

INDEPENDENT OFFICE OF AUDITS AND INVESTIGATIONS

P.O. BOX 942874, MS-2
SACRAMENTO, CA 94274-0001
PHONE (916) 323-7111
FAX (916) 323-7123
TTY 711
<https://ig.dot.ca.gov>



January 11, 2021
File: P3010-0666

Angel Pyle
Senate Bill 1 Program Manager
California Department of Transportation
1120 N Street
Sacramento, CA 95814

Dear Ms. Pyle:

Subject: Fiscal Year 2018-19 Efficiencies Final Audit Report

The Independent Office of Audits and Investigations' (IOAI) has completed the audit of efficiency savings reported by Caltrans in its Senate Bill 1 2018-19 Annual Efficiency Report. The enclosed report is for your information and use. Your response to the report findings has been included in this final report. This report will be placed on our website.

A detailed Corrective Action Plan (CAP) addressing the findings and recommendations is due from Caltrans within 60 days from receipt of this letter. The CAP should include milestones and target dates as applicable. Subsequent to the 60-day CAP, updated CAPs will be due every six months until all planned actions have been implemented.

We thank you and your staff for the assistance provided during this audit. If you have any questions, please contact Alice Lee, Audit Chief, Office of Project Delivery, at (916) 323-7953.

Sincerely,

RHONDA L. CRAFT

Inspector General

Attachment: Final Audit Report

c: Toks Omishakin, Director, California Department of Transportation
Jim Davis, Chief Deputy Director, California Department of Transportation
Mitch Weiss, Executive Director, California Transportation Commission
Elissa Konove, Deputy Secretary, California State Transportation Agency
Rodney Whitfield, Director of Financial Services, Federal Highway Administration
Steven Keck, Finance Deputy Director, California Department of Transportation
David Ambuehl, Acting Chief, Division of Maintenance, California Department of Transportation
Michael B. Johnson, P.E., State Asset Management Engineer, California Department of Transportation
Camille Abou-Fadel, Statewide Maintenance Operations Manager, Office of Roadway Engineering, Division of Maintenance, California Department of Transportation
Diana Antony, Chief Deputy Inspector General, Independent Office of Audits and Investigations
Frances Parmelee, Assistant Chief Deputy Inspector General, Independent Office of Audits and Investigations
Alice Lee, Audit Chief, Office of Project and Delivery, Independent Office of Audits and Investigations
David Wong, Audit Manager, Independent Office of Audits and Investigations

INDEPENDENT OFFICE OF AUDITS AND INVESTIGATIONS

Rhonda L. Craft, Inspector General

SENATE BILL 1 2018-19 EFFICIENCIES AUDIT

Background

In April 2017, Senate Bill (SB) 1 (Beall, Chapter 5, Statutes of 2017), also known as the Road Repair and Accountability Act of 2017, was passed by the California Legislature and signed into law by Governor Brown. SB1 increases revenue for California's transportation system and requires the California State Department of Transportation (Caltrans) to implement efficiency measures with the goal of generating at least \$100 million annually in savings to invest in the maintenance and rehabilitation of the state highway system and to report the savings to the California Transportation Commission (CTC).

The Independent Office of Audits and Investigations (IOAI) completed an audit of efficiency savings reported by Caltrans in its SB1 Annual Efficiency Report to the CTC for fiscal year 2018-2019. We focused our audit on efficiencies reported under Acceleration of Work and Innovative Strategies in Striping Contracts which together totaled \$94.4 million of the \$233.1 million savings reported. The objectives of the audit were to determine whether:

- The methodology used to calculate efficiency savings is supported.
- The reported efficiency savings is supported with adequate documentation and the estimated savings would be available for investment into the maintenance and rehabilitation of the state highway system.

Results

The audit determined that Caltrans was able to support \$90.7 million of the \$94.4 million in reported savings which is a cost avoidance that would be available for reinvestment in the maintenance and rehabilitation of the state highway system.

Key Recommendations

For transparency purposes, Caltrans should report significant methodology changes to efficiencies reported in previous fiscal years.

