skew angle between the railroad tracks and Magnolia Avenue caused a long exposure to pedestrians and motorists at the crossing. The close proximity of Buchanan Avenue and Lincoln Street on either side of the tracks increased the potential for vehicles to stop on the tracks during a red light. Construction of the grade separation eliminated the possibility for train accidents with vehicles and pedestrians. Rear-end accidents were also eliminated at the crossing by removing the need to stop for trains. Emergency response vehicles no longer have to wait at the crossing when a train is present. The anticipated increase in rail freight volumes will not affect vehicle or pedestrian safety due to the grade separated crossing. Pedestrians and cyclists enjoy the safety of a continuous sidewalk and bicycle lane across the bridge. Collision reports indicate there were five collisions within the project limits in the year prior to construction and four collisions in the year after bridge opening. None of the collisions were related to the bridge or train. According to the FRA, no pedestrian or vehicle related train accidents have occurred at the crossing since the bridge was opened to traffic.</p>	Yes

Project Benefits/Outcomes Category	Expected Benefits/Outcomes	Benefits/Outcomes Reported per FDR	Benefits/Outcomes Achieved
Velocity	<p>Elimination of at-grade crossing will improve train velocity by eliminating the potential for train versus automobile/truck/pedestrian accidents and associated delays to investigate and clear tracks. The proposed project will also eliminate idling of trucks and passenger cars at the crossing. Although the train speed limit at this crossing is 50 mph for the freight and 60 mph for the passenger trains, these trains pass through with a much lower speed, roughly 25 to 30 mph, in this area. After the improvements are complete, both freight and passenger trains will be able to operate at their maximum designated speed for the area and also improve the volume of trains traveling through this crossing. Vehicular traffic on Magnolia Avenue will also be able to flow at 45 mph speed without the interruptions of train traffic.</p>	<p>The new bridge provides unrestricted movement on Magnolia Avenue over the railroad tracks for vehicles, including trucks and school buses traveling in the area. Motor vehicles are now able to operate at the posted speed limit of 45 mph. Mobility for emergency response vehicles is no longer inhibited by waiting for trains at the crossing. Additionally, train velocity has nearly doubled to allow trains to operate at the prescribed 50 mph for freight and 60 mph for passenger trains since slowing for the crossing is no longer needed.</p>	Yes
Throughput	<p>This grade separation project will improve the operational efficiency by eliminating accidents and associated delays. Currently, 41 freight trains pass through Magnolia Avenue crossing, and the number is projected to increase to 62 by 2030.</p>	<p>Construction of this bridge has improved operational efficiency by eliminating accidents and associated delays from occurring by eliminating the interface between trains and automobiles/trucks/pedestrians. The improvements in throughput benefit the local communities, businesses, and the seven schools in the area. Construction of this grade separation provides for the projected 50 percent increase in freight train traffic and future track expansion without affecting vehicular traffic.</p>	Yes

