HOUSE APPROPRIATIONS

GOV. OPS SUB COMMITTEE

MARCH 13, 2025

BRYNHILD HAUGLAND

NORTH Dakota | Information Technology

Be Legendary.

Introductions

Corey Mock
Chief Information Officer

Greg Hoffman
Deputy Chief Information Officer

Evonne Amundson
Chief Business Applications Officer

Kim Weis
Chief Data Officer

Craig Felchle
Chief Technology Officer

Shelly Miller
Chief of Staff

Chris Gergen
Interim Chief Information Security Officer

NDIT Vision and Mission

NDIT enables partners to provide the 'Best Government Experience' and strives to be a trusted business partner through frictionless technology and proactive services

North Dakota Information Technology

Defends
252,000+
People every day from cyber attacks

Prevents
4.5 Billion+
Threats on STAGEnet per year

Provides
ND Citizen Skills for All Training
a pathway to a career in technology

Supports
ND companies to provide internet to unserved /underserved citizens by awarding **$37M grant funds**

WHAT WE DO

End to End Technology Services
Handling all technology, from supporting the tried and true, to finding innovative technology solutions for the future.

Whole-of-State Cybersecurity
Defending the data and services of all branches of government and the citizens they serve.

STAGEnet
Network backbone for governmental entities in the state.

PK20W
All North Dakota, Future Ready, Today. Every student. Every school. Cyber educated.

Education
Improve student and teacher outcomes in every North Dakota K12 school using SLDS and Learning Information Systems.

Program & Portfolios
Managing hundreds of millions of dollars of IT projects across government.

WHAT WE'RE PROUD OF

Strengthen Operational Rhythm – HB1398 (2023)
ND is the First State to require Cybersecurity and Computer Science credits for high school graduation.

Optimize Financial and Process Discipline - HHS MMIS Upgrade
Decreasing operational support costs, addressing security risk, and building more modern platforms that will support the MMIS system for the future.

Frictionless Experience - NDIT and ND Game and Fish win National Award
The Electronic posting project is a tool for landowners and hunters to identify posted lands digitally.

NDIT Teams

- **Applications Team-** The Applications Team at NDIT creates, supports, and improves the digital tools and programs—like health applications, websites, and document-sharing platforms—that help state employees get their work done. This team ensures these tools are reliable, user-friendly, and meet the needs of everyone who uses them.
- **Data Team-** The Data Team at NDIT helps make data useful and accessible for better decision-making across the state. They support tools like maps and geospatial data (GIS), analyze data for trends and insights, and use artificial intelligence to automate tasks and improve processes.
- **Technology Team-** The Technology Team at NDIT ensures the state's technology is innovative, secure, and efficient. They support public safety with tools like 911 system support and emergency communication, expand broadband access to connect communities, and manage the overall technology (hosting, computers, networks, collaboration products) that keep systems running smoothly. The Technology Team also leads the Enterprise Architecture practice, the solutioning and road-mapping team that strives to align business objectives with technology solutions.
- **Security Team-** The Security Team protects the state's data, systems, and critical services from cyber threats. They work closely with agencies to create security policies, identify risks, fix vulnerabilities, and monitor and respond to threats to ensure everything remains safe and secure.
- **Fiscal and Vendor Management Team-** The Fiscal and Vendor Management teams handle all the back-office support for procurement, budgeting, service fee creation and financial management of NDIT
- **Administrative Team-** The Administrative Team at NDIT is responsible for internal and external communications, human resource functions, training, education and outreach for technology solutions. They lead efforts on employee culture, engagement and succession planning.

