May 2021
Chiefs & Sheriff's Association Meeting

PUBLIC SAFETY COMMUNICATIONS IN ND

SIRN Today, Tomorrow and beyond

NORTH DAKOTA STATEWIDE INTEROPERABLE RADIO NETWORK

Pre-2019

Fragmented Systems

Little to No Interoperability & Coverage Issues

SIRN 2020 Today

- Updating DOT sites 45
- Adding 95 more sites
  - Working with City/County Government to use local assets
- Almost 50% of PSAPs on new MCC 7500 Consoles with 18 of the 22 upgraded by end of 2021
  - Allowing for Direct Communications with other PSAPS

SIRN 2020 into the future…

- Interoperability with MN, SD, Manitoba, Verizon, AT&T, Federal Government
- LTE Integration via Critical Connect / Smart Connect
- Centralized Logging
- Mission Critical PTT via LTE

SIRN Today, Tomorrow and beyond

NORTH DAKOTA STATEWIDE INTEROPERABLE RADIO NETWORK

SIRN 2020 into the future…

- Interoperability with MN, SD, Manitoba, Verizon, AT&T, Federal Government
- LTE Integration via Critical Connect / Smart Connect
- Centralized Logging

- LTE (Mission Critical Push to Talk (MCPTT))
  - Not meant to replace LMR, but augment
  - Cost Savings on Admin staff and benefits
- Centralized Logging LMR
  - Local recorder for 911/admin lines
- Other Technologies

SIRN Today

Transitioning to the future

NORTH DAKOTA STATEWIDE INTEROPERABLE RADIO NETWORK

PSAPs Preparing to Transition to 800Mhz

- Fleetmaps
  - Final Naming, how do we communicate, breaking old thought processes
  - Working with your PSAP is key
  - Approval to program by every entity/department is needed
  - Preparing Williston PD, Grand Forks, Minot, Bismarck, Dickinson

SIRN Today Continued

Transitioning to the future

NORTH DAKOTA STATEWIDE INTEROPERABLE RADIO NETWORK

PSAPs Preparing to Transition to 800Mhz Continued

- Radio Talkgroup Layouts
  - State minimums on all radios
  - How, what types of events, patching to make interoperability happen

