

STATE OF CALIFORNIA
Budget Change Proposal - Cover Sheet
 DF-46 (REV 10/20)

Fiscal Year 2021-22	Business Unit 2740	Department Motor Vehicles	Priority No. 4
Budget Request Name 2740-074-BCP-2021-MR		Program 2130 – Vehicle/Vessel Identification Compliance	Subprogram N/A

Budget Request Description

Heavy-Duty Vehicle Inspections and Maintenance Program (SB 210)

Budget Request Summary

The Department of Motor Vehicles (DMV) requests one-time implementation resources from the Air Pollution Control Fund to continue implementation activities associated with Chapter 298, Statutes of 2019 (SB 210, Leyva). This legislation requires the California Air Resources Board (CARB) to adopt and implement a regulation for a Heavy-Duty Vehicle Inspection and Maintenance Program for non-gasoline motor vehicles with a gross vehicle weight rating of more than 14,000 pounds. This bill will require the DMV to withhold registration from vehicles that fail to establish emission compliance.

Requires Legislation <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Code Section(s) to be Added/Amended/Repealed Click or tap here to enter text.	
Does this BCP contain information technology (IT) components? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <i>If yes, departmental Chief Information Officer must sign.</i>	Department CIO Rico Rubiono	Date Click or tap to enter a date.

For IT requests, specify the project number, the most recent project approval document (FSR, SPR, S1BA, S2AA, S3SD, S4PRA), and the approval date.

Project No. 2740-226 **Project Approval Document:** SB 210 Heavy Duty Vehicle Emissions Compliance S2AA

Approval Date: Click or tap to enter a date.

If proposal affects another department, does other department concur with proposal? ☒ Yes ☐ No

Attach comments of affected department, signed and dated by the department director or designee.

Prepared By Dina Martinez	Date 5/11/2021	Reviewed By Lee Scott	Date Click or tap to enter a date.
Department Director Steve Gordon	Date Click or tap to enter a date.	Agency Secretary David S. Kim	Date Click or tap to enter a date.

Department of Finance Use Only

Additional Review: ☐ Capital Outlay ☐ ITCU ☐ FSCU ☐ OSAE ☐ Dept. of Technology

PPBA Click or tap here to enter text.	Date submitted to the Legislature Click or tap to enter a date.
---	---

Analysis of Problem

A. Budget Request Summary

The Department of Motor Vehicles (DMV) requests one-time implementation resources from the Air Pollution Control Fund to continue implementation activities associated with Chapter 298, Statutes of 2019 (SB 210, Leyva). This legislation requires the California Air Resources Board (CARB) to adopt and implement a regulation for a Heavy-Duty Vehicle Inspection and Maintenance Program for non-gasoline motor vehicles with a gross vehicle weight rating of more than 14,000 pounds. This bill will require the DMV to withhold registration from vehicles that fail to establish emission compliance.

In FY 2021/22, \$1.17 million will be immediately available for expenditure on July 1, 2021 and the remaining \$523,000 appropriation will be available through provisional budget language contingent upon approval of the Stage Four Project Readiness/Approval. The cost in FY 2022/23 and beyond are estimated through the PAL process. However, as with all projects, the project scope and requirements may change as the project moves forward. CARB and DMV will work collaboratively to identify resources to meet the requirements of the bill by the implementation date and plan to jointly submit a budget change proposal for Heavy-Duty Inspection and Maintenance in the Fall of 2021.

B. Background/History

In California, there are approximately 35 million registered vehicles, of which approximately 510,000 are subject to the Commercial Vehicle Registration Act fees. Currently, all registered vehicles are subject to the biennial smog program, except diesel-powered vehicles 1997 model year and older with a gross vehicle weight rating of more than 14,000 pounds, electric, natural gas-powered vehicles over 14,000 pounds, motorcycles, trailers, or gasoline-powered vehicles 1975 and older.