Major IT Focus Areas Overview

Major IT Focus Areas

- SLDS- Tracy Korsmo, SLDS Program Manager
- GIS- Bob Nutsch, Geospatial Program Manager
- HIN- Shila Blend, NDHIN Health IT Director
- EduTech- John Gieser, K12 IT Strategist
- Broadband- Brian Newby, Broadband Program Director
- SIRN- Craig Felchle, CTO
- Enterprise Digitization and Modernization- Craig Felchle, CTO
- Vulnerability Remediation- Chris Gergen, Interim CISO
- Digital Experience (Gateway work)- Evonne Amundson, CBAO
- Statewide Data Strategy (Lighthouse work)- Kim Weis, CDO


SLDS
THE CHICKEN LIFE CYCLE

WHAT DOES AI SAY ABOUT THE SLDS

(GROK3 QUESTION: "WHAT CAN YOU DESCRIBE OF THE ND SLDS")

The North Dakota Statewide Longitudinal Data System (SLDS), as reflected through ND Insights (https://insights.nd.gov) and related public information, is a comprehensive data framework designed to track individuals across education and workforce stages. Managed by the North Dakota Information Technology agency in collaboration with multiple state partners, it aims to provide actionable insights for improving educational outcomes, workforce readiness, and policy decisions. Here's a detailed breakdown based on available descriptions:

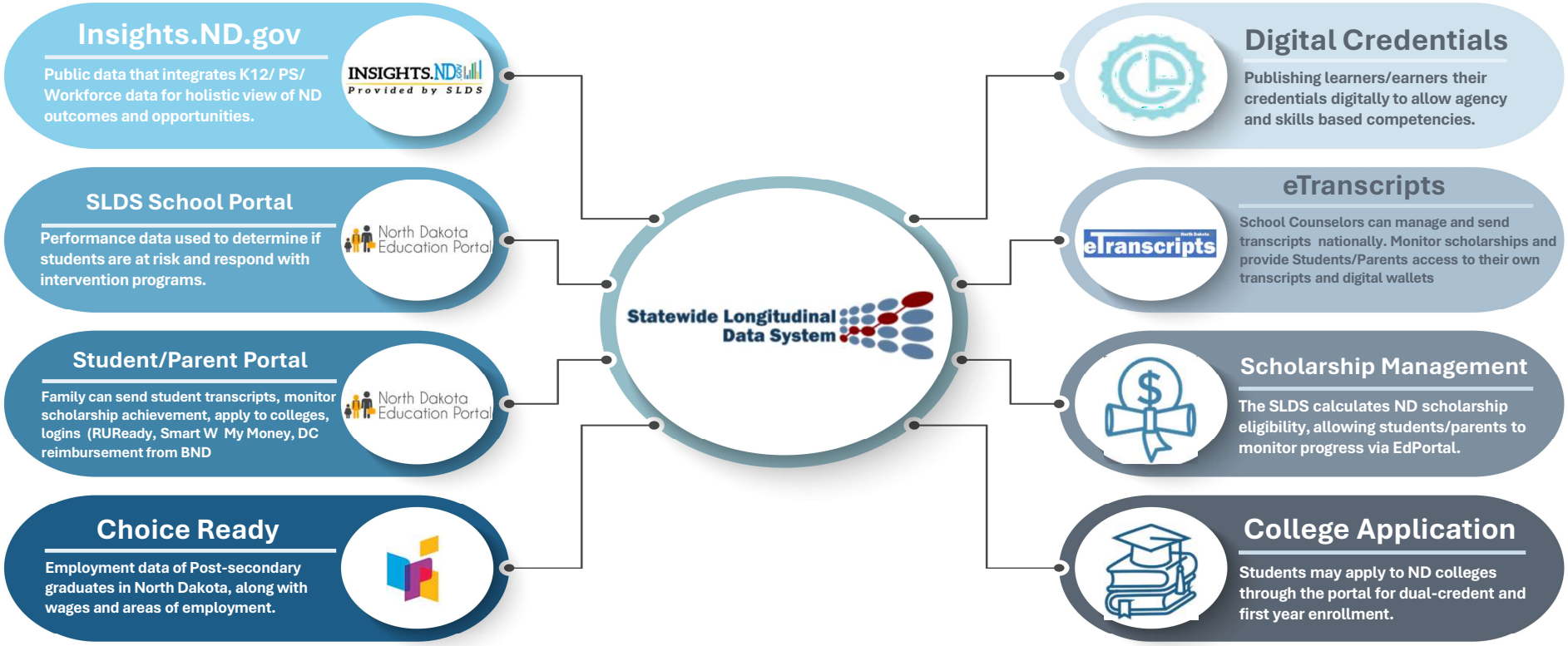
Purpose and Scope

- The ND SLDS integrates data from early childhood education through K-12, post-secondary education, and into workforce participation. Its primary goals are:
  - Track Progress: Monitor student achievement and transitions over time, from preschool to employment.
  - Evaluate Programs: Assess the effectiveness of education and training initiatives.
  - Inform Stakeholders: Offer transparent data to educators, families, policymakers, and employers to support decision-making.
  - Workforce Alignment: Connect educational outputs (e.g., degrees, skills) to North Dakota's economic needs, like agriculture, energy, and healthcare.

What is the Statewide Longitudinal Data System

- The Statewide Longitudinal Data System (SLDS) leverages stakeholders and partners of education, training, and employment programs to create a system which provides data and services to support the research and evaluation of programs to improve the outcomes of individuals provided service.
- The SLDS is a series of secured data warehouses comprised of historical **education** and **workforce training data**. The objective of the SLDS is to provide data on the outcomes of ND education and workforce training programs.
- https://www.slds.nd.gov/

ND SLDS Services and Features



SLDS Activity and Goals

- Research teacher retention
- Training 2000+ along with video and online
- Move applications to cloud-based infrastructure in Azure (modernization)
- BND DC application
- Digital Credentials
  - Bismarck State College Proof of Concept (degrees/credentials to digital wallet)
  - ND EMS with Federal Homeland Security POC on First Responder digital credentials with Digital Bazaar
- Juvenile Justice domain (measure interventions, programs, outcomes in education and beyond)
- AI POC on public data (Insights.nd.gov)

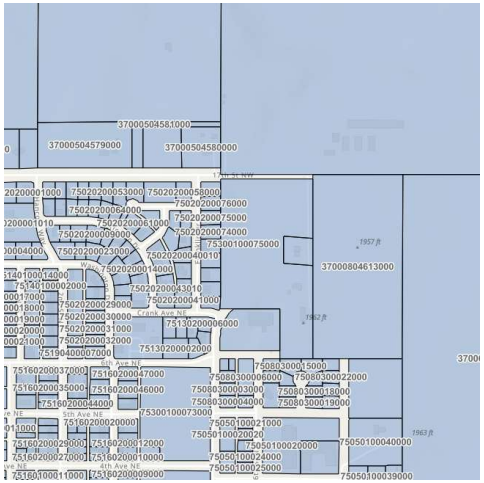
Geospatial

Geospatial Program

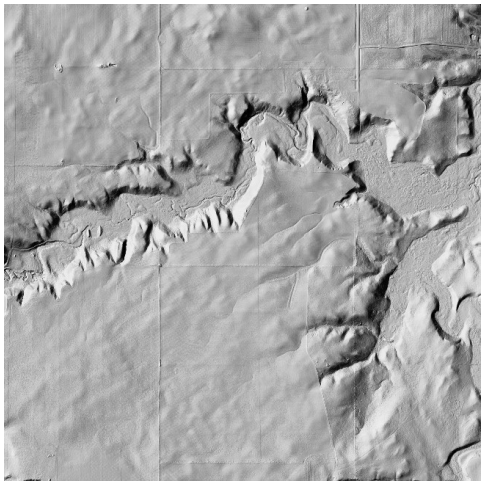
- The North Dakota Geospatial Program **reduces barriers** to the utilization of geospatial technology and geospatial data. This in turn, provides state agencies the opportunity for greater collaboration with other agencies, for more efficient **data-driven decisions**, and for improved **delivery of services** to other levels of government and to the citizens of North Dakota.
- The core of the State Geospatial Program is the GIS Hub which leverages the State's existing data and infrastructure to support state agency business processes including systems such as the **North Dakota Parcel Program**, the **Game and Fish Electronic Posting**, and **Next Generation 9-1-1**.