OH1	OH2	OH3	01 LAW 1	01 LAW 2	01 FIRE/EMS	01 LOCAL GOV	01 LOCAL MA	02 LAW 1	2LAW2	02 FIRE/EMS 1	02 FIRE/EMS 2	03 STATE LAW1	03 STATE LAW2	03 STATE FIEMS	04 Other	05 REGIONAL	05 STATE MA1	05 STATE MA2	5 NAT'L 700MA1	5 NAT'L 700MA2	5 NAT'L 800tMA	5 NAT'L VHF MA
			HOME LE	HOME LE	Home Fire_EMS	HOME Local Govt	Local MA	Adjacent LE		Adjacent Fire		State LE	State LE	State Fire_EMS	Other/Misc.	Regional Interop	Statewide MA	Statewide MA	National MA (700)	National MA (700)	National MA (800)	National MA (VHF)
							## CW LE MA 1					00HP FG OPS1	SR 01 LE BD	00_FS REG A		ND NW MA HAIL	ND MA HAIL	ND MA HAIL	7CALL50	7CALL50_D	8CALL90	VCALL10
PURSUIT	PURSUIT	PURSUIT					## CW LE MA 2					00HP JN OPS1	SR 01 LE MW	00_FS REG B		ND NW PURSUIT	ND PURSUIT 1	ND MA 16	7TAC51	7TAC51_D	8TAC91	VTAC11
							## CW MA 3					00HP BK OPS1	SR 01 LE M	00_FS REG C		ND NW MA 01	ND PURSUIT 2	ND MA 17	7TAC52	7TAC52_D	8TAC92	VTAC12
							## CW MA 4					00HP DK OPS1	SR 02 LE ANN	00_FS REG D		ND NW MA 02	ND MA 03 E	ND MA 18	7TAC53	7TAC53_D	8TAC93	VTAC13
							## CW MA 5					00HP WN OPS1	SR 02 LE BRR	00_FS REG E	Examples:	ND NW MA 03	ND MA 04 E	ND MA 19	7TAC54	7TAC54_D	8TAC94	VTAC14
							## CW MA 6					00HP MT OPS1	SR 02 LE MPSW	00_FS REG F	*Hospitals*	ND NW MA 04	ND MA 05 E	ND MA 20	7TAC55	7TAC55_D	8CALL90_D	VFIRE21
												00HP DL OPS1		00_FS REG G	*MDOT*	ND NW MA 05	ND MA 6	ND MA 21	7TAC56	7TAC56_D	8TAC91_D	VFIRE22
												00HP GF OPS1		00_FS REG H	*Fish*	ND NW MA 06	ND MA 7	ND MA 22	7GTAC57	7GTAC57_D	8TAC92_D	VFIRE23
												00BCI BK OPS1			*Game&Fish*	ND SW MA HAIL	ND MA 8	ND MA 23	7MOB59	7MOB59_D	8TAC93_D	VFIRE24
												00BCI DK OPS1		00_DOH OPS 1	DOH	ND SW PURSUIT	ND MA 9	ND MA 24	7LAW61	7LAW61_D	8TAC94_D	VFIRE25
												00BCI WN OPS1		00_DOH OPS 2	BCI	ND SW MA 01E	ND MA 10	ND MA 25	7LAW62	7LAW62_D		VFIRE26
														00_DOH OPS 3	Federal Agencies	ND SW MA 02	ND MA 11	ND MA 26	7FIRE63	7FIRE63_D		VMED28
														00_DOH OPS 4		ND SW MA 03	ND MA 12	ND MA 27	7FIRE64	7FIRE64_D		VMED29
														00_DOH OPS 5		ND SW MA 04	ND MA 13	ND MA 28	7MED65	7MED65_D		VLAW31
														00_DOH OPS 6		ND SW MA 05	ND MA 14	ND MA 29	7MED66	7MED66_D		VLAW32
																ND SW MA 06	ND MA 15	ND MA 30	7DATA69	7DATA69_D		SAR NFM

SIRN Today Continued

Transitioning to the future

NORTH DAKOTA STATEWIDE INTEROPERABLE RADIO NETWORK

OH1	OH2	OH3	01 LAW 1	01 LAW 2	01 FIRE/EMS
			HOME LE	HOME LE	Home Fire_EMS
PURSUIT	PURSUIT	PURSUIT			

01 LOCAL GOV	01 LOCAL MA	02 LAW 1	2LAW2	02 FIRE/EMS 1	02 FIRE/EMS 2
HOME Local Govt	Local MA	Adjacent LE		Adjacent Fire	
	## CW LE MA 1				
	## CW LE MA 2				
	## CW MA 3				
	## CW MA 4				
	## CW MA 5				
	## CW MA 6				

03 STATE LAW1	03 STATE LAW2	03 STATE FIEMS	04 Other
State LE	State LE	State Fire_EMS	Other/Misc.
00HP FG OPS1	SR 01 LE BD	00_FS REG A	
00HP JN OPS1	SR 01 LE MW	00_FS REG B	
00HP BK OPS1	SR 01 LE M	00_FS REG C	
00HP DK OPS1	SR 02 LE ANN	00_FS REG D	
00HP WN OPS1	SR 02 LE BRR	00_FS REG E	**Examples:**
00HP MT OPS1	SR 02 LE MPSW	00_FS REG F	*Hospitals*
00HP DL OPS1		00_FS REG G	*NDDOT*
00HP GF OPS1		00_FS REG H	*P&R*
00BCI BK OPS1			*Game&Fish*
00BCI DK OPS1		00_DOH OPS 1	DOH
00BCI WN OPS1		00_DOH OPS 2	BCI
		00_DOH OPS 3	Federal Agencies