Project Benefits/Outcomes Category	Expected Benefits/Outcomes	Benefits/Outcomes Reported per FDR	Benefits/Outcomes Achieved
Reliability	This project will improve freight train movement and reliability by eliminating the potential for accidents. These accidents create costly schedule impacts to other trains when the operation on rail shuts down for several hours to investigate and clear the accident.	Construction of this grade separation has improved freight train movement and reliability by eliminating the potential for accidents between trains and automobiles/trucks/pedestrians. Such accidents create costly schedule impacts to other trains on this line when the operation on this rail shuts down for several hours due to investigating and clearing of accidents. The project has improved public safety and emergency vehicle response times by eliminating delays caused by lengthy train crossings or due to the re-routing of emergency vehicles because of the lengthy train crossings.	Yes
Congestion Reduction	On average, 68 freight and passenger trains pass through Magnolia Avenue Railroad crossing each day, causing 104.8 minutes of delays at this crossing; delay is projected to rise to 203.5 minutes by 2030. The vehicle hours of delay per day were 24.8 in 2005 but are projected to increase by more than four times to 103.4 vehicle hours of delay per day by 2030.	Construction of this grade separation eliminated vehicular traffic congestion caused by the train crossing at this location. An estimated 60 vehicle hours of delay per day have been eliminated since the bridge opening. The grade separation currently eliminates approximately 148 vehicle hours of delay per day and is on target to meet the 2030 vehicle hours of delay by allowing traffic to free flow beneath the railroad crossing. The time savings will continue to increase as traffic and train volumes increase.	Not Applicable Expected to be achieved in 2030
Emissions Reduction	The emissions benefit of the project in 2030 is calculated to be 15 tons per year of combined PM10, ROG, NOx, and CO2. Additionally, noise from train horns is eliminated for a population of 23,596 within 6,400 feet of the project.	With completion of this grade separation, we are on target and anticipate meeting year 2030 emissions reduction projections. Additionally, the need for train horns at this location have been eliminated by construction of this grade separation and have directly reduced acoustical impacts to over 23,500 people in the proximity of this location.	Not Applicable Expected to be achieved in 2030

Project Number: 0813000098

Project Name: Avenue 56 Grade Separation

Program Name: TCIF

Project Description: Construct a grade separation at Avenue 56 for the UPRR lines near the City of Coachella.

Audit Period: September 1, 2008 through November 30, 2017 for audit objective 1¹²
September 1, 2008 through November 15, 2018 for audit objectives 2 and 3¹³

Project Status: Construction is complete and the project is operational.

Schedule of Proposition 1B Expenditures

Proposition 1B Expenditures	Reimbursed
Construction	\$11,102,000
Construction Engineering	1,700,000
Total Proposition 1B Expenditures	\$12,802,000

Results:

Compliance—Proposition 1B Expenditures

Proposition 1B expenditures were incurred and reimbursed in compliance with the executed project agreements, Caltrans/CTC's program guidelines, and applicable state and federal regulations cited in the executed agreements. Additionally, the match requirement was met.

Deliverables/Outputs

The construction phase of the project was completed in May 2017. Based on our review of the completed project using Google Maps street images and construction photos provided by the County, the project deliverables/outputs were consistent with the project scope. As stated in Finding 2, the project's FDR was due in November 2017, but was submitted in November 2018, 12 months late. Additionally, the project was behind schedule and completed 14 months late. The County appropriately updated Caltrans and CTC of the delay.

Benefits/Outcomes

Actual project benefits/outcomes related to safety, velocity, and reliability were adequately reported in the FDR. Additionally, for these categories, the County achieved the expected project benefits/outcomes as described in the executed project agreements. Actual project benefits/outcomes related to throughput, congestion reduction, and emissions reduction were not adequately reported in the FDR. As stated in Finding 3, the County misreported the actual benefit/outcome for throughput and the projected congestion and emissions reduction benefits/outcomes were not supported.

¹² The audit period end date reflects the billing period end date of the last reimbursement claim submitted to Caltrans.

¹³ The audit period end date reflects the FDR submission date.