SB 210 requires CARB, in consultation with the Bureau of Automotive Repair and DMV, to create a maintenance and inspection program for non-gasoline, heavy-duty vehicles with a gross vehicle weight rating over 14,000 pounds. Prior to registration or the transfer of ownership, CARB must collaborate with the DMV to confirm compliance or exemption from the Heavy-Duty Vehicle Inspection and Maintenance Program. Registered owners who fail a smog inspection may obtain a \$50 Temporary Operating Permit (TOP) from DMV until the vehicle passes inspection, assisting in the enforcement of clean air standards.

The statute includes a mandate for CARB to consult with state agencies, including DMV to develop and demonstrate a solution that shows potential for readily bringing vehicles into this new program. To remain compliant with the requirements of SB 210, DMV and CARB must implement a data exchange by July 2023 and withhold registrations for non-compliant vehicles by October 2023.

DMV is currently undergoing a modernization effort. In order to reduce the risk of legacy core system failure the department is implementing a containment strategy which will circumvent legacy system changes. The recommended solution must leverage alternative approaches to alleviate pressure on DMV's obsolete technology. In July 2020, DMV received planning funds for the implementation of SB 210 to hire a project manager, develop requirements and provide project oversight alongside CARB. DMV and CARB have developed a workgroup to create the requirements and Project Approval Lifecycle (PAL) documents for compliance with SB 210. The Stage 1 Business Analysis (S1BA) and Stage 2 Alternative Analysis (S2AA) were

developed in conjunction with CARB. The S1BA was approved by California Department of Technology (CDT) on April 14th, 2020 and the S2AA is anticipated to be approved May 2021.

DMV and CARB will use existing data exchange protocols to allow DMV to receive the list of vehicles that meet SB 210 requirements and California Vehicle Identification Numbers (VIN) that can be registered from CARB. In addition, CARB will provide DMV with the following data: license plate number, the last date the vehicle passed the emission test, and any updates from a prior list (i.e. an addition or deletion of a vehicle VIN).

DMV focused on finding a solution that can interface with the existing legacy solution, DMV Automation (DMVA), using IBM Host Access Transformation Services (HATS). A key benefit of the HATS solution is its ease of use and transparency to the current DMVA database and Vehicle Registration applications. HATS will be used by DMV staff to update registration records, verify the compliance with SB 210 requirements and place holds on non-compliant vehicles. In addition, the HATS solution provides the following benefits:

- Maintains the existing screen layouts, look, and feel to reduce training needs.
- Mirrors existing Vehicle Registration (VR) functionality including function keys and keyboard commands.
- Provides a handful of enhancements, such as clickable command links, to improve the user experience.

For its part, CARB is anticipated to inspect around 651,000 heavy duty vehicles through the Motor Carrier Permit for operations limited to the state of California and 400,000 more vehicles through the International Registration Plan (IRP) for out-of-state operations. CARB is expected to generate \$30 million per year through these inspections, where each inspection is \$30 per vehicle and inspections are required on a quarterly or semiannual basis based on the vehicle testing method.

Of these vehicles, DMV is expecting to process 651,000 registration transactions annually:

- 6,000 for Non-resident Original Transactions
 - 100% - 6,000 anticipated to require a Field Office Visit
- 45,000 for Transfer Transactions
 - 95% - 42,750 anticipated to come into a Field Office.
 - 5% - 2,250 anticipated to be handled at Headquarters.
- 600,000 for Renewal Transactions
 - 30% - 180,000 anticipated to come into a Field Office.
 - 70% - 420,000 anticipated to be processed at Headquarters.

Total: 651,000 Annual Registration Transactions

Registered owners who fail a smog inspection may obtain a \$50 Temporary Operating Permit (TOP) from DMV upon request:

- Non-resident Originals
 - 75% - 4,500 assumed will be non-compliant
 - 25% - 1,500 assumed will be compliant

- Transfer Transactions
 - 34% - 15,300 assumed will be non-compliant
 - 66% - 29,700 assumed will be compliant
- Renewal Transactions
 - 18% - 105,644 assumed will be non-compliant
 - 82% - 494,356 assumed will be compliant

The first year of costs are known with a high degree of certainty through the state's PAL process. The cost in FY 2022/23 and beyond are estimated through the PAL process. However, as with all projects, the project scope and requirements may change as the project moves forward into the solution development phase anticipated to be complete by September 2021. CARB and DMV will work collaboratively to identify resources to meet the requirements of the bill by the implementation date and plan to jointly submit a budget change proposal for Heavy-Duty Inspection and Maintenance in the Fall of 2021.

