

# Land Mobile Radio System Semi-Annual REPORT



Reporting Period: July 2023 – December 2023

## SUMMARY

The Washington State Patrol (WSP) was appropriated \$6,575,000 from the State Patrol Highway Account (SPHA) in the 2023-2025 Biennium for Land Mobile Radio (LMR) system replacement, upgrade, and other related activities.

Engrossed Substitute House Bill 1125 requires the WSP to provide semiannual reports, beginning January 1, 2024, on progress related to the projects and activities associated with the LMR system, to include governance structure, outcomes achieved in the prior six-month period, and how the activities are being managed. This report is the first report for the 2023-2025 Biennium and covers the period of July 1, 2023, through December 31, 2023.

The current appropriation provided to WSP for the LMR system is consolidated from three separate decision packages. Two of these decision packages are distinct projects and do not have interdependencies (LMR System Upgrade Agreement and LMR Standard Radio Replacement), while the third (Communication Infrastructure) encompasses three interconnected projects (LMR Base Station Replacement, Microwave Radio Replacement, and Alternative Power Units); however, all aspects of each project support the LMR System. The funding distribution (including General Fund) for the three decision packages and expenditures to date are as follows:

Project	Budget	Expenditures to Date
LMR System Upgrade Agreement	\$1,434,000	\$730,243
Communications Infrastructure	\$4,485,000	\$344,196
Standard Radio Replacement*	\$953,700	-
<b>Current Total</b>	<b>\$6,872,700</b>	<b>\$1,074,439</b>

\*The appropriated funding for the Standard Radio Replacement is tied to an anticipated Certificate of Participation (COP) valued at \$27,500,911.

# LMR PROGRAM GOVERNANCE

## Overview

Provide program governance over the WSP Public Safety Land Mobile Radio (LMR) system, which is a vital statewide communications network that provides real-time communications to support Public Safety response throughout the state of Washington.

## Structure



## Roles and Decision-Making Process

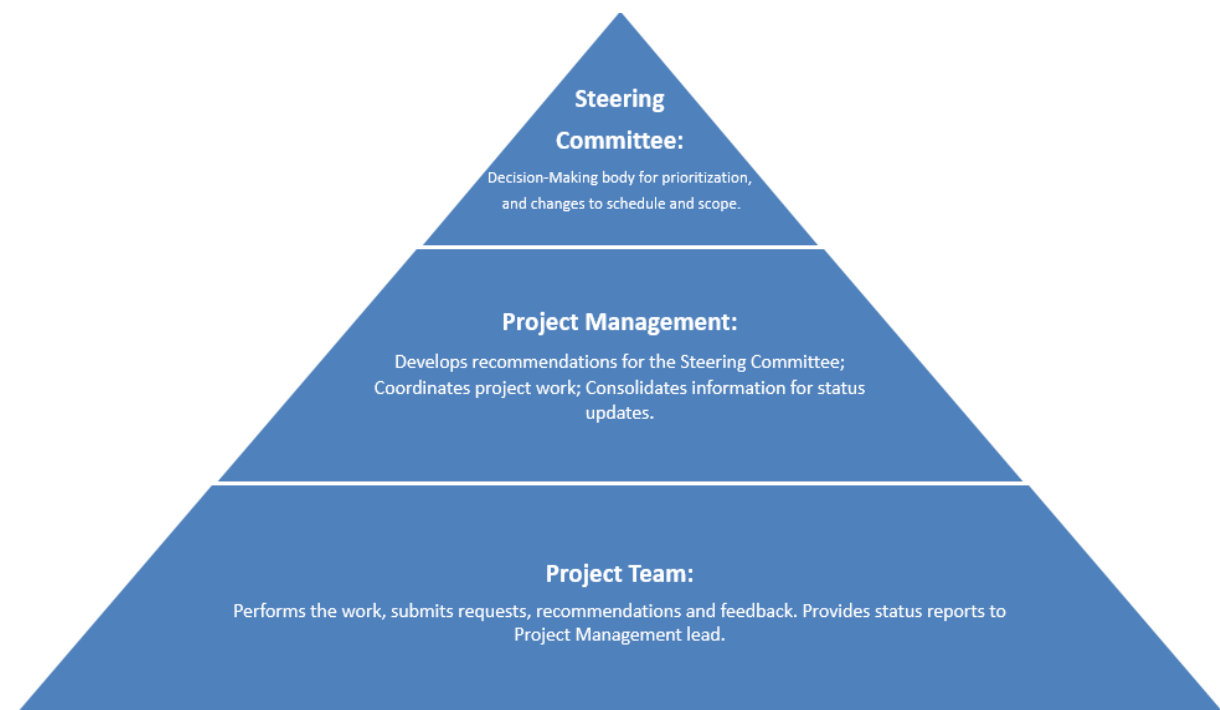
### Governance (Steering) Committee Roles:

- Approve project deliverables.
- Make decisions on matters pertaining to scope and schedule.
- Attend steering committee meetings to address questions, issues, risks, and concerns identified by the project.
- Set priorities and resolve issues.
- Represent the interests and concerns of WSP stakeholders.
- Track issues that may affect stakeholders and their organizations.
- Identify, secure, and assign project resources.
- Provide governance structure for prioritization of rollout.

