

STATE OF CALIFORNIA
Budget Change Proposal - Cover Sheet
 DF-46 (REV 02/20)

Fiscal Year 2021/22	Business Unit 2720	Department California Highway Patrol	Priority No. 4
Budget Request Name 2720-013-BCP-2021-GB		Program Traffic Management	Subprogram Ground Operations

Budget Request Description
 Replacement of Portable Radios

Budget Request Summary

The California Highway Patrol (CHP) requests \$8.604 million permanent augmentation from the Motor Vehicle Account to replace portable radios and accessories that have exceeded the life expectancy, are out of warranty, and unserviceable.

The portable radio is vital to the mission of the CHP as it is a critical and indispensable link between officers in the field, communications centers, and allied agencies.

Requires Legislation <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Code Section(s) to be Added/Amended/Repealed	
Does this BCP contain information technology (IT) components? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <i>If yes, departmental Chief Information Officer must sign.</i>	Department CIO	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. _____ **Project Approval Document:** _____

Approval 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 J. R. DOLCE, Captain	Date 1/4/2021	Reviewed By Michelle Fojas	Date 1/4/2021
Department Director Amanda L. Ray	Date 1/4/2021	Agency Secretary David S. Kim	Date 1/4/2021

Department of Finance Use Only

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

PPBA	Date submitted to the Legislature
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A. Budget Request Summary

The California Highway Patrol (CHP) requests \$8.604 million permanent augmentation from the Motor Vehicle Account (MVA) to replace portable radios and accessories that have exceeded the life expectancy, are out of warranty, and unserviceable. This proposal seeks to replace 1,630 radios annually or twenty percent of the Department's initial inventory as baseline for continuing replacement of aging radios.

The portable radio is vital to the mission of the CHP as it is a critical and indispensable link between officers in the field, communications centers, and allied agencies.

B. Background/History

Prior to the initial acquisition of Motorola APX portable radios, the CHP had an inventory of 9,600 EF Johnson single band portable radios. This inventory included a ten percent surplus to allow for breakage, loss, or special needs. The EF Johnson single band portable radio proved to be poorly suited to the varying operational environments of the CHP. Due to unprecedented failure rates, unreliable repairs, and the inherent risk to officer safety, the EF Johnson radio was removed from service. In Fiscal Year (FY) 2015/16, the CHP purchased 8,153 Motorola APX portable multi-band radios and sufficient accessories to deploy to CHP uniformed staff. This initial inventory did not include a surplus of spare equipment. The Motorola APX has proven to be a reliable and durable hand-held radio. While superior to the EF Johnson in every respect, the Motorola APX portable radios have an expected service life of five to seven years depending on the mode of operational environment. These radios have been in the field since early 2015 and are showing signs of wear and tear due to daily use. In addition, the existing stock of consumable accessories such as batteries, antennas, and lapel microphones are insufficient to fully support continuing needs.

C. State Level Consideration

The ability to use point-to-point public safety radio communications equipment is fundamentally tied to the CHP's mission and role in essential services and emergency response. The proposed purchase of Motorola APX portable radios fulfills this need with the ability to interoperate with allied agencies and maintain operations during catastrophic events.

The Motorola APX radios are Federal Communications Commission compliant, meet Project 25 (P-25) narrow-banding mandates, and fulfill the CHP's need to deploy field level interoperable radio communications. This proposal is also consistent with the California Public Safety Radio Communications (CAPSCOM) Strategic Plan of 2010. The CAPSCOM was written as a five to ten-year plan which includes the following guidelines:

- The statewide public safety communications strategy must strive towards providing optimized support for each agency's mission. New enforcement vehicle modular land-mobile radio systems will integrate with the equipment implemented by the California Highway Patrol Enhanced Radio System project, maintaining a state of the art and highly expandable communications system utilized by the CHP.

- All new and existing state public safety radio systems must integrate with the overall California "System of Systems" strategy outlined in the California Statewide Communications Interoperability Plan. New enforcement vehicle modular land-mobile radio systems would be Internet Protocol (IP)-based, allowing them to be remotely administered and integrated with other new or evolving technologies.
- New public safety radio communications systems must consist of modern, standards-based digital technologies. The most technologically advanced portable public safety radio systems on the market today are fully digital, state of the art systems utilizing the newest technologies available. The proposed system incorporates over-the-air programming and over-the-air rekeying. These technology features significantly decrease the need for hands-on work, saving both time and money.
- Standardized voice and data solutions must be deployed across agencies to the extent possible. The new enforcement vehicle modular land-mobile radio systems available today can be integrated with other digital voice communications systems, such as Voice over IP and Radio over IP technologies currently used by the CHP and other local, state, and federal agencies.