C. State Level Consideration

This request addresses the department's strategic goals to "Create flexible, secure technology systems to enable innovation and continuous improvement" and "Embed measurable efficiency in every aspect of the organization". DMV is leveraging the existing technology stack to ensure the recommended solution meets the needs of the SB 210 business requirements and support the constraints of the DMVA containment strategy.

The SB 210 program for Heavy-Duty non-gasoline engines with gross vehicle weight rating over 14,000 pounds, will result in a transition to lower-Green House Gas (GHG) trucks statewide. The success of the program will directly impact California's ability to meet GHG reduction targets set forth in AB 32 and SB 32 as well as reduce health impacts from diesel particulate matter, and impact California's ability to meet air quality and climate goals set forth in the State Implementation Plan and Climate Change Scoping Plan.

D. Justification

CARB and DMV are anticipating the Heavy-Duty Vehicle Inspection and Maintenance Program for non-gasoline motor vehicles with a gross vehicle weight rating of more than 14,000 pounds to be implemented/operational for vehicle registration and transfer transactions effective October 2023, with DMV supporting a data exchange of vehicles in compliance with CARB emission standards in July 2023. In order to meet the anticipated implementation date, the department must implement an IT solution to ensure compliance with SB 210. The proposed system will interface with the core DMVA legacy system to integrate functionality and transfer data with CARB on vehicles suitable for registration by the DMV. DMV is requesting one-time funding for FY 2021/22, which includes project support to complete the Project Approval Lifecycle (PAL) and award the HATS contract (March 2022). A multi-year IT project is required to comply with the requirements of SB 210.

Smog Policy Analyst:

DMV requests temporary help funding of 1.0 Manager III position and \$154,000 in FY 2021/22 to support the implementation of SB 210 to support system design requirements, interpret regulations, and collaborate with stakeholders.

Classification	FY 2021/22
Manager III	1.0
Total Requested Positions:	1.0

DMV is requesting one Manager III to act as a policy analyst specializing in SB 210 requirements. This analyst will directly interact with the California Air Resources Board (CARB) to address specific situations related to SB 210, including a vehicle's notation in DMV systems and customer outreach.

Due to SB 210 impacts on vehicles entering California, this analyst will serve as a policy analyst representing California on international programs, such as the Interstate Registration Program (IRP), to address emission-related questions posed by out-of-state drivers/companies and act as a liaison between the driver/company, CARB and law enforcement. This Manager III will be responsible for developing/updating the IAA(s), monitoring CARB workload activities, and researching inquiries by CARB related to vehicle status. They will also work to identify and implement emissions-related policy and procedure changes.

This analyst will also be responsible for coordinating emissions programming requests and user acceptance testing, collaborating with DMV's Information Services Division to troubleshoot system defects, conducting data analysis and reporting activities.

HATS Solution Consultant

DMV requests \$88,000 in funding in FY 2021/22 to hire a vendor to begin development of the IT solution for the legacy system, DMVA.

The HATS consultant will implement the SB 210 program by incorporating the business rules in the DMVA system. This will allow the Motor Vehicle Representatives to process vehicle registration or renewal transactions directly into the legacy system without a breach of containment. The heavy-duty vehicle information will be verified against the new table of SB210 compliant VINs provided by CARB and based on SB 210 compliance, the transaction will either be completed or marked as pending.

The vendor will also be required to use the existing DMVA platform and business processes to integrate the detailed requirements into the solution. The SI will need to ensure the solution enables DMV to continue to interface with CARB and 3rd party service providers. The SI staff will be required to educate and transfer the knowledge to the DMV technical staff as to how the program is implemented and how to update the system to address future changes. DMV supports selecting vendors with significant experience in the development and implementation.