**Decision Making Process:** Decisions will be made based upon a majority approval or via consensus, with each area represented. Governance/Steering committee meetings are used to address concerns and reservations before moving forward with recommendations.

In cases where a full consensus or majority cannot be agreed upon, the concerns or reservations will be provided to each respected Bureau Commander for guidance and/or determination. Ultimately, the Chief, will have final decision.

**Accomplishments:** Charter has been approved that defines roles and responsibilities for each stakeholder. ESD has established a technical committee that provides support for/or clarification to the governance committee.



## Project Updates

### LMR System Upgrade – In Scope, On Schedule, within Budget

WSP received \$1,434,000. This funding enabled WSP to enter into an agreement with Motorola for upgraded land mobile radio equipment including software and hardware. The System Upgrade Agreement (SUA) is a six-year agreement that provides three full system updates during those six years at a significantly reduced cost compared to one-time upgrades. Upgrade activities commenced October 2023.

- Project Kickoff occurred November 16, 2023.
- Project will consist of upgraded equipment and software installation at all WSP Communications and Training Center.
- Project completion is scheduled for January 26, 2024.
- The table below represents the funds spent this reporting period.

LMR System Upgrade Agreement	Total
SUA - Phase 1	\$730,243
<b>Total</b>	<b>\$730,243</b>

### Communications Infrastructure – In Scope, On Schedule, within Budget

WSP received \$4,485,000 to continue replacement and upgrade of aging public safety communications system hardware. This includes replacing 1/3 of the WSP LMR base stations, repeaters, microwave radios, site batteries, and associated support equipment, such as network routers and switches, over three biennia.

- LMR Base Station Replacement: **In Scope, On Schedule, within Budget**
  - August 2023, the WSP placed an order for all funded 76 Motorola GTR LMR Base Stations.
    - Delivery date for the GTR LMR radios from Motorola has yet to be identified.
  - The WSP team has identified the installation order based on site criticality, volume of use, site locations, and weather predictions for the higher elevation sites.
    - Scheduling of the installation dates are on hold until vendor delivery dates are verified.

- Microwave Radio Replacement: **In Scope, On Schedule, within Budget**
  - July 2023, the WSP placed and received an order for 48 Cisco network switches.
  - August 2023, the WSP placed an order for 24 Nokia microwave radios.
    - The vendor has not provided an anticipated delivery date.
    - Installation dates will be identified when vendor delivery date has been received.
  - November 2023, the WSP placed an order for all 95 NetGuardian alarm monitoring devices for the microwave tower sites.
    - By ordering all 95 devices at once, the quoted price for the biennium was locked, providing insulation from projected price increases.
      - The first 50 devices are scheduled for delivery in FY 2023.
        - Deployment schedule will be based on winter conditions at time of receipt.
      - The remaining 45 NetGuardian devices will be delivered after July 1, 2024, and be scheduled accordingly.
  - December 2023, The WSP placed an order for 26 Nokia microwave radios.
  - The table below represents the funds spent this reporting period.

Microwave Radio Replacement	Total Spent
48 - Cisco 9300 network switches	\$344,196
<b>Total</b>	<b>\$344,196</b>

- Alternative Power Units: **In Scope, On Schedule, within Budget**
  - The WSP has received the quote for the alternative power units (tower site batteries) and is anticipating placing the order in January 2024.
  - Sites to be installed have been identified, delivery lead times have been identified, and a high-level installation schedule has been developed.

## Standard Radio Replacement – In Scope, On Schedule, within Budget

WSP received appropriated funding tied to an anticipated Certificate of Participation (COP) valued at \$27,500,911. The appropriation allows replacement of all mobile (in vehicle) and portable radios that are Out of Service as of December 31, 2023.

- Mobile Radio (In Vehicle)
  - December 2023, the WSP has received an approved quote and placed an order from Motorola for 1489 mobile radios.
    - The quote is in support of all vehicles, motorcycles, and academy training vehicles.
  - Installations will be managed by WSP staff.
    - New installations will be managed by the Fleet section.
    - Existing vehicle/retrofit installations will be managed by WSP's Electronic Services Division staff.
      - Due to the new model radio being the same form factor and wiring, the installation will utilize the existing brackets and wiring, reducing installation time and associated costs.
  - Antennas
    - WSP received a quote for all antennas in support of the mobile radios. The antennas will be ordered in January 2024 and will be sourced from a business with a manufacturing presence in Vancouver WA.
- Portable Radio
  - The WSP is in negotiations with Motorola for the next portable model.
    - The model and needed features have been identified. The order will be placed in January 2024.
  - The radio deployment and training will be managed by WSP's Electronic Services Division.