- Maintain a complete and accurate list of projects used to calculate savings, as recommended in our previous audit.
- Clearly document and report in the Annual Efficiencies Report the specific "efficiency measures" implemented and if reported as an "Innovative Tool" explain how the efficiency is innovative in nature.
- Continue to evaluate and adopt best practices and parameters used by other organizations for reporting efficiency savings and documenting validation efforts. The adopted best practices and parameters should specifically include process improvements or innovations, and the number of years an efficiency can be reported.
- Efficiency savings for striping contracts should be calculated using 2017-18 winning bid prices (since innovative strategies were implemented after 2017-18) as a baseline to compare to current fiscal year winning bid prices as recommended in our previous audit of Value Analysis efficiencies.

California Department of Transportation

SB1 2018-19 Efficiencies Audit



FINAL AUDIT REPORT

P3010-0666

JANUARY 2021



PREPARED BY:

Independent Office of Audits and Investigations – MS 2

Post Office Box 942874

Sacramento, California 94274-0001

<https://ig.dot.ca.gov>

AUDIT TEAM:

Alice Lee, Chief, Office of Project Delivery

David Wong, Audit Manager

Phet Bouthavong, Auditor-in-Charge

Nicholas Plaza, Auditor

P3010-0666

TABLE OF CONTENTS

SUMMARY	1
BACKGROUND	1
OBJECTIVES, SCOPE AND METHODOLOGY	2
RESULTS AND RECOMMENDATIONS	4
ACCELERATION OF WORK	4
INNOVATIVE STRATEGIES IN STRIPING CONTRACTS.....	9

SUMMARY, BACKGROUND, OBJECTIVES, SCOPE, AND METHODOLOGY

SUMMARY

The Independent Office of Audits and Investigations (IOAI) completed an audit of efficiency savings reported to the California Transportation Commission (CTC) for fiscal year 2018-19. The purpose of this audit was to determine if the savings reported in the SB 1 Annual Efficiencies Report are supported and available for investment in the maintenance and rehabilitation of the state highway system, as required by Senate Bill 1 (SB 1). The audit focused on the following efficiency areas, Acceleration of Work and Innovative Strategies in Striping Contracts which totaled \$94.4 million or 40 percent of \$233.1 million in total savings reported to the CTC.

The audit determined that the California Department of Transportation (Caltrans) was able to support \$90.7 million in reported savings which is a cost avoidance that would be available for reinvestment in the maintenance and rehabilitation of the state highway system.

Area Reviewed	Savings Reported to CTC	Audited Savings	Amount over reported
Acceleration of Work	\$64,000,000	\$63,000,000	(\$1,000,000)
Innovative Strategies in Striping Contracts	\$30,446,026	\$27,746,634	(\$2,699,392)
Totals	\$94,446,026	\$90,746,634	(\$3,699,392)

Our testing, however, found that Caltrans over reported \$3.7 million in savings, as shown in the table above.

The methodology and processes to identify, track, and support efficiencies is unique to each area. As a result, we have specific recommendations for each efficiency area within their respective sections of this report.

BACKGROUND

In April 2017, Senate Bill (SB) 1 (Beall, Chapter 5, Statutes of 2017), also known as the Road Repair and Accountability Act of 2017, was passed by the California Legislature and signed into law by Governor Brown. SB1 increases revenue for California's transportation system and requires Caltrans to implement efficiency measures with the goal of generating

at least \$100 million annually in savings to invest in the maintenance and rehabilitation of the state highway system and to report the savings to the CTC.

The Caltrans Financial Policy Board, who is responsible for making final decisions on department-wide financial policy issues including the oversight of SB1 efficiencies, approved the definition of efficiency savings as either a cost avoidance or a reduction in support or capital costs.

In July 2018, IOAI issued an audit report on Caltrans' Interim Report to the CTC for 2017-18 efficiency savings. The audit was limited to determining if the methods for calculating the savings were appropriate and supported; however, we did not audit the efficiency savings reported. The audit report identified areas for improvement and provided general recommendations to assist Caltrans in meeting SB 1 efficiency requirements.

In July 2019, IOAI issued an audit report on Caltrans final Annual Efficiencies Report for 2017-18 efficiency savings and found that Caltrans over-reported savings of \$8.7 million in savings. The audit report identified areas for improvement and provided several recommendations.