Supporting Contracts

DMV requests \$1.28 million in funding for necessary support contracts in the areas of oversight, planning, management, business analysis and IRP change implementation.

	FY 2021/22
Supporting Contracts	\$ 1,283
CDT Oversight	\$ 163
Project Management	\$ 300
Independent Verification & Validation	\$ 134
Organizational Change Management	\$ 111
Business Analyst Contractor	\$ 200
IRP Implementation	\$ 375

The department requests \$163,000 in FY 2021/22 to obtain consultative and oversight services from the California Department of Technology (CDT) in the areas of project management and Statewide Technology Procurement through the PAL Stage 4.

In addition, consultants will assist departmental staff with the Project Approval Lifecycle (PAL) deliverables and risk assessment, and mitigate the issues related to the project. In collaboration with staff, the consultants will formulate a change management plan for the project's preplanning activities, develop a focused communication strategy that includes all stakeholders and assists the DMV team address technical and business needs.

The Business Analyst will design the system based on business requirements, modify the system alongside of the DMV technical staff and provide documentation and knowledge transfer to users at DMV.

DMV requests \$375,000 in funding in FY 2021/22 to contract for IRP support services. This contract is necessary to hire developers to modify and support the Vehicle Registration and Remittance applications for SB 210 program. This is necessary to make SB 210 compliance changes in the current IRP vendor's system, thereby allowing staff to implement registration holds for non-compliant vehicles.

Other Operating Expenses and Equipment

DMV requests \$169,000 for support computers, licenses and 10% contingency on operating expenses and equipment cost, as is customary for multi-year IT projects.

E. Outcomes and Accountability

DMV requires current inspection and emissions results that supports its ability to issue valid heavy-duty vehicle registrations. CARB and the law enforcement communities require current TOP data from DMV to ensure heavy-duty vehicles are operating within the State with a valid certification.

The SB 210 program will enable California to enforce the compliance of clean air standards prior to vehicle registrations or renewals. Successful implementation of this program will add over 651,000 heavy duty vehicles over 14,000 pounds into California's clean air program thereby reducing emissions resulting in cleaner air for the benefit of all Californians.

F. Analysis of All Feasible Alternatives

Alternative #1: DMV will use the existing DMVA platform with modifications to the current enterprise architecture to integrate functionality available in products such as IBM HATS as a solution to meet the requirements of the bill by the implementation date.

Cost: \$1.7 million in FY 2021/22 to begin activities associated with the implementation of SB 210

Pros:

- SB 210 schedule risks are potentially mitigated without reliance on the DXP modernization effort.
- Increases the opportunity for program success by mitigating the need for separate resource pools for development and integration activities.
- Converting the business logic into some rules and implementing the HATS layer without replacing the entire functionality will be an easier and modular approach.
- Reduces the risk that essential services will be unavailable impacting both DMV and CARB efforts to implement the SB 210 legislation.

Cons:

- Increased costs due to the effective date of October 2023 which will create the need to develop an interim solution prior to the implementation of the Digital eXperience Platform (DXP), the DMV modernization project.
- Scope will be limited to reduced functionality due to the containment constraints in order to meet the scheduled due date. Further enhancements will be introduced when the DXP platform completes the Vehicle Registration (VR) phase.

Alternative #2: A Platform-as-a-Service (PaaS) solution will be developed and maintained by a service provider to the DMV enabling the modification, running, and management of business applications impacted by SB 210. Additional infrastructure will need to be built to meet the October 2023 implementation date. DMV will incur the expense and complexity of buying and managing additional software licenses solely for support of the SB 210 program. DMV staff will manage the applications and services while the cloud platform service provider would manage the PaaS in the interim until SB 210's requirements are merged into the future DMV modernization project.

Cost: \$8.9 million in FY 2021/22, \$17.8 million for FY 2022/23, \$17.8 million for FY 2023/24 and \$13.3 million for FY 2024/25 and ongoing funding of \$3.2 million and 28.0 permanent positions to support the SB 210 Heavy Duty Vehicle Inspection and Maintenance Program.