The CAPSCOM Strategic Plan provided a vision where California would establish a "System of Systems" architecture and infrastructure. The plan specified the state would prepare to procure shared systems in the next five to ten years (from 2010). This project is strongly aligned with the CAPSCOM Strategic Plan and serves to continue the state's vision of a "System of Systems," which is currently being installed by the Governor's Office of Emergency Services, Public Safety Communications.

D. Justification

An officer's ability to communicate while on foot patrol is critical for their daily tasks, making the portable radio vital to the mission of the CHP. It is a critical and indispensable link between officers in the field, communications centers, and allied agencies. The Motorola APX multi-band portable radio also provides communications between state, county, and city-owned radio systems, in addition to providing for nationwide interoperability radio channels.

The current inventory of portable radios is insufficient to meet current needs and has reached the initial stages of the replacement life-cycle. The CHP seeks to establish a five-year replacement strategy to meet both incidental and ongoing replacement needs as well as to have a needed, readily-available replacement supply. Failures of currently deployed Motorola APX portable radios are regularly occurring due to the age of the equipment. The inability to have replacement radio equipment may render officers ineffective for both emergency and operational services and compromise their safety, putting both patrol officers and the public at risk.

Procuring replacements as well as an available stock of portable radios and accessories leverages the power of wholesale purchasing through statewide contracting and eliminates the costs included with individual emergency purchases.

E. Outcomes and Accountability

Since the initial purchase of Motorola APX portable radios in FY 2015/16, the radios have been deployed statewide with no available stock of replacements. The CHP is unable to fulfill ongoing field requests to maintain operational needs and cover unforeseen events. It is the intention of the CHP to establish a radio replacement strategy to have available stock on hand to issue replacements when radios are broken or in need of repair.

F. Analysis of All Feasible Alternatives

1. Approve \$8.604 million permanent augmentation from the MVA for the annual replacement of aging hand-held portable radios and consumable accessories.

Pro: This option will permit the CHP to establish a regular replacement schedule and replace aging hand-held portable radios and retain a supply of replacement equipment. This option also permits the CHP to procure sufficient consumable accessories to support daily field operations.

Con: This option will obligate funds from the MVA.

2. Approve a one-time budget augmentation of \$25.8 million over three years from the MVA for the replacement of aging hand-held portable radios and consumable accessories. The CHP will seek additional funding in FY 2024/25.

Pro: This option will permit the CHP to, over a period of three years, replace 60 percent of its existing inventory of aging hand-held portable radios and consumable accessories.

Con: This option will encumber funds from the MVA. In addition, the CHP may not be able to purchase a supply of hand-held portable radios sufficient to support replacement of radios that have failed, been damaged, or lost.

3. Approve funding of \$8.6 million from the MVA for the replacement of aging hand-held portable radios and consumable accessories. The CHP will seek additional funding in FY 2022/23.

Pro: This option reduces the demand on the MVA and provides the CHP with funding to replace 20 percent of its existing inventory of aging hand-held portable radios and consumable accessories.

Con: This option holds the greatest degree of risk. Failing to replace aging hand-held radio equipment increases the risk of catastrophic failure at a time when radio communication is most critical; while an officer is engaged in enforcement action outside the patrol vehicle. The CHP will be unable to purchase a supply of hand-held portable radios to support replacement of radios that have failed, been damaged, or lost.

G. Implementation Plan

This augmentation would become effective July 1, 2021, or upon enactment of the Budget Act of 2021.

H. Supplemental Information

Item	Total Inventory	20% of Inventory	Cost per Radio	Total Amount (Rounded to Thousand)
APX8000 Dual Band Portable Radio	8,148	1,630	\$5,278	\$8,604,000

I. Recommendation

The CHP recommends approval of Alternative 1, approve a permanent augmentation for an ongoing replacement of aging portable radios.

BCP Fiscal Detail Sheet

BCP Title: Replacement of Portable Radios

BR Name: 2720-013-BCP-2021-GB

Budget Request Summary

	CY	BY	FY21 BY+1	BY+2	BY+3	BY+4
Operating Expenses and Equipment						
5368 - Non-Capital Asset						
Purchases - Equipment	0	8,604	8,604	8,604	8,604	8,604
Total Operating Expenses and Equipment	\$0	\$8,604	\$8,604	\$8,604	\$8,604	\$8,604
Total Budget Request	\$0	\$8,604	\$8,604	\$8,604	\$8,604	\$8,604

Fund Summary

Fund Source - State Operations						
0044 - Motor Vehicle Account, State Transportation Fund	0	8,604	8,604	8,604	8,604	8,604
Total State Operations Expenditures	\$0	\$8,604	\$8,604	\$8,604	\$8,604	\$8,604
Total All Funds	\$0	\$8,604	\$8,604	\$8,604	\$8,604	\$8,604

Program Summary

Program Funding						
2050010 - Ground Operations	0	8,604	8,604	8,604	8,604	8,604
Total All Programs	\$0	\$8,604	\$8,604	\$8,604	\$8,604	\$8,604

