



Nevada Shared Radio System (NSRS) System Purchase Agreement

800 MHz Joint Operating
Committee - October 19, 2018





NSRS System Purchase Agreement

- System Purchase Agreement (SPA) between the Communications Systems Segment of Harris Corporation and Washoe County.
 - To purchase, design and build an 800 MHz, Project 25, Public Safety Radio System.
 - Including:
 - Radio system infrastructure and services
 - Radio Site Development
 - End-User radio equipment



NSRS Vendor Selection

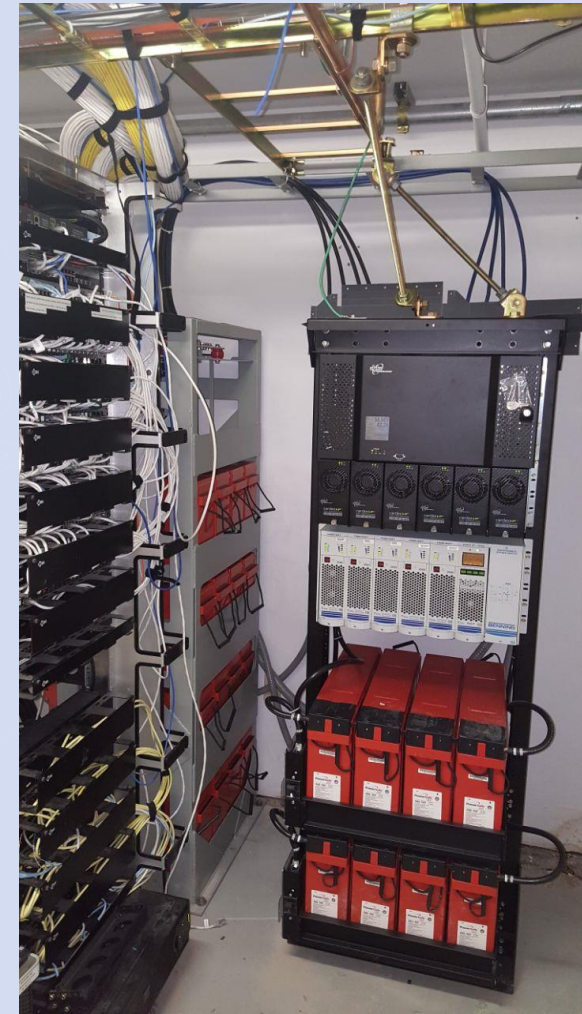
- RFP Released in May, 2017
- NDOT administered the selection process
- NSRS members made up the evaluation teams
 - Technical and cost proposals were evaluated separately by separate teams.
- Technical Review:
 - Scope of Work
 - Project plan and schedule
 - Migration Plan
 - Qualification and Experience
- Cost Review
- Selection was based on combined scores
- Harris Communications was selected





NSRS Vendor Negotiations

- Together, infrastructure owners developed system design
 - Goal: Ensure regional and statewide needs are met
- Washoe County/Harris negotiations included:
 - Site development responsibility
 - Third-party mark-ups
 - Warranty & Support
 - Pricing
 - Schedule





NSRS – Washoe County SPA

- To purchase, design and build an 800 MHz, Project 25, Public Safety Radio System.
- Including:
 - Radio system infrastructure and Services
 - Site Development
 - End-User radio equipment

Contract Cost Summary	
Infrastructure and Services	\$8,543,700
Site Development	\$7,033,222
End-User Radio Equipment	\$10,960,588
Total	\$26,537,510



NSRS – Washoe County SPA

- **Infrastructure and Services - \$8,543,700**
- **Infrastructure – Upgrade 10 sites, build 5 new sites:**
 - Radio System & Control Equipment, Software, Licensing
 - Network Equipment
 - Antenna Systems
 - Spare Equipment
- **Services:**
 - System Engineering
 - Project management
 - Training
 - System Equipment Services

*Washoe County will upgrade the Microwave infrastructure at Chimney Peak and Ophir Peak. NV Energy Will upgrade and/or build the radio system infrastructure at these sites.