OBJECTIVES, SCOPE and METHODOLOGY

The objectives of the audit were to determine whether:

- The methodology used to calculate efficiency savings is supported.
- The reported efficiency savings is supported with adequate documentation and the estimated savings would be available for investment into the maintenance and rehabilitation of the state highway system.

The audit covered the period from July 1, 2018 through June 30, 2019. We conducted our audit from January 23, 2020 through October 1, 2020. Changes after these dates were not tested, and accordingly, our conclusions do not pertain to changes arising after October 1, 2020.

The current audit is based on Caltrans 2018-19 Annual Efficiencies Report submitted to the CTC. The report identified thirteen efficiencies that totaled \$233.1 million in savings. This audit focused on two of the largest efficiency savings areas, Acceleration of Work and Innovative Strategies in Striping Contracts, which represent \$64 million and \$30.4 million in reported savings, respectively. The specific background for each of the efficiencies is detailed in the Results and Recommendations section of this report.

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.

Results and Recommendations

CONCLUSION

We determined that while Caltrans was able to support their calculation of \$63 million in cost avoidance for Acceleration of Work, the audit identified key areas that were not addressed in the Efficiency Report, including but not limited to, identifying how prior year recommendations were incorporated and documenting the specific efficiency measures implemented to generate the cost avoidance.

In addition, we determined Caltrans could support a cost savings of \$27.7 million for Innovative Strategies in Striping Contracts.

Lastly, the two efficiencies had a total estimated savings of \$90.7 million and would be available for investment into the maintenance and rehabilitation of the state highway system.

ACCELERATION OF WORK

Background

In general, Caltrans' Acceleration of Work savings is based on the concept that the additional SB 1 funding enabled projects to move into construction a year sooner resulting in a savings from avoided escalation costs on labor and materials in future years. Specifically, and as reported by Caltrans, "With additional SB1 funding, Caltrans saw an opportunity to advance the development and delivery of critical maintenance and rehab of projects. Due to availability of additional funding, projects will move into construction sooner at a lower cost." As a result, Caltrans used the following formula to calculate the \$64 million in efficiency savings:

$$\text{\$1.5 billion (SB1 funds)} \times 4.25\% \text{ (1-year escalation rate)} = \text{\$64 million}$$

Audit Methodology

We interviewed key staff and reviewed available documentation to understand the approach and assumptions Caltrans used to report the Acceleration of Work efficiency savings. In addition, because Caltrans claimed \$9.2 million in Acceleration of Work savings in their prior 2017-18 Efficiency Report, we compared methodologies used for both years.

Specifically, we determined if:

- Caltrans implemented applicable recommendations from IOAI's July 2018 and July 2019 audits of Caltrans' Efficiency Reports.
- Caltrans had detailed support to show \$1.5 billion was used to fund SB 1 projects in 2018-19, and whether the support could be traced back to accounting records.
- The escalation rate used to calculate the savings was correct by comparing it to the escalation rate established in the 2018 State Transportation Improvement Program (STIP) Fund Estimate¹ approved and adopted by CTC.
- The savings would be available for investment into the maintenance and rehabilitation of the state highway system by tracing project funding to the SB 1 Road Maintenance and Rehabilitation account in Caltrans' accounting system.

Results

Based on Caltrans' current definition of efficiency savings, the methodology and cost avoidance of \$63 million for Acceleration of Work is supported; however, there are several key areas for improvement that Caltrans should consider moving forward.

New Methodology Does Not Incorporate Applicable Prior Year Audit Recommendations

Caltrans claimed Acceleration of Work for two consecutive years; once in 2017-18 for \$9.2 million and again in 2018-19 for \$64 million. However, while the savings concept of "time value of money" is the same in both years, Caltrans developed a new methodology for 2018-19 without distinguishing nor explaining the significant changes in the methodology. Additionally, Caltrans did not incorporate IOAI's prior year audit recommendations. Specifically, our July 2018 and July 2019 Audit Reports, included several audit recommendations including but not limited to the following related to Acceleration of Work:

- The monthly escalation rate should be based on the programmed fund estimate rate.

¹ The State Transportation Improvement Program Fund Estimate establishes an annual escalation rate that Caltrans uses to capture future increase in labor and materials costs on construction project that take multiple years to complete.