Project Benefits/Outcomes Category	Expected Benefits/Outcomes	Benefits/Outcomes Reported per FDR	Benefits/Outcomes Achieved
Safety	<p>Elimination of at-grade crossing will improve public safety by eliminating the potential for train versus automobile/truck/pedestrian accidents. One vehicle versus train accident has occurred at the crossing in the last 10 years. The potential for vehicle or pedestrian versus train accidents are expected to increase by 50 percent as vehicular and train volumes increase. The project will eliminate the need for pedestrians to walk across the mainline tracks. These improvements will eliminate the number of rear-end vehicular accidents at the crossing. The proposed project will also improve public safety and emergency vehicles response time.</p> <p>Safety improvements also include increasing vertical sight distance along Van Buren Boulevard, adding sidewalks, increasing curb return radius for truck turns, and upgrading of all guardrails to current standards.</p>	<p>Construction of the bridge eliminated the potential at the crossing for train accidents with vehicles or pedestrians. Rear-end accidents were also eliminated at the crossing by removing the need to stop for trains. Emergency response vehicles no longer have to detour two and a half to six miles to access locations on the east when a train is present. The anticipated increase in rail freight volumes will not affect vehicle or pedestrian safety due to the grade separated crossing. Pedestrians enjoy the safety of a continuous sidewalk along Avenue 56 that provides safe access to the post office, nearby schools, and businesses. Collision reports indicate there were five collisions within the project limits in the year prior to construction and two non-injury collisions in the year after bridge opening. According to the FRA, no pedestrian or vehicle related train accidents have occurred at the crossing since the bridge was opened to traffic.</p>	Yes
Velocity	<p>Elimination of at-grade crossing will improve train velocity by eliminating the potential for train versus automobile/truck/pedestrian accidents and associated delays to investigate and clear tracks. The proposed project will also eliminate idling of trucks and passenger cars at the crossing. Traffic circulation in this area will also improve.</p>	<p>The new bridge provides unrestricted movement on Avenue 56 from SH-86 over the railroad tracks and Grapefruit Boulevard for vehicles, freight, and agriculture equipment traveling to the community of Thermal, nearby farms, produce packing houses, and the Jacqueline Cochran International Airport. An estimated three to six minute improvement in response time by emergency services to locations east of the railroad tracks was achieved by eliminating the at-grade crossing. Train velocity is no longer limited by the at-grade crossing.</p>	Yes

Project Benefits/Outcomes Category	Expected Benefits/Outcomes	Benefits/Outcomes Reported per FDR	Benefits/Outcomes Achieved
Throughput	The proposed project provides for increased volume of freight trains (71 to 107) through improved operational efficiency on rail and NAFTA corridors SR-86 and SR-111. These improvements will also increase capacity and improve the operational efficiency for trucks.	Opening year ADT on Avenue 56 at the railroad tracks is estimated at 6,700 vehicles which are no longer delayed at the train crossing—increasing throughput and operational efficiency on the surrounding roadway network. Throughput on Grapefruit Boulevard is also increased by eliminating turn lane backup spill over onto Grapefruit Boulevard at the railroad crossing. Because the bridge structure spans the railroad right-of-way, according to UPRR, rail operations have increased from 71 trains per day during the project planning period to an average of 90 trains per day in 2018 which is on track to meet the 2030 projections of 107 trains per day. Future track expansions are unrestricted at the crossing. Train lengths are no longer limited by the distance between at-grade crossings which previously blocked one or more road crossings during frequent track switching maneuvers or maintenance. Emergency services have unrestricted access across the railroad tracks—greatly decreasing response times.	No

Project Benefits/Outcomes Category	Expected Benefits/Outcomes	Benefits/Outcomes Reported per FDR	Benefits/Outcomes Achieved
Reliability	Project reduces the variability and unpredictability of travel time, including NAFTA truck traffic through this corridor through the elimination of auto/train conflicts. Rail traffic on this segment of track is projected to increase from 71 trains a day to 107 by 2030. The rail capacity improvements needed to accommodate this level of growth will not gain public acceptance without grade separations. Rail corridor closures due to accidents can exceed several hours and have a costly ripple effect on the movement of trains to and from the Southern California ports.	Construction of the grade separated crossing improved the travel time reliability through the corridor for passenger, NAFTA freight truck, and agriculture equipment. Emergency response vehicles also now have a reliable route to service customers east of the railroad without train delays. According to UPRR, rail traffic has increased from 71 trains per day during the project planning period to an average of 90 trains per day in 2018 which is on track to meet the 2030 projections of 107 trains per day. Increased rail traffic has no effect on vehicle or pedestrian traffic circulation in the area. Trains can operate at higher speeds and operations are no longer delayed or stopped by vehicle accidents at the crossing.	Yes
Congestion Reduction	Project improvements will eliminate up to 25 vehicle daily hours of delay on the system and improves truck access to nearby freight facilities.	The Southern California Consensus Group ranked Avenue 56 in the top tier of 14 priority grade separation projects. Completion of the Avenue 56 grade separation project eliminated up to 25 vehicle daily hours of delay at the location and improved truck and equipment access to nearby commercial and agricultural facilities. Vehicle backup at the crossing has been eliminated freeing traffic flow on nearby Grapefruit Boulevard.	No
Emissions Reduction	The emissions benefit of the project is estimated to eliminate 8,600 grams/day of CO ₂ , 0.7 grams/day of CH ₄ , and 0.89 grams/day of PM _{2.5} . Additionally, noise from train horns is eliminated for a population of 4,280 within 6,400 feet of the project.	The emissions benefit of the project has eliminated an estimated 8,600 grams/day of CO ₂ , 0.7/grams day of CH ₄ , and 0.89 grams/day of PM _{2.5} by removing idling vehicles at the crossing. Additionally, noise from train horns is eliminated for the surrounding community.	No