Pros:

- Reduces the risk that legacy services will be unavailable impacting both DMV and CARB efforts to implement the SB 210 legislation.

Cons:

- Costs are higher due to the complex nature of the development and implementation of a standalone system.
- The implementation date of July 2023 will create the need to develop a duplicate, disparate platform solution.
- The SB 210 program on-going operations and maintenance will need to be merged into the DXP at a later date.
- Schedule delays could impact the success of the SB 210 program.

Alternative #3: In agreement with CARB, implementation of SB 210 will be delayed by 18 months from October 2023 to January 2025 to coincide with the timeline for DXP. SB 210 functionality will be built into the DXP Project.

Cost: \$171,000 for FY 2021/22, \$1.6 million for FY 2022/23, \$3.3 million for FY 2023/24 and \$1.4 million funding and 5.0 permanent positions in FY 2024/25 and ongoing to support SB 210.

Pros:

- Cost avoidance of approximately \$10 million in one-time IT costs to implement the interim SB 210 solution.

Cons:

- Introduces additional risk into SB 210, due to the dependence on DXP timeline.
- Environmental impacts – may not address the intent of the bill in a timely fashion.

G. Implementation Plan

Project Approval Lifecycle Review and Approval Process:

The Project Approval Lifecycle (PAL) is divided into four stages, each separated by approval “gates”. The gates provide a series of approval points, where CDT will involve Critical Partners from across CDT and other state control agencies, such as DOF and DGS, to evaluate the PAL documents and provide approval to progress to the next stage. As additional information is collected and refined through the PAL, the cost estimates, schedules and business objectives will be progressively updated and evaluated to determine if the project is still practical to pursue the State investment. Following is the estimated timeline for the SB 210 Project PAL stages:

PAL Stages	Start Date	Complete
Stage 1 Business Analysis	February 2020	April 2020
Stage 2 Alternatives Analysis	April 2020	May 2021
Stage 3 Solution Development	May 2021	September 2021
Stage 4 Project Readiness & Approval	September 2021	March 2022

The complete project schedule will be developed as Stage 3 is completed. DMV and CARB must implement a data exchange by July 2023 and withhold registrations on non-compliant vehicles by October 2023. DMV and CARB staff plan to jointly submit a budget change proposal for Heavy-Duty Inspection and Maintenance in the Fall of 2021.

H. Supplemental Information

	Planning	Project	Total FY 2021/22
Staff Costs (Salaries & Benefits)	\$ 101,127	\$ 33,709	\$ 134,836
Standard Complement (Staff)	\$ 41,150	\$ 5,045	\$ 46,195
PAL/Oversight	\$ 90,000	\$ -	\$ 90,000
STP	\$ 73,080	\$ -	\$ 73,080
Independent Verification & Validation	\$ 100,500	\$ 33,500	\$ 134,000
Project Management (Incl. PAL PM)	\$ 225,000	\$ 75,000	\$ 300,000
Business Analyst/Testing	\$ 200,000	\$ -	\$ 200,000
Organizational Change Management	\$ 83,250	\$ 27,750	\$ 111,000
IRP Implementation	\$ 150,000	\$ 225,000	\$ 375,000
HATS	\$ -	\$ 87,500	\$ 87,500
Contingency	\$ 106,259	\$ 35,420	\$ 141,678
Total	\$ 1,170,366	\$ 522,924	\$ 1,693,289

I. Recommendation

The recommendation is to approve Alternative #1 – providing DMV with the requested funding to continue the implementation of the requirements set by Heavy-Duty Vehicle Inspection and Maintenance Program (SB 210). CARB and DMV will work collaboratively to identify resources to meet the requirements of the bill by the implementation date.

