

# Iterative Project Report for Programs & Multi-Year Phased Projects

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## GENERAL INFORMATION

**Program/Project Name:** North Dakota Statewide Interoperable Radio Network (SIRN)

**Agency Name:** North Dakota Information Technology (NDIT)

**Project Sponsor:** Duane Schell

**Project Manager:** Timothy Verasca

## PROJECT DESCRIPTION

A significant portion of the public safety community has stated that current land mobile radio networks limit the ability of first responders to consistently work together in providing timely response for day to day, mutual aid, and task force operations due to technology and coverage limitations. Additionally, current public safety land mobile radio systems may not consistently meet regional/statewide needs in providing suitable functionality across all operating environments and locations.

Significant additional factors supporting the timing of meeting the business needs:

1. Approximately 40% of all public safety communications equipment across the state is approaching “End of Support” from manufacturers (2018-2020)
2. Current interoperable communications are limited and require significant work arounds, while not readily supporting field interoperability and communications with the local 911 dispatch centers
3. Procurement and implementation of Mission Critical Communications must address at a minimum:
  - a. Reliability
  - b. Coverage
  - c. Interoperability
  - d. Sustainability
4. Current issues experienced within North Dakota
  - a. Coverage challenges
  - b. Interoperability challenges
  - c. End of support challenges (2018)

To ensure maximum adoption and an efficient communications ecosystem, the SIRN Program will be comprised of multiple projects, and will address the baseline needs put forth by the stakeholder community, provide a centralized management system, and integrate current and future radio systems while enabling federated control of local resources. SIRN solutions will be substantially anchored on existing public (State and Local) infrastructure to leverage all suitable investments.

The program solution for SIRN consists of three principal attributes:

- Deliver effective radio coverage and interoperability
- Ensure feature accessibility and timely/reliable maintenance
- Leverage inclusive Governance

Another way to describe this is the need to deliver the right combination of people, processes, and technologies; in that order. Based on legislative guidance, the SIEC in concert with NDIT will establish an overarching SIRN program based on selection and procurement of a key partner or partners in meeting the business need. Since the selected contractor will be critical in determining the priority of work, use of funds and identification of objectives for each approved project, along with specific business objectives and measurements will be developed and confirmed as part of planning for each project, with SIEC concurrence prior to baselining the project.

## BUSINESS NEEDS AND PROBLEMS

Per the Statewide Interoperable Radio Network Feasibility Study, public safety communications systems in the State of North Dakota are at a critical juncture. The State’s current mission critical networks are comprised of a patchwork of dozens of aging and disparate systems that have not kept pace with the public safety community’s evolving needs for increased reliability, performance, and interoperability. These land mobile radios serve as an essential communications

tool for over 900 public safety and other public sector agencies comprised of 20,000 users and devices and 23 Public Safety Answering Points (“PSAP”, “Dispatch”, or 9-1-1 Call Centers”) distributed across all 53 counties and several state agencies. Many of these systems—primarily anchored on 1970s technology, and implemented individually by State, local, and municipal entities over the past three decades—will soon reach the end of their functional lifecycle and, as the vendors begin to sunset old technologies, will no longer be supported by their manufacturers.

**PROGRAM/PROJECT FORMAT**

**Program/Project Start Date:** August 1, 2019

**Budget Allocation at Time of Initial Start Date:** \$120,000,000

**How Many Phases Expected at Time of Initial Start Date:** Three Phases, with sub phases or groups each being managed as a project

**Phase Approach Description:** Iterative waterfall

**Estimated End Date for All Phases Known at Time of Initial Start Date:** Term of the contract is 5 years (August 2024), with up to 4 one-year extensions

**PROGRAM/PROJECT ROAD MAP**

The program road map shows the high-level plan or vision for the program/projects/phases. It is intended to offer a picture of the lifespan of all the effort that is expected to be required to achieve the business objectives.

Project/Phase	Title	Scope Statement	Estimated Months Duration	Estimated Budget
Phase 1 Group 1	Core & Consoles (5)	Establish Network Core and Five (5) PSAP equipment replacement (Grand Forks, Minot, Stutsman, Barnes, and Richland	11 Months	\$5,741,102.14
Phase 1 Group 2	Console Replacement	Console replacement group 2	12 Months	\$3,628,966.65
Phase 1 Group 3	Console Replacement	Console replacement group 3	TBD	TBD
Phase 1 Group 4	Console Replacement	Console replacement group 4	TBD	TBD
Phase 2 Group 1	RF Buildout & Simulcast	RF Buildout of state-owned towers, tower construction, enclosure construction and Simulcast	41 Months	\$21,525,454.52
Phase 2 Group 2	RF Buildout & Simulcast	RF Buildout of leased tower sites and Simulcast	30 Months	\$10,683,594.70
Phase 2 Group 3	RF Buildout & Simulcast	RF Buildout of leased tower sites	TBD	TBD
Phase 3 RR	State Radio Reimbursement	State of North Dakota City/County Law Enforcement, Fire Fighters, and Emergency Medical Personnel	57 Months	\$30,000,000.00

## PROJECT BASELINES

The baselines below are entered for only those projects or phases that have been planned. At the completion of a project or phase a new planning effort will occur to baseline the next project/phase and any known actual finish dates and costs for completed projects/phases will be recorded. The iterative report will be submitted again with the new information.