Sites	Status	Channels	Type	Owner
Watertank	Upgrade	8	Simulcast	Washoe County
Snowflake	Upgrade	8	Simulcast	Washoe County
Slide Mountain	Upgrade	12	Simulcast	Washoe County
Mount Rose	Upgrade	12	Simulcast	Washoe County
Red Peak	Upgrade	16	Simulcast	Washoe County
Peavine	Upgrade	16	Simulcast	Washoe County
Chimney Peak*	Upgrade	16	Simulcast	NVEnergy
Virginia Peak	Upgrade	10	Multisite	Washoe County
Marble Bluff	Upgrade	10	Multisite	Washoe County
Poito	Upgrade	6	Multisite	Washoe County
Fox Mountain	Upgrade	5	Multisite	Washoe County
Ophir Peak*	Greenfield	8	Multisite	NVEnergy
49 Mountain	Greenfield	3	Multisite	Washoe County
Yellow Peak	Greenfield	3	Multisite	Washoe County
Red Rock	Greenfield	4	Multisite	Washoe County
Truckee Station 18	Greenfield	8	Multisite	Washoe County
Smokey Quartz	Greenfield	12	Multisite	Washoe County



NSRS – Washoe County SPA

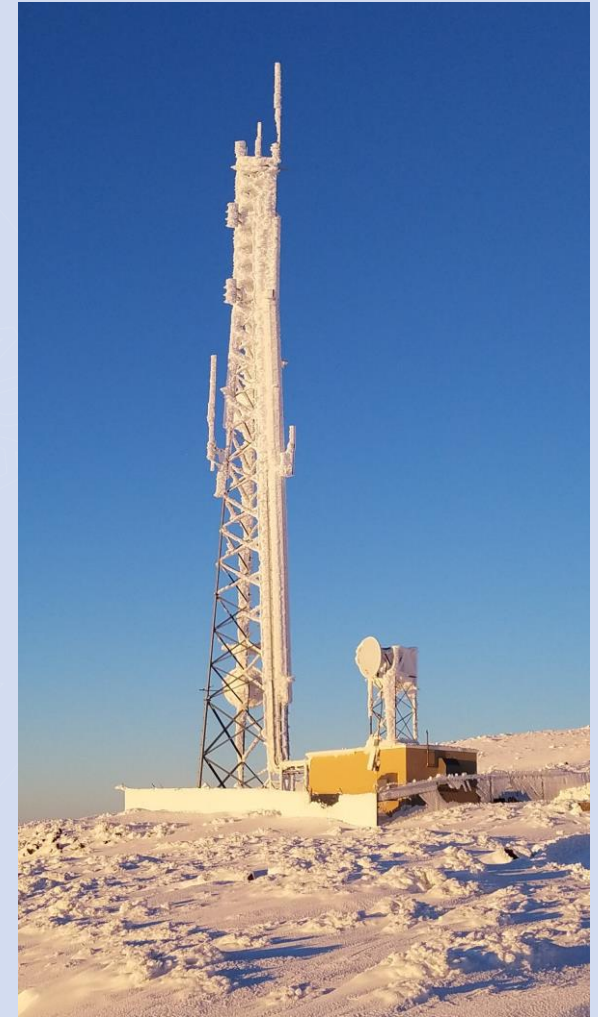
- **Site Development - \$4,796,577**
- **Upgrade 10 sites, build 5 new sites:**
 - Tower Construction
 - Shelter Construction
 - Site Development – Roads, Fencing, Land Clearance
 - Generators
 - Electrical work
 - DC Power systems
 - Air Conditioning
 - Permits, Drawings, Site Acquisition
- **Microwave equipment - \$2,236,646**
- **Site Dev + Microwave = \$7,033,222**





NSRS – Washoe County SPA

- **Total Radio System Infrastructure Cost: \$15,576,922**
- **New System Benefits and Features:**
 - Virtually Unlimited User Capacity
 - Open Standard – Project 25 (P25)
 - Increased/Improved Coverage
 - Seamless Statewide coverage & Interop. for all users
 - Manufacturer support





NSRS – Washoe County SPA



- **End-User Radio Equipment: \$10,960,588**
 - 5,070 radios to be purchased over initial 6-8 year contract period.
 - Hand-held radios
 - Mobile radios
 - Upgrades of existing radios
 - Installation/Programming Services
 - Contract Pricing - %72.2 discount off of retail pricing - is available to WCRCS agencies.



NSRS – Washoe County SPA

- **Next Steps:**
- Work with Joint Operating Committee to plan FY20 payment, Washoe County has partial payment budgeted.
- Work with regional partners to develop a strategy for allocation of operations and infrastructure payments.
- Finalize and present a detailed funding plan to Board of County Commissioners
- Facilitate end-user radio purchases with regional partners.