- Assumptions used in calculating savings should be noted in the efficiency report to the CTC.
- The list of projects included in the calculation is reviewed to ensure that projects reported under the Acceleration of Work are not also reported under NEPA.

According to Caltrans, the 2018-19 methodology captures savings at a programmatic level instead of the project level used in 2017-18. As a result, Caltrans documentation to support the savings consisted of the following formula without any project detail:

$$\$1.5 \text{ billion (SB 1 funds)} \times 4.25\% \text{ (escalation rate)} = \$64 \text{ million}$$

For audit purposes, we requested documentation to support the elements of the formula: the SB 1 funds and the escalation rate. Results are noted below.

Project Detail Was Not Initially Available to Support Savings Calculation

The reported savings was not calculated on a project specific basis. As a result, project detail was not initially available to validate the savings. At our request, Caltrans provided a list of projects; however, the list was incomplete. The final list to support the claimed \$1.5 billion in SB 1 funded projects included State Highway Operation and Protection Program (SHOPP)² construction capital costs, SHOPP construction support costs, and Highway Maintenance projects. We tested projects from the lists on a sample basis to verify that SB 1 project funding amounts agreed to amounts in Caltrans accounting system and verified total funding for all projects equaled or exceeded \$1.5 billion.

Inaccurate Escalation Rate Used

In general, escalation rates in the STIP Fund Estimates are developed to capture future increases in labor and material costs. The 2018 STIP Fund Estimate established an escalation rate of 4.2 percent which was approved and adopted by the CTC. The escalation rate used in the formula of 4.25 percent was higher than the 4.2 percent rate established in the 2018 STIP Fund Estimate and resulted in an overreported savings of \$1 million. Caltrans reported a cost avoidance of \$64 million but when the correct escalation rate of 4.2% is applied to the calculation the cost avoidance would be \$63 million (\$1.5 billion x 4.2%).

² The State Highway Operation and Protection Program is the State Highway System's "fix-it-first" program that funds the repair and preservation, emergency repairs, safety improvements, and some highway operational improvements on the State Highway System.

Assumptions and Associated Costs Not Included in Report to the CTC

In the July 2018 audit, we recommended that assumptions and considerations for all costs associated with efficiencies be noted in the report to the CTC, and Caltrans agreed with the recommendation. Caltrans reported the assumptions, "Accelerating projects will allow construction to begin sooner at a lower cost. It is assumed that the escalation rate will continue being the same as when projects were programmed." However, Caltrans did not include the impact of potential delayed and canceled projects. Caltrans stated they assumed delayed and canceled projects were insignificant factors that would not affect the cost avoidance. These are other types of assumptions and associated costs that should be included in the report to CTC. In addition, other assumptions such as the increase in administrative support costs associated with the significant increase in SB1 projects were not reported.

Implementing Efficiency Measures that Generate Costs Savings

In 2018, Caltrans approved the definition of an efficiency savings as being either a cost avoidance or a reduction in support or capital costs. While in theory, accelerating work can lead to cost avoidance, it is unclear what efficiency measures Caltrans implemented to generate the cost avoidance. Specifically, SB 1 requires Caltrans to implement efficiency measures with the goal to generate at least \$100 million per year in savings to invest in maintenance and rehabilitation of the state highway system. Additionally, Caltrans reported the Acceleration of Work savings under the category of Innovative Tools. Innovation is typically defined as (1) a new idea, method, or device (2) the introduction of something new³. Caltrans' Annual Efficiencies Report did not describe what efficiency measures were implemented nor explain how the Acceleration of Work was an innovative tool.

We acknowledge Caltrans' prior reports have reported several efficiency measures implemented that have generated millions in cost savings. Additionally, in 2017, Caltrans engaged a consulting firm to conduct preliminary research on efficiency savings best practices. That research found that reporting of efficiency savings varied widely, but many state departments of transportation (DOTs) reporting efficiency cost savings typically include:

- Value engineering and/or innovative contracting and project delivery approaches to reduce time, materials, or equipment use, and/or

3 "Innovation." Merriam-Webster.com Dictionary, Merriam-Webster, <https://www.merriamwebster.com/dictionary/innovation>. Accessed 17 Nov. 2020.