Project/Phase	Project/Phase Start Date	Baseline End Date	Baseline Budget	Funding Source	Actual Finish Date	Schedule Variance	Actual Cost	Cost Variance
Phase 1 Group 1	2012	8/2020	\$7,166,137	Special/Other	8/2020	0%	TBD	TBD
Phase 1 Group 2	1/2020	9/2021	\$4,429,290	Special/Other	In Progress			
Phase 1 Group 3	3/2021	1/2022	\$1,877,307	Special/Other	In Progress			
Phase 1 Group 4	Not started							
Phase 2 Group 1	8/2019	12/2022	\$25,582,657	Special/Other	In Progress			
Phase 2 Group 2	7/2019	3/2022	\$10,683,594	Special/Other	In Progress			
Phase 2 Group 3	3/2021	12/2023	\$16,523,924	Special/Other	In Progress			
Phase 2 Group 4	Not started							
Phase 3 RR	7/2020	1/2024	\$30,000,000	Special/Other	In Progress			

### Notes:

#### Program Funding

<b>Special Funds</b>	\$20,000,000	Project Costs	Strategic Investment and improvement fund per HB 1435
<b>Special Funds</b>	\$20,000,000	Project Costs	BND profits per HB 1435
<b>Special Funds</b>	\$80,000,000	Project Costs	Loan from BND per HB 1435
<b>Communication Services Fee</b>	\$12,330,000 <i>(current estimate)</i>	Operation Costs	Assessed communications services fee per C.C. 57-40.6-03
<b>Local Funds</b>	\$90,000,000	Project Costs (Oversight)	Local funding for PSAPs, Subscriber Radios, Training
<b>Budget Total</b>	<b>\$222,330,000</b>		State and Local Funds

## OBJECTIVES

Project/Phase	Business Objective	Measurement Description	Met/Not Met	Measurement Outcome
Phase 1 Group 1	Establish SIRN Network Cote & PSAP Console Replacement (5)	Establishment of a fully redundant core and installation of fully functional PSAP equipment No impacts to daily operations at the PSAP level		
Phase 2 Group 2	RF Buildout of state-owned towers, tower construction, enclosure construction and Simulcast	Establishment of Motorola's new network at all state-owned sites State Radio able to operate on new state network		
Phase 1 Group 2	Console replacement group 2	Installation of fully functional PSAP equipment No impacts to daily operations at PSAP level		
Phase 2 Group 2	RF Buildout of leased tower sites and Simulcast	Establishment of Motorola's new network at Early Adopters lease sites Early Adopters able to operate on new network built out		
Phase 3 RR	Radio Reimbursement Tracking	Maximum participation in SIRN 2020 project by North Dakota Cities and Counties Exhaust all funds		

## POST-IMPLEMENTATION REPORT

Post-Implementation Reports are to be performed after each project or phase is completed. A "PIR" is a process that utilizes surveys and meetings to determine what happened in the project/phase and identifies actions for improvement going forward. Typical PIR findings include, "What did we do well?" "What did we learn?" "What should we do differently next time?"

Project/Phase	Key Lessons Learned, Success Stories, Ideas for Next Time, Etc.
Phase 1 Group 1	TBD

## KEY CONSTRAINTS AND/OR RISKS

The program has the following constraints:

- NDI and Public Safety Agency Resources (business and technical) are limited in the number of staff available
- The full program schedule cannot be established due to the long duration; therefore, schedule management is constrained to each phase of the project
- Future funding appropriations are necessary to complete all phases

- Cost, schedule, scope, and quality are often in conflict during releases. The sponsor and ESC elected to prioritize these constraints as follows for the program:
  1. Scope
  2. Quality
  3. Cost
  4. Schedule

The program has the following risks:

- North Dakota weather – since there is considerable amounts of civil work to be completed, the North Dakota weather is a risk to all phases of the project. The team will attempt to schedule outdoor civil work based on average weather patterns. However, weather may fluctuate outside of the normal patterns and impact the project.