Geospatial Data Examples

Parcel Boundaries
(Counties & NDIT)

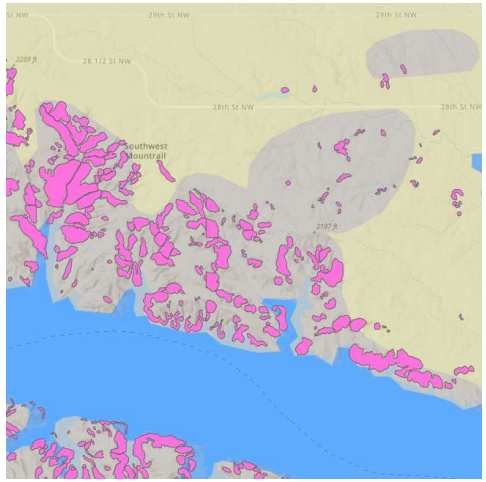


Elevation
(DWR & Partners)

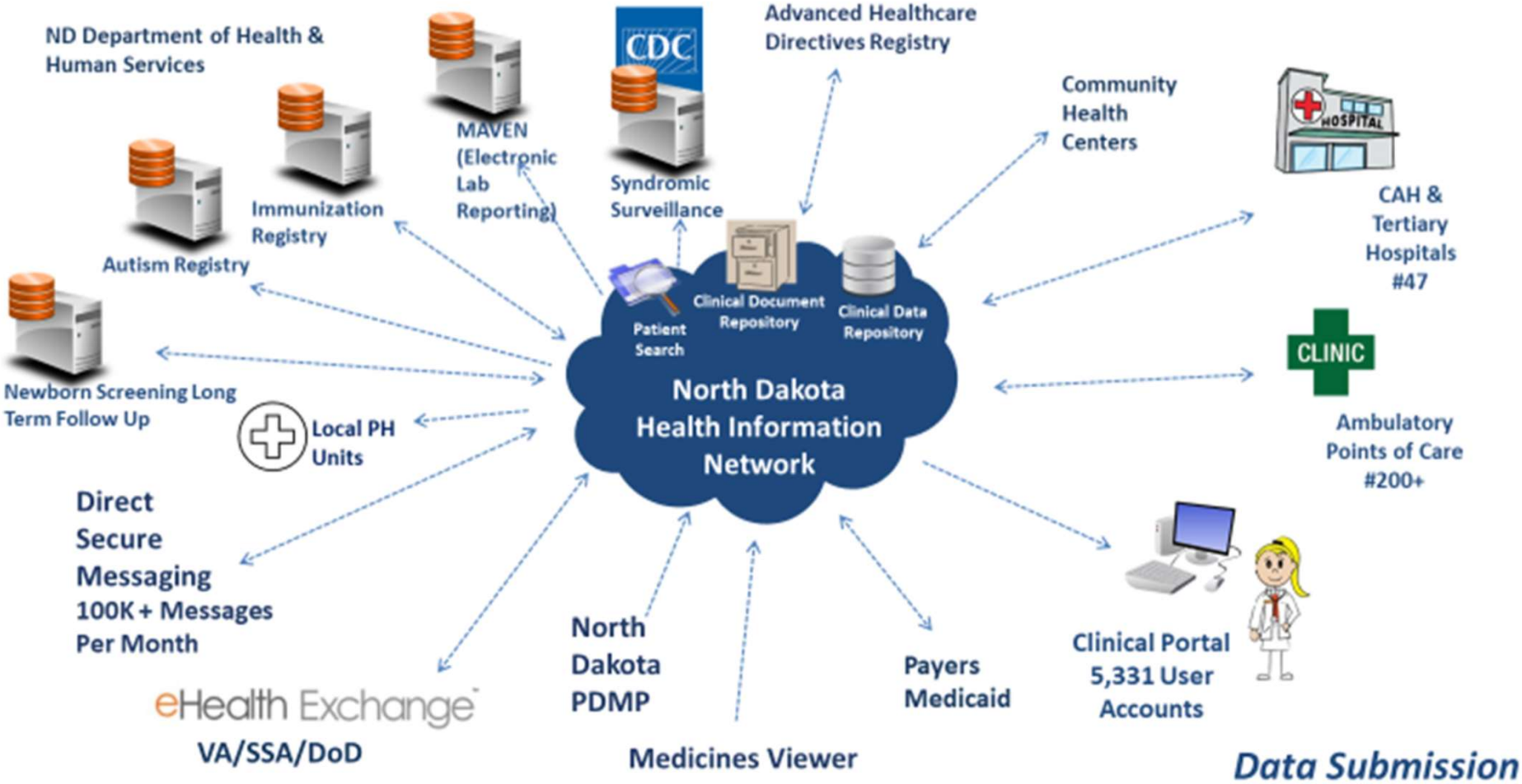


