



WASHOE COUNTY

Integrity Communication Service

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STAFF REPORT

COMMITTEE MEETING DATE: September 19, 2024

DATE: Tuesday, September 10, 2024

TO: E911 Emergency Response Advisory Committee

FROM: Quinn Korbolic, Information Technology Manager
Technology Services, 775-328-2348, qkorbolic@washoecounty.gov

THROUGH: Behzad Zamanian, Chief Information Officer

SUBJECT: Recommendation to approve reimbursement to Washoe County's Nevada Shared Radio System Project fund for microwave equipment, installation and implementation services for microwave links that connect directly to regional Public Safety Answering Points (PSAPs) including links from and to Sparks Dispatch, Regional Dispatch on Spectrum Blvd., and Edison Way, and mountain top radio sites connected directly to PSAPs at Peavine Mountain, Red Peak, Ophir Peak, and Slide Mountain; for a total reimbursement not to exceed \$606,143.10; and if approved, forward such recommendation to the Board of County Commissioners. FOR POSSIBLE ACTION

SUMMARY

Washoe County, through the Washoe County Regional Communication System (WCRCS), operates a public safety radio communication network that serves public safety, law enforcement and emergency response organizations in the region. The WCRCS is part of the Nevada Shared Radio System (NSRS) which serves as the primary public safety radio communications system in the state of Nevada. Washoe County and NSRS partners, the Nevada Department of Transportation and NV Energy, are currently working to replace and upgrade legacy radio equipment with open-standards-based Project 25 (P25) radio equipment.

As part of the NSRS system upgrade the microwave backhaul network is also being upgraded. The microwave network connects mountain-top radio sites to the rest of the radio network, enabling radio communication from anywhere in the state of Nevada. The microwave network is also a critical part of Public Safety Answering Point (PSAP) radio communications. Each PSAP is connected through the Microwave Network to the entire NSRS. Dispatch console radio communications rely on and would not work without the Microwave network.

Staff recommends approval of a reimbursement to Washoe County's Nevada Shared Radio System Project fund for microwave equipment, installation and implementation services for microwave links that connect directly to regional Public Safety Answering Points (PSAPs) including links from and to Sparks Dispatch, Regional Dispatch on Spectrum Blvd., and Edison Way, and mountain top radio sites connected directly to PSAPs at Peavine Mountain,

AGENDA ITEM # _____

Red Peak, Ophir Peak, and Slide Mountain; for a total reimbursement not to exceed \$606,143.10 (see attachment 1, table 1).

BACKGROUND

Nevada Revised Statutes (NRS) 244A.7645 provides direction for use of 911 Surcharge Fees:

If a surcharge is imposed in a county pursuant to NRS 244A.7643, the board of county commissioners of that county shall create a special revenue fund of the county for the deposit of the money collected pursuant to NRS 244A.7643. The money in the fund must be used only:

- (a) To pay the costs of adopting and reviewing the 5-year master plan for the enhancement of the telephone system for reporting emergencies in the county that is required pursuant to NRS 244A.7643.
- (b) With respect to the telephone system for reporting an emergency:
 - (1) In a county whose population is 45,000 or more, to enhance the telephone system for reporting an emergency, including only:
 - (I) Paying recurring and nonrecurring charges for telecommunication services necessary for the operation of the enhanced telephone system;
 - (II) Paying costs for personnel and training associated with the routine maintenance and updating of the database for the system;
 - (III) Purchasing, leasing or renting the equipment and software necessary to operate the enhanced telephone system, including, without limitation, equipment and software that identify the number or location from which a call is made; and
 - (IV) Paying costs associated with any maintenance, upgrade and replacement of equipment and software necessary for the operation of the enhanced telephone system.

Code of Federal Regulations (CFR) Title 47, Chapter I, Subchapter A Part 9, Subpart I, 9.23, specifies that expenditures of 911 Fees are limited to:

- (1) Support and implementation of 911 services provided by or in the State or taxing jurisdiction imposing the fee or charge; and
- (2) Operational expenses of public safety answering points within such State or taxing jurisdiction.

Examples of acceptable purposes and functions provided as part of CFR Title 47 include, but are not limited to, the following, provided that the State or taxing jurisdiction can adequately document that it has obligated or spent the fees or charges in question for these purposes and functions:

- (1) PSAP operating costs, including lease, purchase, maintenance, replacement, and upgrade of customer premises equipment (CPE) (hardware and software), computer aided dispatch (CAD) equipment (hardware and software), and the PSAP building/facility and including NG911, cybersecurity, pre-arrival instructions, and emergency notification systems (ENS). PSAP operating costs include technological innovation that supports 911;
- (2) PSAP personnel costs, including telecommunicators' salaries and training;

- (3) PSAP administration, including costs for administration of 911 services and travel expenses associated with the provision of 911 services;
- (4) Integrating public safety/first responder dispatch and 911 systems, including lease, purchase, maintenance, and upgrade of CAD hardware and software to support integrated 911 and public safety dispatch operations; and
- (5) Providing for the interoperability of 911 systems with one another and with public safety/first responder radio systems.