BCP Fiscal Detail Sheet

BCP Title: Heavy-Duty Vehicle Inspections and Maintenance Program (SB 210)

BR Name: 2740-074-BCP-2021-MR

Budget Request Summary

Personal Services

Personal Services	FY21 Current Year	FY21 Budget Year	FY21 BY+1	FY21 BY+2	FY21 BY+3	FY21 BY+4
Salaries and Wages Earnings - Temporary Help	0	77	0	0	0	0
Salaries and Wages Overtime/Other	0	8	0	0	0	0
Total Salaries and Wages	\$0	\$85	\$0	\$0	\$0	\$0
Total Staff Benefits	0	50	0	0	0	0
Total Personal Services	\$0	\$135	\$0	\$0	\$0	\$0

Operating Expenses and Equipment

Operating Expenses and Equipment	FY21 Current Year	FY21 Budget Year	FY21 BY+1	FY21 BY+2	FY21 BY+3	FY21 BY+4
5301 - General Expense	0	7	0	0	0	0
5304 - Communications	0	1	0	0	0	0
5322 - Training	0	1	0	0	0	0
5340 - Consulting and Professional Services - Interdepartmental	0	163	0	0	0	0
5340 - Consulting and Professional Services - External	0	545	0	0	0	0
5346 - Information Technology	0	841	0	0	0	0
Total Operating Expenses and Equipment	\$0	\$1,558	\$0	\$0	\$0	\$0

Total Budget Request

Total Budget Request	FY21 Current Year	FY21 Budget Year	FY21 BY+1	FY21 BY+2	FY21 BY+3	FY21 BY+4
Total Budget Request	\$0	\$1,693	\$0	\$0	\$0	\$0

Fund Summary

Fund Source

Fund Source	FY21 Current Year	FY21 Budget Year	FY21 BY+1	FY21 BY+2	FY21 BY+3	FY21 BY+4
State Operations - 0115 - Air Pollution Control Fund	0	1,693	0	0	0	0
Total State Operations Expenditures	\$0	\$1,693	\$0	\$0	\$0	\$0
Total All Funds	\$0	\$1,693	\$0	\$0	\$0	\$0

Program Summary

Program Funding

Program Funding	FY21 Current Year	FY21 Budget Year	FY21 BY+1	FY21 BY+2	FY21 BY+3	FY21 BY+4
2130 - Vehicle/Vessel Identification and Compliance	0	1,693	0	0	0	0
Total All Programs	\$0	\$1,693	\$0	\$0	\$0	\$0

Personal Services Details

Salaries and Wages

Salaries and Wages	FY21 Current Year	FY21 Budget Year	FY21 BY+1	FY21 BY+2	FY21 BY+3	FY21 BY+4
-	0	0	0	0	0	0
TH00 - Temporary Help	0	85	0	0	0	0
Total Salaries and Wages	\$0	\$85	\$0	\$0	\$0	\$0

Staff Benefits

Staff Benefits	FY21 Current Year	FY21 Budget Year	FY21 BY+1	FY21 BY+2	FY21 BY+3	FY21 BY+4
5150150 - Dental Insurance	0	1	0	0	0	0
5150350 - Health Insurance	0	10	0	0	0	0
5150450 - Medicare Taxation	0	1	0	0	0	0
5150500 - OASDI	0	5	0	0	0	0
5150600 - Retirement - General	0	23	0	0	0	0
5150800 - Workers' Compensation	0	3	0	0	0	0
5150820 - Other Post-Employment Benefits (OPEB) Employer Contributions	0	2	0	0	0	0
5150900 - Staff Benefits - Other	0	5	0	0	0	0
Total Staff Benefits	\$0	\$50	\$0	\$0	\$0	\$0

Total Personal Services

Total Personal Services	FY21 Current Year	FY21 Budget Year	FY21 BY+1	FY21 BY+2	FY21 BY+3	FY21 BY+4
Total Personal Services	\$0	\$135	\$0	\$0	\$0	\$0

STATE OF CALIFORNIA

Budget Change Proposal – Heavy-Duty Vehicle Inspections and Maintenance Program (SB 210)

DF-46 (REV 10/20)

Parameters	Selected Values
Year	FY21
Department	2740
House	MR Dept Working
BR Name	2740-074-BCP-2021-MR
Run Time	03/26/2021 06:51:32 PM
Last Data Refresh	03/26/2021, 06:48 PM