Project Number: 0813000147

Project Name: Fred Waring Drive Improvement

Program Name: SLPP

Project Description: Widen Fred Waring Drive from Adams Street to just east of Port Maria Road and construct a storm drain system, sound wall, and pedestrian parkway in the City of La Quinta.

Audit Period: November 8, 2012 through December 31, 2015 for audit objective 1¹⁴
November 8, 2012 through June 29, 2016 for audit objectives 2 and 3¹⁵

Project Status: Construction is complete and the project is operational.

Schedule of Proposition 1B Expenditures

Proposition 1B Expenditures	Reimbursed
Construction	\$3,178,011
Construction Engineering	461,584
Total Proposition 1B Expenditures	\$3,639,595

Results:

Compliance—Proposition 1B Expenditures

Proposition 1B expenditures were incurred and reimbursed in compliance with the executed project agreements, Caltrans/CTC's program guidelines, and applicable state and federal regulations cited in the executed agreements. Additionally, the match requirement was met.

Deliverables/Outputs

The construction phase of the project was completed in January 2016. Based on our review of the completed project using Google Maps street images and construction photos provided by the County, the project deliverables/outputs were consistent with the project scope. The project's FDR was submitted timely in June 2016. However, the project was behind schedule and completed 16 months late. The County appropriately updated Caltrans and CTC of the delay.

Benefits/Outcomes

Actual project benefits/outcomes related to widening, raised median, drainage improvements, sound wall, modifying traffic signals, and improving access ramps were adequately reported in the FDR.

¹⁴ The audit period end date reflects the billing period end date of the last reimbursement claim submitted to Caltrans.

¹⁵ The audit period end date reflects the FDR submission date.

Project Benefits/Outcomes Category	Expected Benefits/Outcomes	Benefits/Outcomes Reported per FDR	Benefits/Outcomes Achieved
Widening	The widening project will provide three through lanes in each direction, reducing traffic congestion that is expected to nearly double to 42,000 vehicles per day in the area by 2035. Safety improvements also include increasing vertical sight distance along Van Buren Boulevard, adding sidewalks, increasing curb return radius for truck turns, and upgrading of all guardrails to current standards.	Widened Fred Waring Drive to provide three through lanes in each direction, reducing traffic congestion that is expected to nearly double to 42,000 vehicles per day in the area by 2035.	Yes
Raised Median	A raised median will provide protection from oncoming traffic while left turn pockets will facilitate safe turning movements.	Constructed a raised median to provide protection from oncoming traffic with left turn pockets to facilitate safe turning movements.	Yes
Drainage Improvements	Drainage improvements will control storm runoff, reduce nuisance flows, and direct water away from the traffic lanes.	Constructed drainage improvements to control storm runoff, reduce nuisance flows and direct water away from the traffic lanes.	Yes
Sound Wall	A sound wall will be constructed on the south side of the road, reducing traffic related noise for residence.	Constructed a sound wall on the south side of the road, reducing traffic related noise for residents.	Yes