- Process improvements where staff creatively invented new ways to perform duties, maintain equipment, or utilize staff.

Furthermore, the research found certain state DOT's, such as Minnesota DOT, adopted additional parameters including conservative approaches in measuring efficiency savings "by only tracking savings that are directly attributed to deliberate decisions in planning, project management and delivery that advance efficient outcomes. Although external market forces can have an impact on MDOT's ability to stretch each dollar further, the agency is not counting savings that can be attributed to external market forces in this analysis." In conclusion, the consultant provided recommended next steps, including but not limited to:

- Review in detail the 2016 Minnesota DOT report that described the agency's estimated cost savings and how they were achieved using a more targeted approach to identify and quantify efficiencies.

The best practices and reporting parameters noted in the study are valid points for discussion between Caltrans and its stakeholders, including but not limited to determining whether efficiency savings should be required to include process improvements or innovations, and the number of years an efficiency can be reported. Furthermore, according to Caltrans, SB1 is estimated to provide \$1.6 billion in increased annual SHOPP revenue from 2018-19 to 2021-22⁴. As a result, Caltrans may continue to report \$64 million in Acceleration of Work cost savings annually. This savings alone will represent over 60 percent of the required \$100 million in efficiency savings.

Given the continued impact of this savings, Caltrans has an opportunity to consider additional parameters when reporting efficiency savings. Caltrans stated they will host a Peer Exchange with the Federal Highway Administration, other states, regional partners, and stakeholders to focus on efficiencies. According to Caltrans, this Peer Exchange will provide a forum for Caltrans to share its vision, strategies, and best practices for efficiencies and receive feedback from other experts.

Recommendations

- A. For transparency purposes, Caltrans should report significant methodology changes to efficiencies reported in previous fiscal years.

⁴ State Highway Operations Protection Program, 2018 SHOPP, Fiscal Years 2018-19 through 2021-21, adopted by CTC on March 22, 2018, pages ii and 13.

- B. Maintain a complete and accurate list of projects used to calculate savings, as recommended in our previous audit.
- C. Ensure the correct escalation rate is applied, as recommended in our previous audit.
- D. Report all assumptions and costs associated with the efficiency savings in the report to the CTC, as recommended in our previous audit.
- E. Clearly document and report in the Annual Efficiencies Report the specific "efficiency measures" implemented and if reported as an "Innovative Tool" explain how the efficiency is innovative in nature.
- F. Continue to evaluate and adopt best practices and parameters used by other organizations for reporting efficiency savings and documenting validation efforts. The adopted best practices and parameters should specifically include process improvements or innovations, and the number of years an efficiency can be reported.

Caltrans' Response

Caltrans concurs with the results and recommendations. Please see Attachment A.

INNOVATIVE STRATEGIES IN STRIPING CONTRACTS

Background

Prior to 2017-18, striping was a 1 to 2 percent component of larger paving, road widening, maintenance, and rehabilitation highway projects. In 2017-18, Caltrans Division of Maintenance completed 35 SB1 striping contracts with a total budget of \$200 million. Caltrans reported, that the winning bid prices for the 35 contracts came in higher than expected, specifically \$6.8 million higher than the engineer's estimate which are Caltrans' estimate for costs of individual materials and service items contractors bid on (bid items).

Caltrans stated that striping work is specialized and as a result only 10 striping contractors bid on the 35 contracts statewide. They also indicated that for this type of work there were increased risks to the contractor such as 1) the limited number of striping contractors resulted in contractors averaging 3-5 projects with overlapping start and end dates leading to a shortage of equipment, materials, and labor, 2) work area stationary closures were only half a mile long, forcing contractors to move safety cones and signs about 10 times per shift, and 3) work area stationary closures limited the hours contractors could work in certain districts.

According to Caltrans, for 2017-18 contractors anticipated these risks that affected their ability to complete their projects on time. As a result, the contractors increased prices on lump sum items such as traffic control as well as other bid items to cover the costs of potential liquidated damages in case they were unable to complete the striping projects on schedule. To mitigate these risks, in 2018-19, the Division of Maintenance worked with contractors and district traffic managers to develop three strategies for the SB1 striping contracts.

