

**IT Project Proposal Report - Detail**  
**Agency: 046 - DEPT OF CORRECTIONAL SERVICES**  
 Budget Cycle: 2023-2025 Biennium                      Version: AF - AGENCY FINAL REQUEST

**IT Project : Radio System Upgrade**

**General Section**

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<b>City :</b> Lincoln		<b>NITC Score :</b>
<b>State :</b> Nebraska	<b>Zip :</b> 68509-	

**Expenditures**

IT Project Costs	Total	Prior Exp	FY22 Appr/Reappr	FY24 Request	FY25 Request	Future Add
<b>Contractual Services</b>						
Design	0	0	0	0	0	0
Programming	0	0	0	0	0	0
Project Management	0	0	0	0	0	0
Data Conversion	0	0	0	0	0	0
Other	0	0	0	0	0	0
<b>Subtotal Contractual Services</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>Telecommunications</b>						
Data	0	0	0	0	0	0
Video	0	0	0	0	0	0
Voice	0	0	0	0	0	0
Wireless	0	0	0	0	0	0
<b>Subtotal Telecommunications</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>Training</b>						
Technical Staff	0	0	0	0	0	0
End-user Staff	0	0	0	0	0	0
<b>Subtotal Training</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>

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**Expenditures**

IT Project Costs	Total	Prior Exp	FY22 Appr/Reappr	FY24 Request	FY25 Request	Future Add
<b>Other Project Costs</b>						
Personnel Cost	0	0	0	0	0	0
Supplies & Materials	0	0	0	0	0	0
Travel	0	0	0	0	0	0
Other	0	0	0	0	0	0
<b>Subtotal Other Project Costs</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>Capital Expenditures</b>						
Hardware	5,744,219	0	0	3,246,469	2,497,750	0
Software	0	0	0	0	0	0
Network	0	0	0	0	0	0
Other	156,773	0	0	78,000	78,773	0
<b>Subtotal Capital Expenditures</b>	<b>5,900,992</b>	<b>0</b>	<b>0</b>	<b>3,324,469</b>	<b>2,576,523</b>	<b>0</b>
<b>TOTAL PROJECT COST</b>	<b>5,900,992</b>	<b>0</b>	<b>0</b>	<b>3,324,469</b>	<b>2,576,523</b>	<b>0</b>

**Funding**

Fund Type	Total	Prior Exp	FY22 Appr/Reappr	FY24 Request	FY25 Request	Future Add
General Fund	5,900,992	0	0	3,324,469	2,576,523	0
Cash Fund	0	0	0	0	0	0
Federal Fund	0	0	0	0	0	0
Revolving Fund	0	0	0	0	0	0
Other Fund	0	0	0	0	0	0
<b>TOTAL FUNDING</b>	<b>5,900,992</b>	<b>0</b>	<b>0</b>	<b>3,324,469</b>	<b>2,576,523</b>	<b>0</b>
<b>VARIANCE</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>

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**IT Project: Radio System Upgrade**

**EXECUTIVE SUMMARY:**

The Nebraska Department of Correctional Services has a need to update end-of-life radio equipment consisting of end-user radios, tower radios, and control radio consoles. This upgrade is vital to maintaining communications to keep inmates and staff safe while providing the ability to integrate with state/local first responders. Upgrading the radios and system infrastructure will allow standardized management and support that will provide long term upgradeability over the life of the equipment. This allows the department to align the radio communications strategy with the state radio system bringing the department up to the state standards of public safety radio communications.

The Nebraska Department of Correctional Services along with OCIO Public Safety Communications have worked together to integrate the new radio system with the state radio system giving centralized access for radios to work across the state at the respective facilities that can provide public safety radio access. The radio solution will be utilized by custody staff and maintenance staff who work within the facilities and are responsible for inmate transport outside of the facilities.

**GOALS, OBJECTIVES, AND OUTCOMES (15 PTS):**

The new radio system will provide increased clarity, capacity, and coverage for radio users operating in and near the facilities. This ensures that custody staff can clearly and effectively communicate inside and across the facilities.

Adding P25 digital audio capability allows clearer radio communications over the existing analog radios. This performance allows radios to have clearer communications on the fringe areas of coverage.

Increased coverage through design provides the ability of the staff to maintain better radio contact inside the facility to keep custody staff in radio contact during more situations.

**Capacity**

Adding in trunking allows more efficient use of the channels and frequencies available. This also allows increased flexibility of existing users and supports greater communications and future expansion for the department.

As the facility operations increase with complexity of services offered the radio communications can adapt allowing communications to be increasingly dynamic with groups using communications to better operate across their respective domains.

**Coverage**

Improved coverage provides the ability of the staff to maintain radio contact.

**PROJECT JUSTIFICATION / BUSINESS CASE (25 PTS):**

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The new radio system integrated with the state radio system will provide clearer voice communications, P25 digital encryption for stronger security, talk group diversity, common audio recording management, and flexible architecture to allow expansion as needed. Standardization on P25 allows seamless integration across the major metro service areas of the state and the P25 standard allows capable operations in these areas with minimal technical and operational requirements to maintain contact with the respective facilities and nearby first responders when requesting assistance.

**Alternatives Evaluated**

Alternate P25 options have limited integrations and require bridging technologies and alternate management strategies that integrate with state and would produce coverage and voice imbalances.

**TECHNICAL IMPACT (20 PTS):**

The proposed system will align with the current state radio system management and communication issues resolutions structure. This gives redundant access to the system resources and allows resilience to the communications capabilities of the Agency.

The strategy of statewide radio system allows for a proven track record of successful integrations with multiple public safety agencies in the state as well as local and federal public safety. The standardization of this maintains simple and cost effective logistical strategy minimizing wasted efforts on maintaining multiple devices and resources that require significantly more up keep relative to the provided access.

**PRELIMINARY PLAN FOR IMPLEMENTATION (10 PTS):**

The implementation strategy is the final site walks with OCIO/vendor identifying the locations and equipment accesses needed. Site remediation is next with department preparing the locations for the installation by ensuring HVAC, power, and network access are up to the standards required. With current state of logistics, equipment shipping will be varied with certain dependencies that are closely monitored by the department and OCIO. The department and OCIO are working to close these gaps of shipping on items that have long timelines for arrival.

**Milestones**

Equipment installation per facility = 3 weeks  
Equipment testing per facility = 1 week  
Equipment training per facility = 2 weeks  
System cutover per facility = 2 days

**RISK ASSESSMENT (10 PTS):**

A number of risks have been identified at this point in the project planning: Risk Probability Impact Mitigating Actions

Risks High - The current radio system repairability and replacement of broken or faulty equipment.

To sustain our current radio system activity, radios and equipment are purchased on the used secondhand market.

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Risk High - Radio interference and radio coverage that are at each facility. The frequency band that they operate in currently is more susceptible to interference from facility construction (concrete and steel) and electrical (lighting and door motors). These issues can limit the clarity of the radio communication.

Risk Medium – New radios will require all staff to be trained on the new system. Having both systems online will allow communications to continue until staff are trained.

**FINANCIAL ANALYSIS AND BUDGET (20 PTS):**

Vendor provided state contract pricing

Total Equipment, Systems Integration and 1st Year Warranty  
Price

Lincoln Regional Treatment Center (RTC)	\$2,239,748
Lincoln Nebraska State Penitentiary (NSP)	\$2,326,764
Lincoln Community Corrections Center Lincoln (CCCL)	\$ 984,721
Lincoln Central Office (CO)	\$ 148,986
Lincoln Facilities Total	\$5,700,219