RESPONSE



Patricia Romo, P.E.
Director of Transportation

COUNTY OF RIVERSIDE

TRANSPORTATION AND LAND MANAGEMENT AGENCY

Mojahed Salama, P.E.
Deputy for Transportation/Capital Projects

Richard Lantis, P.L.S.
*Deputy for Transportation Planning and
Development*

Transportation Department

Cheryl L. McCormick, CPA, Chief
California Department of Finance
Office of State Audits and Evaluations
915 L Street, 6th Floor
Sacramento, CA 95814

September 18, 2019

Subject: California Department of Finance, Office of State Audits and Evaluations, audit of
Riverside County's (County) Proposition 1 B funded projects listed below:

<u>Project Number</u>	<u>P Number</u>	<u>Project Name</u>
0800000088	P2525-0073	March Inland Cargo Airport
0800000180	P2525-0074	Clay Street Grade Separation
0800000600	P2525-0075	Sunset Avenue Grade Separation
0800020163	P2525-0076	Magnolia Avenue Grade
0813000098	P2525-0077	Avenue 56 Grade Separation
0813000147	P2535-0133	Fred Waring Drive Improvement

Dear Ms. McCormick,

Riverside County is in receipt of the Draft Report of the California Department of Finance, Office of State Audits and Evaluations, audit of Riverside County's Proposition 1 B funded projects. Thank you for the additional time in which to respond. We have the following comments regarding the Findings and Recommendations. The Report text for the Findings and Recommendations were not reproduced here due to their length. Please refer to the Report for that text.

1.A. Riverside County agrees that \$4,712 of right-of-way engineering costs were inadvertently claimed and reimbursed as a construction engineering cost on the Magnolia Avenue Grade Separation project. The amount comes from a consultant claim of \$12,100, which resulted in a \$4,712 billing amount to Caltrans. We consent to the return of \$4,712.

The sentence included in the report that "The County stated they requested reimbursement for the right-of-way costs because they believed all costs were eligible." As a point of clarification, we believe that all costs qualifying as participating costs are eligible. Since construction engineering is a funded project phase and since the costs in question were charged to construction engineering, they appeared to the billing staff to be eligible costs. If the costs in question had been properly charged to right-of-way engineering, the cost would not have been perceived to be eligible.

1.B. Riverside County acknowledges that it is important to have adequate review process to ensure only eligible construction engineering expenditures are claimed for reimbursement. We will continue to strive to do so.

1.C. The consultant solicitation for the project(s) in question occurred in late 2013. Riverside County revised its procedures in early 2014 regarding solicitation for consultant services and retention of related documents. We believe that we have been in compliance with Caltrans guidelines since that time.

2.A & B. Riverside County understands the requirements for submitting project Final Delivery Reports and will strive to submit future reports on time.

3.A. Riverside County acknowledges that additional attention could have been given to project agreements and program guidelines.

We would also like to note that some provisions associated with the Proposition 1B programs were not previously in common use and left room for differing opinions how they would be implemented.

3.B. Riverside County was unable to recover documents prepared in 2008 by a sub-consultant that provided benefits/outcomes data used for preparation of the project applications. The sub-consultant had gone out of business and copies of their documents were not found. This is a lesson learned for us to obtain working and supporting data used by consultants in the execution of their work for the County.

3.C. Riverside County acknowledges that errors were made in calculations of some of the benefits/outcomes in some of the Supplemental Final Delivery Reports. We will strive to provide more accurate benefits/outcomes in future submittals.

Please do not hesitate to contact us if there is need.

Sincerely,



Patricia Romo
Director of Transportation

cc: Mojahed Salama, Deputy Director of Transportation, Riverside County
Roy Null, Programming Engineer, Riverside County Transportation Department