Innovative Strategies for 2018-19 Striping Contracts

- Contractors were given more working days to complete striping contracts and to work on overlapping contracts in different districts.
- District traffic managers agreed to allow more working hours and use moving lane closures instead of stationary closures.
- District traffic managers agreed to give the contractors a larger work area to increase the pace of operations.

Caltrans stated that by implementing the innovative strategies on the striping contracts for 2018-19 this led to lower bid prices and resulted in an efficiency savings. The \$30.4 million in efficiency savings reported for 2018-19 is the difference between the engineer's estimate and the winning contract prices for the 28 striping contracts that year.

Audit Methodology

We met with the Division of Maintenance and reviewed information explaining the efficiency to determine if the method for calculating the efficiency is supported. They explained that the engineer's estimate and contractors bid results were made up of individual bid items. In addition, we interviewed project engineers from Districts 7 and 8 to understand their process for developing engineer estimates on striping contracts.

Caltrans' calculations were reviewed to determine if the methodology was supported by verifying the following:

- If the \$30.4 million reported savings could be supported.
- If engineer's estimate for 2018-19 were based on the 2017-18 winning bid prices.
- If bid items not affected by the innovative strategies were excluded from the efficiency savings.

- If bid items with no baseline for comparison in the previous fiscal year (2017-18) were excluded from the efficiency savings.
- If Caltrans implemented applicable recommendations from IOAI's previous audits of Caltrans' efficiency reports.

In addition, we verified if the savings would be available for investment into the maintenance and rehabilitation of the state highway system by tracing funds to the SB 1 account in Caltrans accounting system.

Results

We determined Caltrans supported a cost savings of \$27.7 million instead of \$30.4 million and that the methodology for the Innovative Strategies in Striping Contracts could be improved.

Baseline for Measuring Efficiency Savings Should be Based on Prior Year Winning Bid Prices Instead of Engineer's Estimates

We determined the difference between the \$27.7 and \$30.4 million was due to Caltrans methodology of comparing engineering estimates to contractors' bid results instead of comparing the current year's winning bid prices to the prior year's contract winning bid prices. However, we found the factors used in determining the engineer's estimates were not always consistent across projects and therefore engineer's estimates were not the most reliable figures to use when calculating efficiency savings. The methodology for developing engineer estimates was based on a combination of project specific variables such as the location, quantities and availability of materials, the type of roadway or highway being striped, and winning bid prices from 2017-18.

Our testing also found Caltrans' calculations included bid items that did not have comparable 2017-18 baseline costs and were not affected by the innovative strategies; therefore, they should not have been factored into the savings.

As a result, a more consistent approach for calculating efficiency savings was to compare 2017-18 winning bid prices (established prior to implementing the innovative strategies) to 2018-19 winning bid prices. This difference in prices could be attributed to Caltrans' implementation of its new strategies. By using this approach, we removed the project specific variables used in engineer's estimate that can cause inconsistent measuring of efficiency savings across projects.

Recommendation

Efficiency savings for striping contracts should be calculated using 2017-18 winning bid prices (since innovative strategies were implemented after 2017-18) as a baseline to compare to current fiscal year winning bid prices as recommended in our previous audit of Value Analysis efficiencies.

Caltrans' Response

Caltrans concurs with the results and recommendation. Please see Attachment A.

ATTACHMENT A

DEPARTMENT OF TRANSPORTATION

SENATE BILL 1 PROGRAM MANAGEMENT

P.O. BOX 942873, MS-49

SACRAMENTO, CA 94273-0001

PHONE (916) 651-9197

TTY 711

www.dot.ca.gov



*Making Conservation
a California Way of Life.*

December 23, 2020

Rhonda Craft

Inspector General

Independent Office of Audits and Investigations

P.O. Box 942874, MS-2

Sacramento, CA 94274-0001

Subject: SB 1 2018-19 Efficiencies Draft Audit Report

Dear Ms. Craft,

The California Department of Transportation (Caltrans) appreciates the opportunity to provide a response to the draft audit report on the SB 1 2018-2019 Efficiencies Audit, dated December 2020. The purpose of this audit was to determine if the savings reported in the SB 1 Annual Efficiencies Report are supported and available for investment in the maintenance and rehabilitation of the state highway system, as required by Senate Bill 1 (SB 1).