Imagery
(USDA)

Landslides & Geology
(Geological Survey)

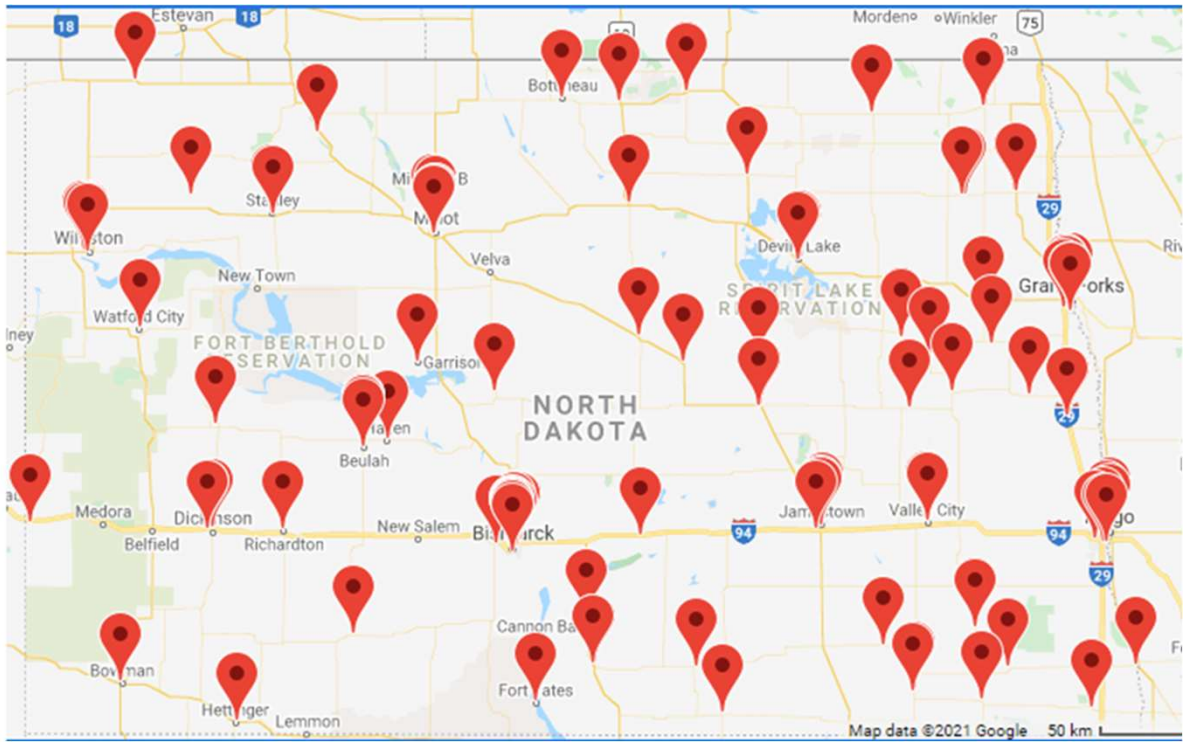


North Dakota Health Information Network (NDHIN)