05 REGIONAL MA	05 REGIONAL MA	05 STATE MA1	05 STATE MA2	5 NAT'L 700MA1	5 NAT'L 700MA2	5 NAT'L 800MA	5 NAT'L VHF MA
Regional Interop	Regional Interop	Statewide MA	Statewide MA	National MA (700)	National MA (700)	National MA (800)	National MA (VHF)
ND NW MA HAIL	ND NE MA HAIL	ND MA HAIL	ND MA HAIL	7CALL50	7CALL50_D	8CALL90	VCALL10
ND NW PURSUIT	ND NE PURSUIT	ND PURSUIT 1	ND MA 16	7TAC51	7TAC51_D	8TAC91	VTAC11
ND NW MA 01E	ND NE MA 01E	ND PURSUIT 2	ND MA 17	7TAC52	7TAC52_D	8TAC92	VTAC12
ND NW MA 02	ND NE MA 02	ND MA 03 E	ND MA 18	7TAC53	7TAC53_D	8TAC93	VTAC13
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ND NW MA 04	ND NE MA 04	ND MA 05 E	ND MA 20	7TAC55	7TAC55_D	8CALL90_D	VFIRE21
ND NW MA 05	ND NE MA 05	ND MA 6	ND MA 21	7TAC56	7TAC56_D	8TAC91_D	VFIRE22
ND NW MA 06	ND NE MA 06	ND MA 7	ND MA 22	7GTAC57	7GTAC57_D	8TAC92_D	VFIRE23
ND SW MA HAIL	ND SE MA HAIL	ND MA 8	ND MA 23	7MOB59	7MOB59_D	8TAC93_D	VFIRE24
ND SW PURSUIT	ND SE PURSUIT	ND MA 9	ND MA 24	7LAW61	7LAW61_D	8TAC94_D	VFIRE25
ND SW MA 01E	ND SE MA 01E	ND MA 10	ND MA 25	7LAW62	7LAW62_D		VFIRE26
ND SW MA 02	ND SE MA 02	ND MA 11	ND MA 26	7FIRE63	7FIRE63_D		VMED28
ND SW MA 03	ND SE MA 03	ND MA 12	ND MA 27	7FIRE64	7FIRE64_D		VMED29
ND SW MA 04	ND SE MA 04	ND MA 13	ND MA 28	7MED65	7MED65_D		VLAW31
ND SW MA 05	ND SE MA 05	ND MA 14	ND MA 29	7MED66	7MED66_D		VLAW32
ND SW MA 06	ND SE MA 06	ND MA 15	ND MA 30	7DATA69	7DATA69_D		SAR NFM

