Briefing on Nevada Shared Radio System (NSRS)
The existing Land Mobile Radio (LMR) system is an 800 MHz trunked radio system which was first installed in the Las Vegas Valley in the early 1990s. NDOT was joined by NV Energy with later expansion to include the Washoe County Regional Communications System. The NSRS provides field to dispatch or command center communications as well as person to person and interagency communications. These types of communications are critical in a situation like the one shown in this photo where the interstate is closed due to a crash and there are multiple agencies responding to the situation, coordinating efforts etc.
Here are some examples of the field equipment installed around the state.

Clockwise from top: Elko Mountain radio room, Ellen Dee tower with rime ice, Spruce Mountain site, Secret Pass site
The system has grown from three sites to 113 sites over the past 20 years. The field infrastructure is owned by three parties and consists of common networked equipment that is individually owned by Washoe County, NV Energy and NDOT. Currently NDOT owns 60% of the radio infrastructure, while Washoe County and NV Energy own 9% and 31% respectively. Each entity is responsible for the operation and maintenance of their equipment by an agreement to ensure the NSRS provides a reliable and interoperable communication system throughout the state. This partnership allows for the leveraging of resources and reduces duplication of efforts by the individual entity.
There are over 16,000 state, local agency and private sector users on the system, only some of whom are listed on this slide. In the audience today we have Director Jim Wright from the Department of Public Safety and Fire Chief Michael Brown from the North Lake Tahoe Fire Protection District. I would like to thank them both for attending today’s Transportation Board meeting. They are here in support of the NSRS because of the critical role the radio system plays in the efforts of their agencies, much of it relating to critical life-safety situations.
The State of Nevada has come to a crossroads with respect to its radio system. First, the system is near capacity and second, the manufacturer, Harris, has announced that this system will no longer be supported after 2017. These issues require careful evaluation, planning and budgeting to determine the best path forward. In an effort to address the limited capacity of the system, the managing agencies are monitoring usage and reallocating and reassigning access to ensure that agencies have the right number of units to safely and adequately perform their duties. We know that the Harris EDACS system will no longer be supported after 2017, and while the need for replacement is urgent, it will still function as we transition to a replacement system. Much like Windows XP can function on your home computer, even though it is no longer supported by Microsoft. Lack of available replacement parts will be a challenge until the migration to a new system is complete. We are working to keep the system functioning at its full capacity, and as equipment is replaced, we are purchasing equipment that will be forward compatible with the new system as much as possible.

STATISTICS, if needed:
16,382 Logical IDs (LID)

NDOT LID’s = 2,392
DPS LID’s = 2,316
Washoe County LID’s = 5,379
NV Energy LID’s = 4,000
Other Miscellaneous State Users LID’s = 1,851
Elko County = 325
Total unassigned LID’s = 119
So what are our next steps? First we established a technical working group made up of the infrastructure owners as well as the Department of Public Safety, who is a major and critical user of the system. The group agreed upon the direction for moving forward, which is to develop a plan to establish the next generation Public Safety system using a vendor-neutral process. The process will be broken into phases to accommodate the reality of budgets and resources to implement a statewide system.

The process will be broken down into three phases:

Phase 1: High-Level evaluation & recommendation
Phase 2: Development of the technical RFP
Phase 3: Deployment of the next generation Public Safety Radio System
The department is in the final steps of Phase One, which consists of conducting a high level needs assessment study and an alternatives analysis. The results of this effort will provide decision makers with key information to better understand the merits and impacts of transitioning to a next-generation radio system technology. High level costs estimates will be developed for the options so that decision makers can plan and budget for system replacement.
Phase Two will consist of the development of detailed system requirements and development of the Request for Proposal (RFP) document and will occur during FY2016. It is anticipated that a single vendor for the statewide system will be selected by the infrastructure owners and that each agency/entity will move forward with their system replacement in a way that suits their funding capabilities while also providing system continuity and operability for all users. As this process moves forward will proved user agencies more information to that they understand the status of the system and the direction we are headed. This will enable them to plan and budget for a solution that suits their needs.

Phase Three will entail deployment of the next generation Public Safety Radio System. It is anticipated that Phase Three will begin in the FY2017-2018 Biennium for NDOT and may take five or more years to complete. Appropriate budget requests will be submitted during the biennium budget development process.