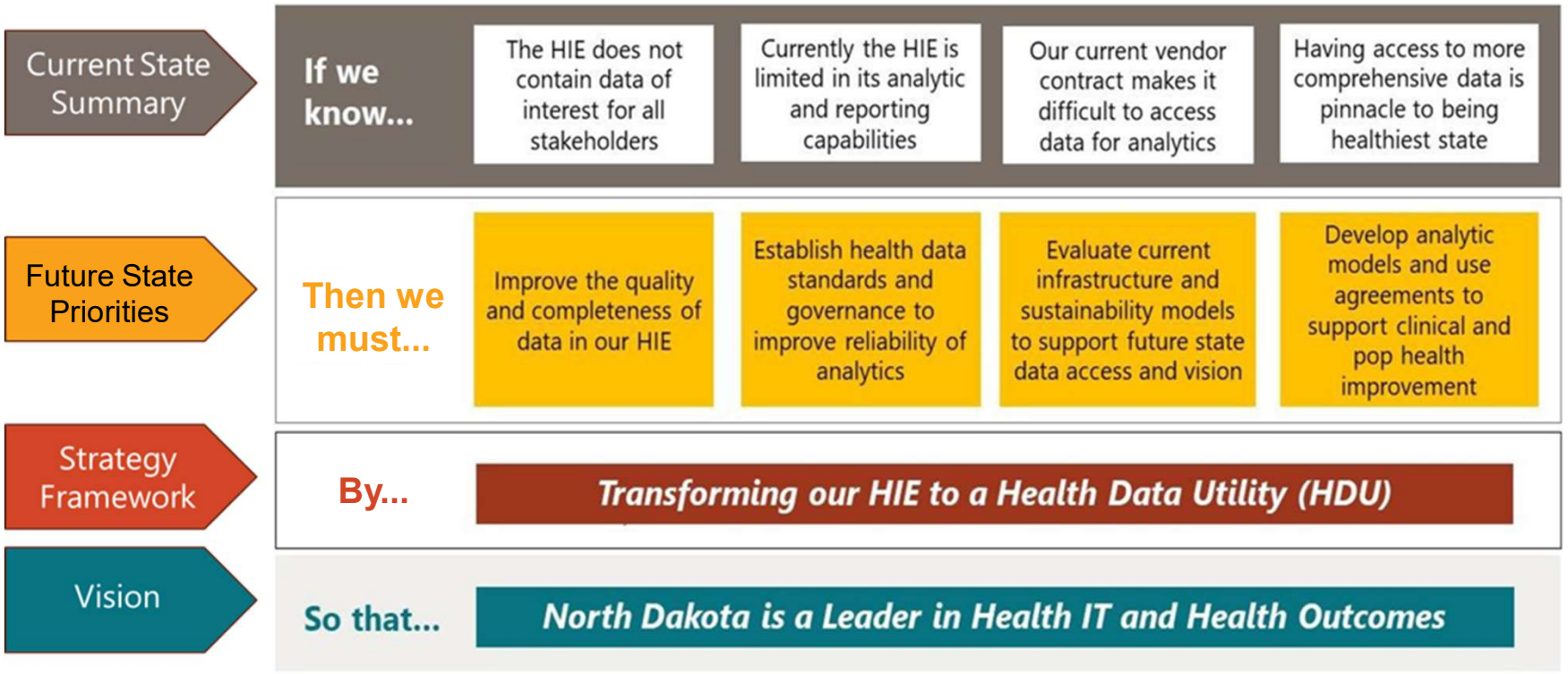

ND Department of Health & Human Services
MAVEN (Electronic Lab Reporting)
CDC
Advanced Healthcare Directives Registry
Community Health Centers
HOSPITAL
Immunization Registry
Syndromic Surveillance
Autism Registry
CAH & Tertiary Hospitals #47
Patient Search
Clinical Document Repository
Clinical Data Repository
CLINIC
Newborn Screening Long Term Follow Up
North Dakota Health Information Network
Local PH Units
Ambulatory Points of Care #200+
Direct Secure Messaging
100K + Messages Per Month
North Dakota PDMP
Payers Medicaid
Clinical Portal 5,331 User Accounts
eHealth Exchange
VA/SSA/DoD
Medicines Viewer
Data Submission