- Radio Talkgroup Layouts
  - State minimums on all radios

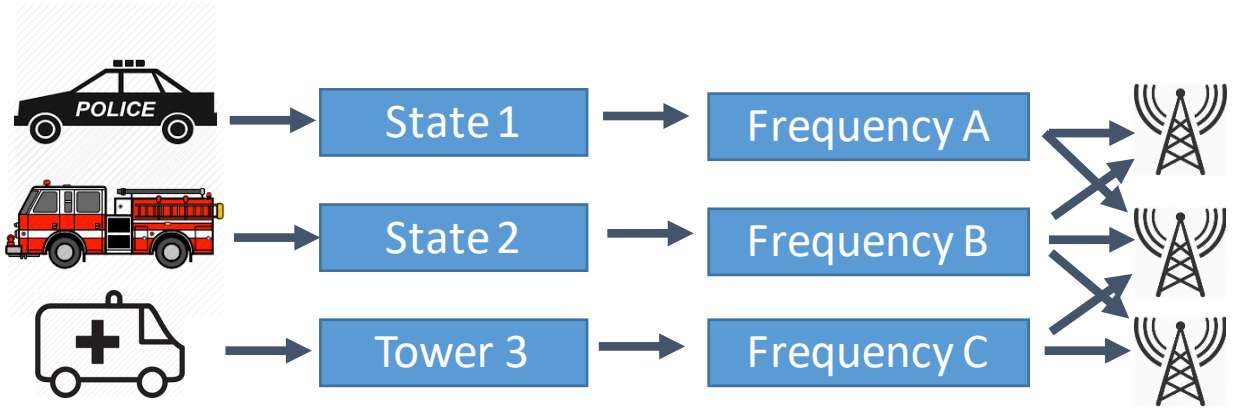
SIRN HISTORY

CONVENTIONAL VS TRUNKING

NORTH DAKOTA STATEWIDE INTEROPERABLE RADIO NETWORK

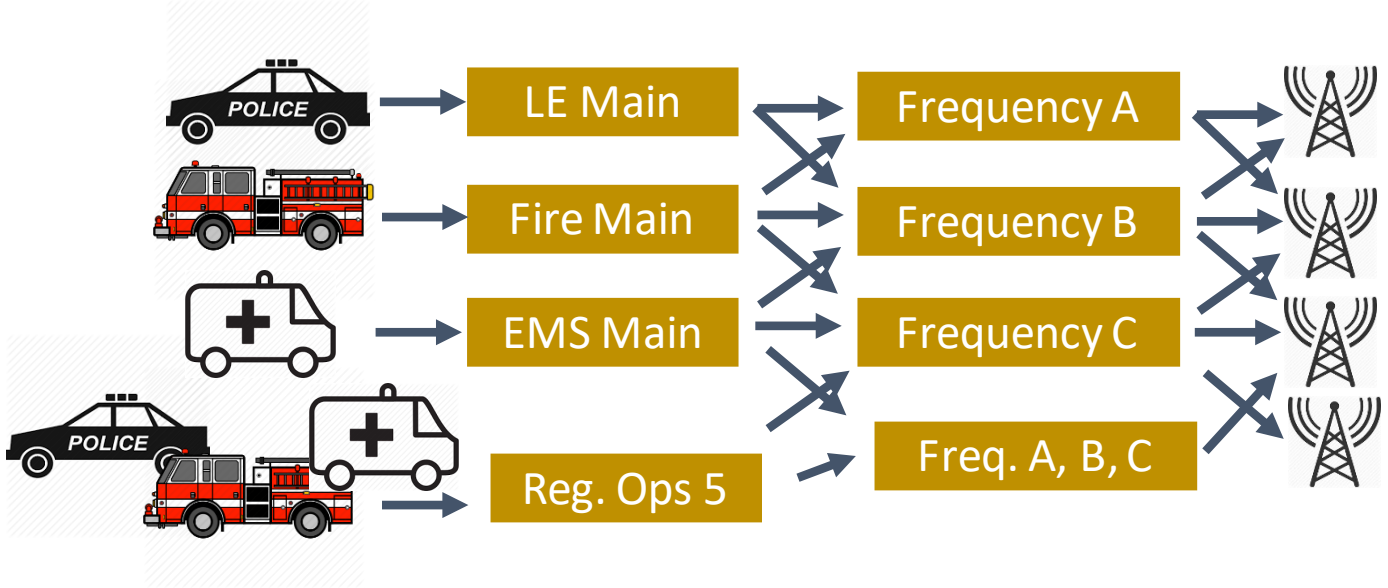
Conventional Radio System:

- User chooses a frequency
- Bound to a specific set of towers
- Assigned to a specific purpose



Trunked Radio System:

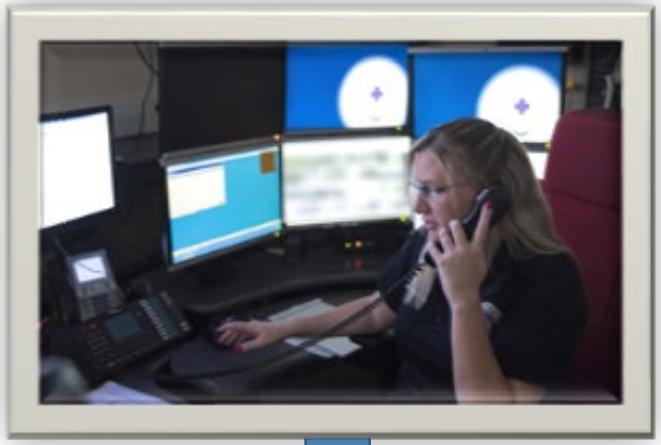
- User chooses a specific talk group
- Assigned to a specific purpose
- Not bound to a frequency
- Not bound to a specific set of towers
  - System programmable
- Can be local, county, regional, state, federal