Caltrans is pleased the Independent Office of Audits and Investigations (IOAI) determined Caltrans was able to support \$90.7 million of the \$94.4 million in reported savings as well as support that the cost avoidance is available for reinvestment in the maintenance and rehabilitation of the state highway system. This \$90.7 million reflects a portion of the \$233 million in total efficiencies submitted in Caltrans 2018-19 Efficiency Report.

While the main objective for the audit was achieved, Caltrans would like to comment on IOAI's observations and findings:

Incorporation of Previous Audit Recommendations

Caltrans has incorporated improvements from previous audit recommendations and these are reflected in the 2018-19 Efficiency Report as well as subsequent reports. Based on the feedback provided in this audit report, it appears the recommendations should have been more

"Provide a safe, sustainable, integrated and efficient transportation system to enhance California's economy and livability"

clearly reflected. Caltrans will endeavor to more clearly incorporate recommendations in future reports.

Acceleration of Work

IOAI's observation that Caltrans applied the incorrect rate when calculating the savings/cost avoidance in the Acceleration of Work efficiency is correct. An incorrect rate was applied in error. Caltrans accepts the adjusted efficiency savings. Caltrans will perform further review and analysis in reporting efficiencies to avoid this type of error in the future.

IOAI reported the Project List for the 2018-19 Acceleration of Work efficiency was not immediately available. The acceleration savings reported in the 2017-18 Efficiency Report was project specific. The acceleration savings reported in the 2018-19 Efficiency Report was calculated at a programmatic level. A programmatic calculation does not require a project list, as it's calculated at a higher level which is the reason a project list was not initially available. At the request of IOAI, Caltrans collated the project list to support the programmatic numbers included in the efficiency. Caltrans is not likely to pursue accelerated project(s) efficiency in future efficiency reports.

Implementing Efficiency Measures

IOAI noted Caltrans did not describe what efficiency measures were implemented nor explain how Acceleration of Work was categorized as an innovative tool. Caltrans recognized a new approach was necessary in subsequent reports to provide a clearer reflection of efficiency efforts and the observations of IOAI are appreciated. While Caltrans' 2019-20 Efficiency Report was released prior to this audit being issued, Caltrans included new categorizations of efficiencies in the 2019-20 report which will address these observations.

Peer Exchange

Caltrans acknowledges the observations of other Departments of Transportation practices as noted in the audit. Caltrans also appreciates the recognition of the Peer Exchange efforts in progress. Caltrans organized the nation's first Peer Exchange focused specifically on Efficiencies. The effort included other state Departments of Transportation, local transportation organizations throughout California, University of

California, California State University and the Federal Highway Administration (FHWA). This effort allowed for a robust exchange of information among entities with the same goal of achieving efficiencies. Caltrans will continue to lead Peer Exchanges on efficiencies in the future. Caltrans is finalizing the final report from the Exchange and working with subject matter experts to evaluate and incorporate suggestions where applicable.

Caltrans appreciates the opportunity to provide comments on this audit specifically. Caltrans also appreciates feedback from IOAI and opportunity to improve processes, increase transparency, and ensure follow through on Senate Bill 1 commitments.

We look forward to working with IOAI on future audits.

Sincerely,

ANGEL PYLE
Senate Bill 1 Program Manager

c: Jim Davis, Chief Deputy Director, Caltrans
Steven Keck, Finance Deputy Director, Caltrans
David Ambuehl, Acting Chief, Division of Maintenance, Caltrans
Michael B. Johnson, P.E., State Asset Management Engineer, Caltrans
Camille Abou-Fadel, Statewide Maintenance Operations Manager, Office of Roadway Engineering, Division of Maintenance, Caltrans
Diana Antony, Chief Deputy Inspector General, Independent Office of Audits and Investigations
Frances Parmelee, Assistant Chief Deputy Inspector General, Independent Office of Audits and Investigations
Alice Lee, Audit Chief, Office of Project and Delivery, Independent Office of Audits and Investigations
David Wong, Audit Manager, Independent Office of Audits and Investigations