Federal Communications Commission (FCC) guidance and documentation on the use of 911 Fees indicates that 911 Fees may be used for Public Safety Radio Microwave Systems as long as those systems are used specifically to deliver 911 originated information to Emergency Responders. A number of states or municipalities have utilized 911 Fees for microwave systems that are used specifically to deliver 911 originated information to Emergency Responders. In 2021 and 2022, the State of California utilized over \$16 million of 911 Fees to upgrade a statewide microwave network so that it could be used to deliver 911 calls to PSAPs that do not have adequate, redundant, commercial IP connectivity. Similarly, in the same year, New Hampshire, and New Jersey utilized 911 Fees to pay for the replacement or repair of Microwave links critical to delivering 911 originated information to Emergency Responders. In all cases where 911 fees were used to replace, upgrade, or repair Microwave Systems directly related to delivering 911 originated information to first responders, the FCC did *not* make a finding of 911 fee diversion¹.

FISCAL IMPACT

The Enhanced 911 Fund (208) has sufficient budget authority in the FY25 budget for the agency reimbursement request of \$606,143.10 in the Enhanced 911 Admin (800801); Payments to Other Agencies (710400).

RECOMMENDATION

It is recommended the Committee approve reimbursement to Washoe County's Nevada Shared Radio System Project fund for microwave equipment, installation and implementation services for microwave links that connect directly to regional Public Safety Answering Points (PSAPs) including links from and to Sparks Dispatch, Regional Dispatch on Spectrum Blvd., and Edison Way, and mountain top radio sites connected directly to PSAPs at Peavine Mountain, Red Peak, Ophir Peak, and Slide Mountain; for a total reimbursement not to exceed \$606,143.10; and if approved, forward such recommendation to the Board of County Commissioners.

POSSIBLE MOTION

Should the Committee agree with the recommendation, a possible motion would be: "Move to approve reimbursement to Washoe County's Nevada Shared Radio System Project fund for microwave equipment, installation and implementation services for microwave links that connect directly to regional Public Safety Answering Points (PSAPs) including links from and to Sparks Dispatch, Regional Dispatch on Spectrum Blvd., and Edison Way, and mountain

¹ [Fifteenth Annual 911 Fee Report \(fcc.gov\)](https://www.fcc.gov/annual-fee-report)

top radio sites connected directly to PSAPs at Peavine Mountain, Red Peak, Ophir Peak, and Slide Mountain; for a total reimbursement not to exceed \$606,143.10; and if approved, forward such recommendation to the Board of County Commissioners.”

Attachment 1

Table 1 - Microwave System Costs for 911 Reimbursement

Microwave Design & Installation	Locations/Equipment								
	Edison Way	Ophir Peak	Peavine Mtn	Red Peak	Slide Mtn	Sparks Dispatch	Spectrum	Spare Microwave Equipment	Grand Total
Radio Equipment	\$21,395.57	\$33,920.15	\$49,054.33	\$33,123.51	\$45,679.37	\$21,395.57	\$41,192.75	\$48,484.40	\$294,245.62
Antennas	\$3,871.64	\$17,674.96	\$39,629.61	\$22,356.82	\$24,119.99	\$4,167.68	\$20,565.05	\$28,398.21	\$160,783.97
Add'l Mtrl Discount	(\$3,500.00)	(\$3,500.00)	(\$3,500.00)	(\$3,500.00)	(\$3,500.00)	(\$3,500.00)	(\$3,500.00)	(\$3,500.00)	(\$28,000.00)
Material Sale Price	\$27,209.00	\$60,118.88	\$106,479.92	\$64,975.41	\$82,874.20	\$27,579.06	\$72,822.24	\$91,728.26	\$533,786.98
Material Variance	(\$985.63)	\$3,394.31	\$2,813.71	\$3,266.08	(\$2,529.46)	(\$1,043.10)	\$1,464.81	\$44,929.01	\$51,309.73
Engineering & PM Svc	\$7,520.00	\$18,461.95	\$7,520.00	\$7,520.00	\$7,520.00	\$7,520.00	\$7,520.00	\$0.00	\$63,581.95
Installation Svc	\$39,630.25	\$39,630.25	\$78,019.35	\$30,000.00	\$39,630.25	\$27,594.82	\$39,630.25		\$294,135.17
Services Sale Price	\$62,238.33	\$76,681.70	\$112,911.94	\$49,526.40	\$62,238.33	\$46,351.56	\$62,238.33	\$0.00	\$472,186.60
Services Variance	\$14,467.44	\$23,705.07	\$25,532.08	(\$14,211.48)	(\$9,355.01)	(\$1,625.70)	(\$11,960.62)	(\$19,958.68)	\$6,593.10
Total	\$89,447.33	\$136,800.59	\$219,391.86	\$114,501.81	\$145,112.53	\$73,930.62	\$135,060.57	\$91,728.26	\$1,005,973.57
911 Reimbursement	1 microwave link	1 out of 2 microwave links	2 out of 6 microwave links	1 out of 3 microwave links	1 out of 4 microwave links	1 microwave link	7 Microwave Links		Total Costs for PSAP Microwave Links
	\$89,447.33	\$68,400.29	\$73,130.62	\$38,167.27	\$36,278.13	\$73,930.62	\$135,060.57	\$91,728.26	\$606,143.10