HOW SIRN TG's WORKS

LTE Main

Dispatcher at PSAP sends message to responders



Trauma 1

LE Main - Encrypted

EMS 1

FIRE 1

HP

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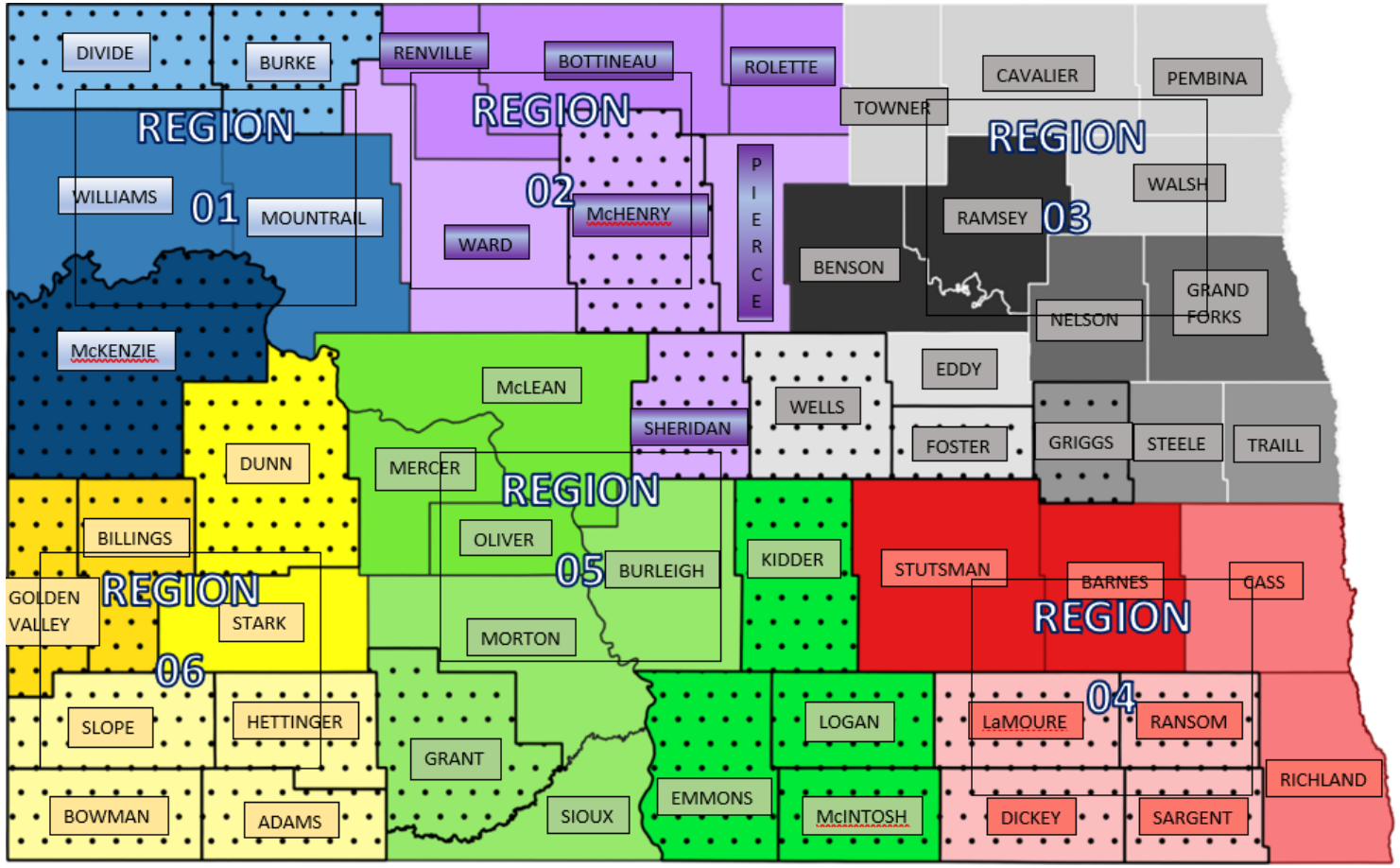
Project Status – Link on SIRN2020.nd.gov