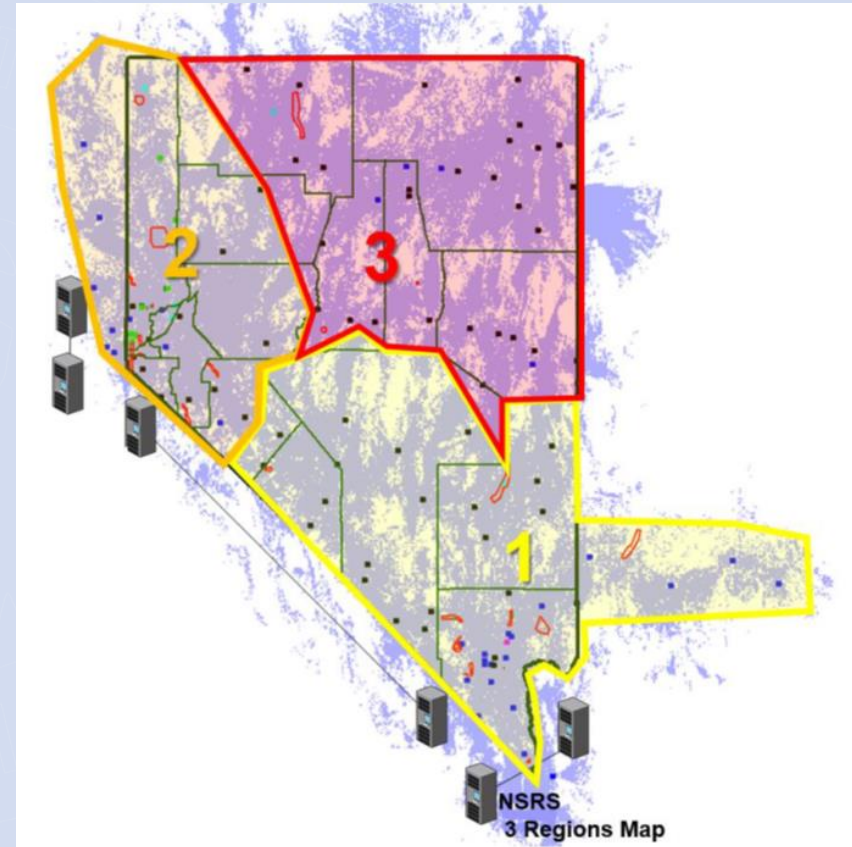
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System Implementation Schedule

Preliminary Project Schedule

- Project Kick-off: November 2018
- Design Phase Completion: May 2019
- Washoe County Site Development: September 2021 → March 2022
- Washoe County RF Infrastructure Installation: September 2021 → March 2022
- Region 2 installation complete: Dec. 2021
- Region 2 Cutover: July 2022
- Final Statewide System Acceptance: December 2023





System Costs

- **Total Radio System Infrastructure Cost: \$15,576,922**
- **Minus Dispatch equipment and 2 years of Software support and Priority TAC.**
 - Dispatch equipment is agency responsibility, mostly Washoe County and School District.
 - Software support and Priority TAC is in operational budget.

$\$15,576,922 - \$541,480 \text{ (dispatch)} - \$173,614 \text{ (Support)} = \mathbf{\$14,861,829}$

- **Federal Engineering (FE)** will provide project management and oversight including technical consulting during the entire implementation process FY19 – FY23.
- FE was selected by NDOT through procurement process and consulted for Washoe County during contract negotiations with Harris.
- **Project Oversight Costs, *not-to-exceed estimate*: \$991,092**
 - Costs will fluctuate annually
 - Contract is based Time and Materials
 - Washoe County to approve and monitor all travel



System Costs

Fiscal Year	Radio System	Microwave Infrastructure	Site Infrastructure	Federal Eng. Estimate	Total by FY
2018-2019	\$533,981			\$220,000	\$753,981
2019-2020	\$1,025,244			\$171,471	\$1,196,715
2020-2021	\$2,135,925	\$1,118,323		\$243,631	\$3,497,879
2021-2022	\$2,990,295	\$1,118,322	\$1,918,631	\$218,424	\$6,245,672
2022-2023	\$1,281,555		\$2,877,946	\$137,566	\$4,297,067
2023-2024	\$576,699				\$576,699
TOTAL	\$8,543,699	\$2,236,645	\$4,796,577	\$991,092	\$16,568,013

Milestone Payments

- **Payment 1 (FY19) :** Washoe County will pay by deferring end-user equipment purchases.
 - Washoe County will also pay project management (PM) costs for FY19.
- **Payment 2 (FY20):** Washoe County will pay a portion – request JOC to cover the remainder from the WCRCS Infrastructure account – including PM costs.
- **Payment 3 – 7:** Washoe County will obtain financing and recoup costs through user fees.
- **Washoe County does not anticipate increasing user fees for system infrastructure until FY 21.**



System Payments

- **Washoe County will work with the JOC to ensure a fair payment allocation strategy.**
- Washoe County has commissioned an independent consultant to develop a fee structure for the WCRCS with the following components:
 - Operational costs
 - Infrastructure allocation
 - Future replacement – expansion
- The fee consultant will provide a conceptual framework and methodology for cost allocation.
 - Washoe County requests agency finance/budget staff participation in review of allocation methodology.
 - Allocation methodology to be presented to the JOC at a future meeting.



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