NORTH DAKOTA STATEWIDE INTEROPERABLE RADIO NETWORK

800 Mhz only or Multi-band / Dual Band?

- **When are your neighbors transitioning?**
- **Do you neighbor State Radio Counties or Lake Region?**
  - Options to overcome challenges
    - Side mount mobile, VHF portables, etc.
- **State will have Mobile Coverage first, then fill in portable**



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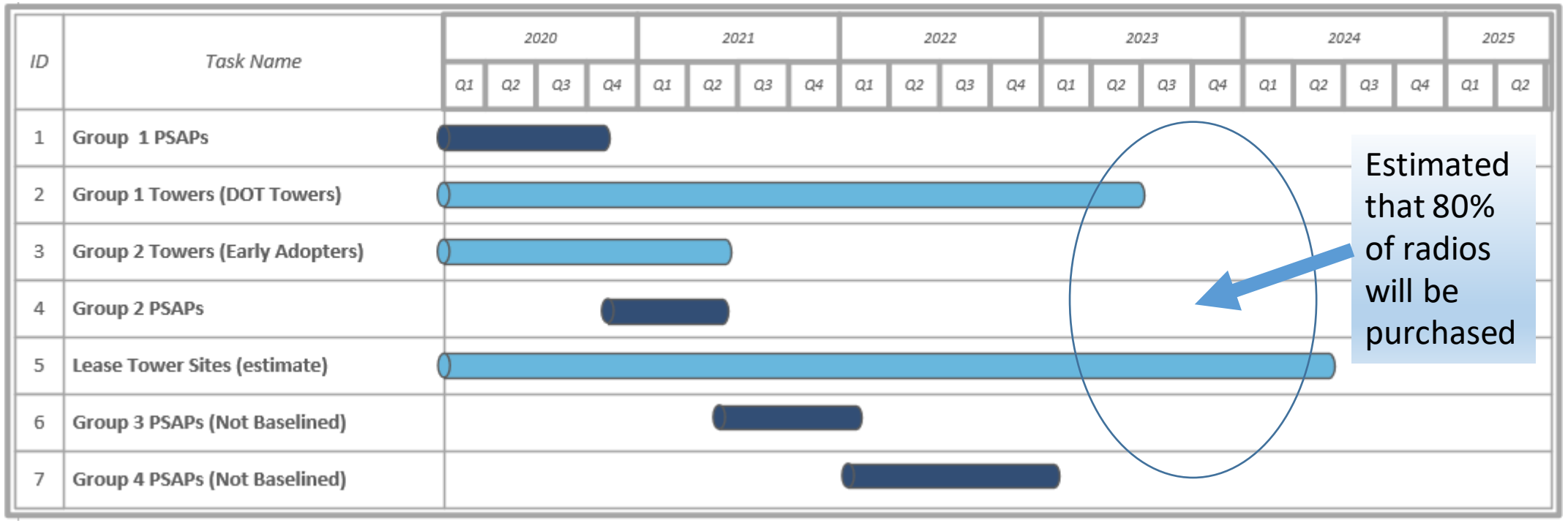
PROJECT TIMELINE

NORTH DAKOTA STATEWIDE INTEROPERABLE RADIO NETWORK



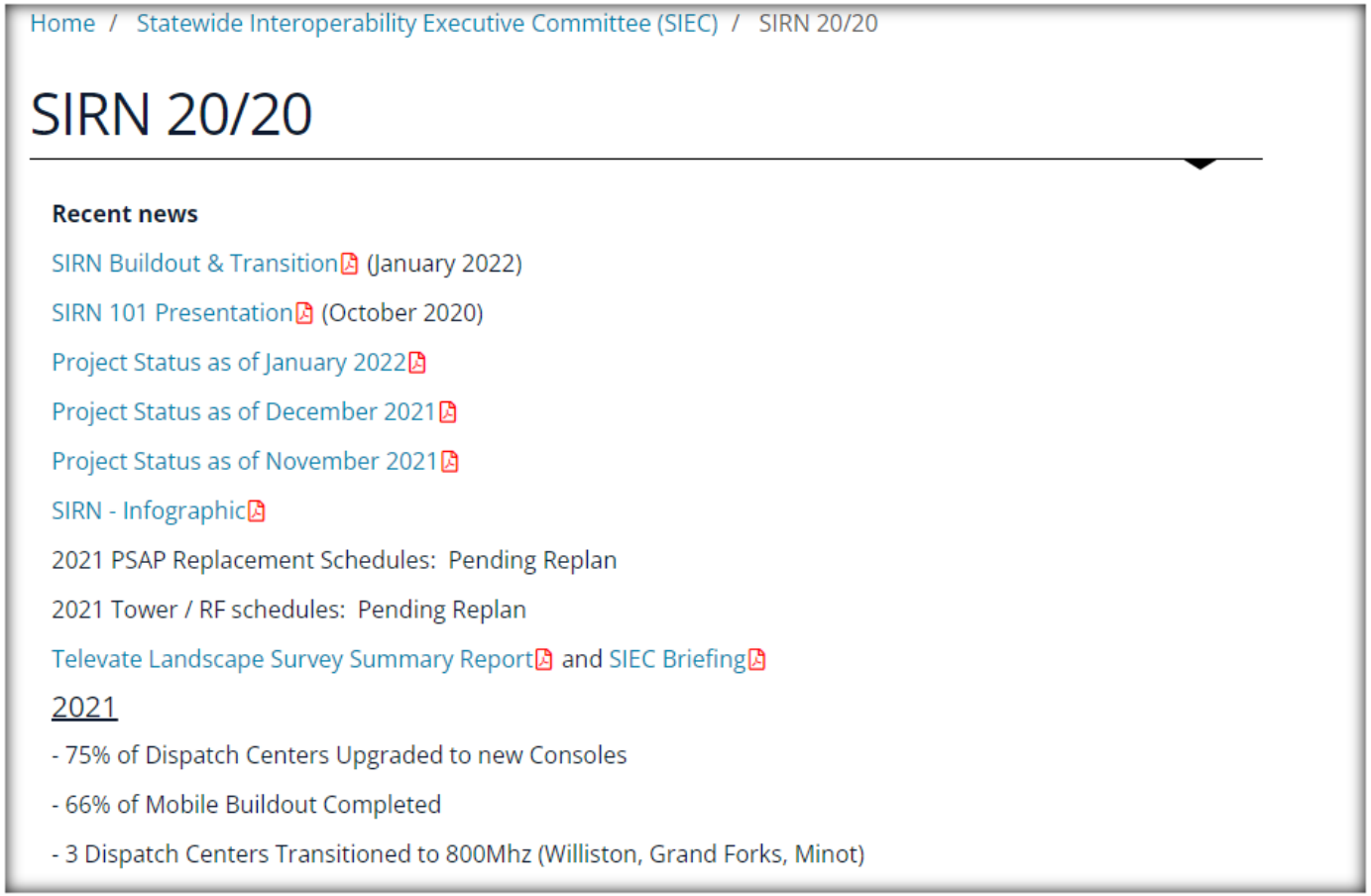
SIRN

GOVERNANCE & POLICY

NORTH DAKOTA STATEWIDE INTEROPERABLE RADIO NETWORK

- Workgroups developing standards which are then reviewed/approved by Subcommittee / SIEC
  - SIRN Standards Page
  - Governance Page

SIRN2020.ND.GOV



Home / Statewide Interoperability Executive Committee (SIEC) / SIRN 20/20

SIRN 20/20

Recent news

SIRN Buildout & Transition (January 2022)

SIRN 101 Presentation (October 2020)

Project Status as of January 2022

Project Status as of December 2021

Project Status as of November 2021

SIRN - Infographic

2021 PSAP Replacement Schedules: Pending Replan

2021 Tower / RF schedules: Pending Replan

Televate Landscape Survey Summary Report and SIEC Briefing

2021

- 75% of Dispatch Centers Upgraded to new Consoles
- 66% of Mobile Buildout Completed
- 3 Dispatch Centers Transitioned to 800Mhz (Williston, Grand Forks, Minot)

SIRN2020.nd.gov

NORTH DAKOTA STATEWIDE INTEROPERABLE RADIO NETWORK

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