NDHIN FOOTPRINT

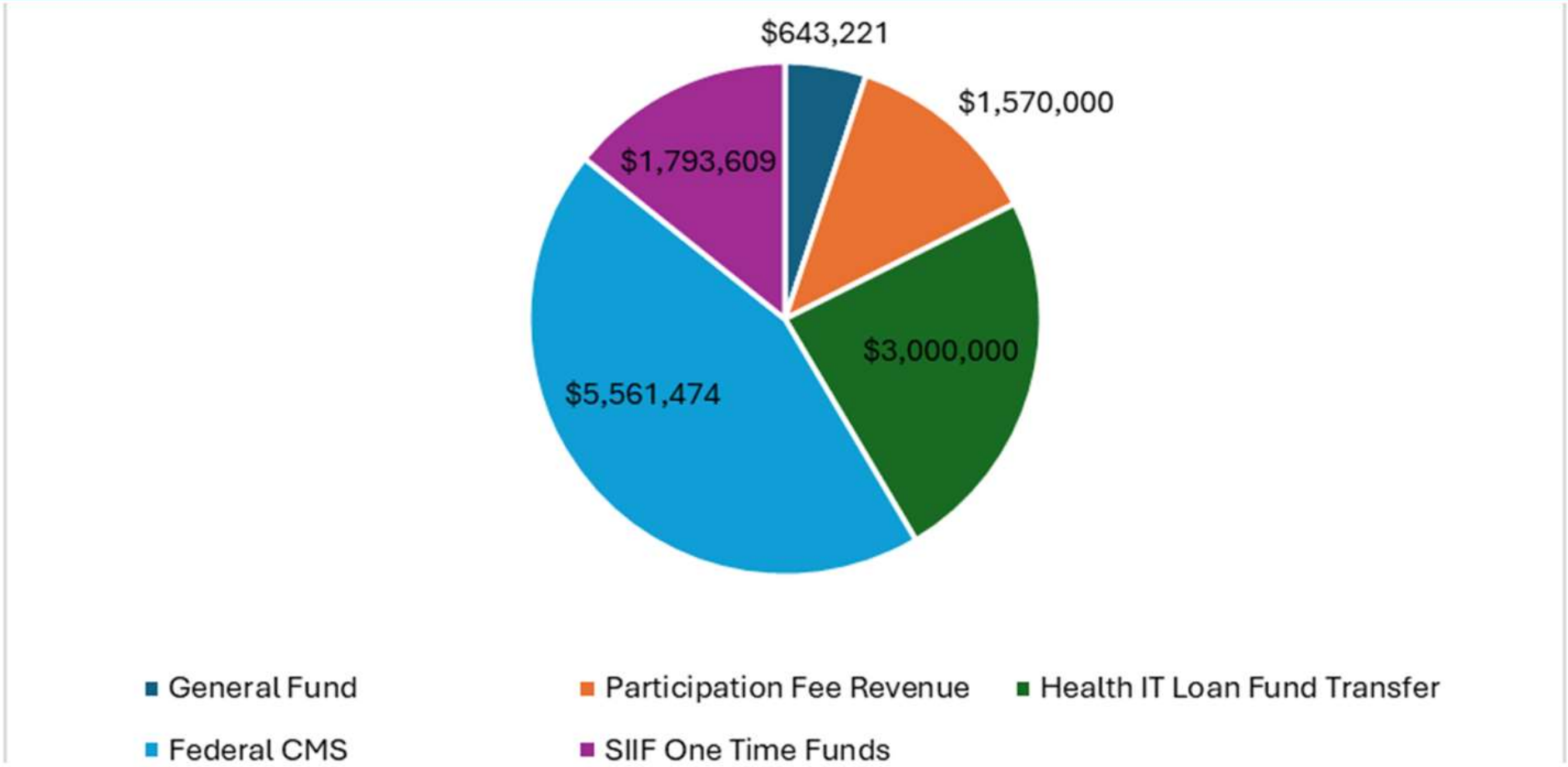
- 2024 Snapshot
- 356 Participating Facilities
- 5560 Active Users
- 1.57M Unique Patient IDs
- All tertiary and Critical Access Hospitals participating
- 655 Incoming Data Feeds
- Almost 1M Direct Secure Messages sent/received in 2023
- 3600+ images viewed in 2023



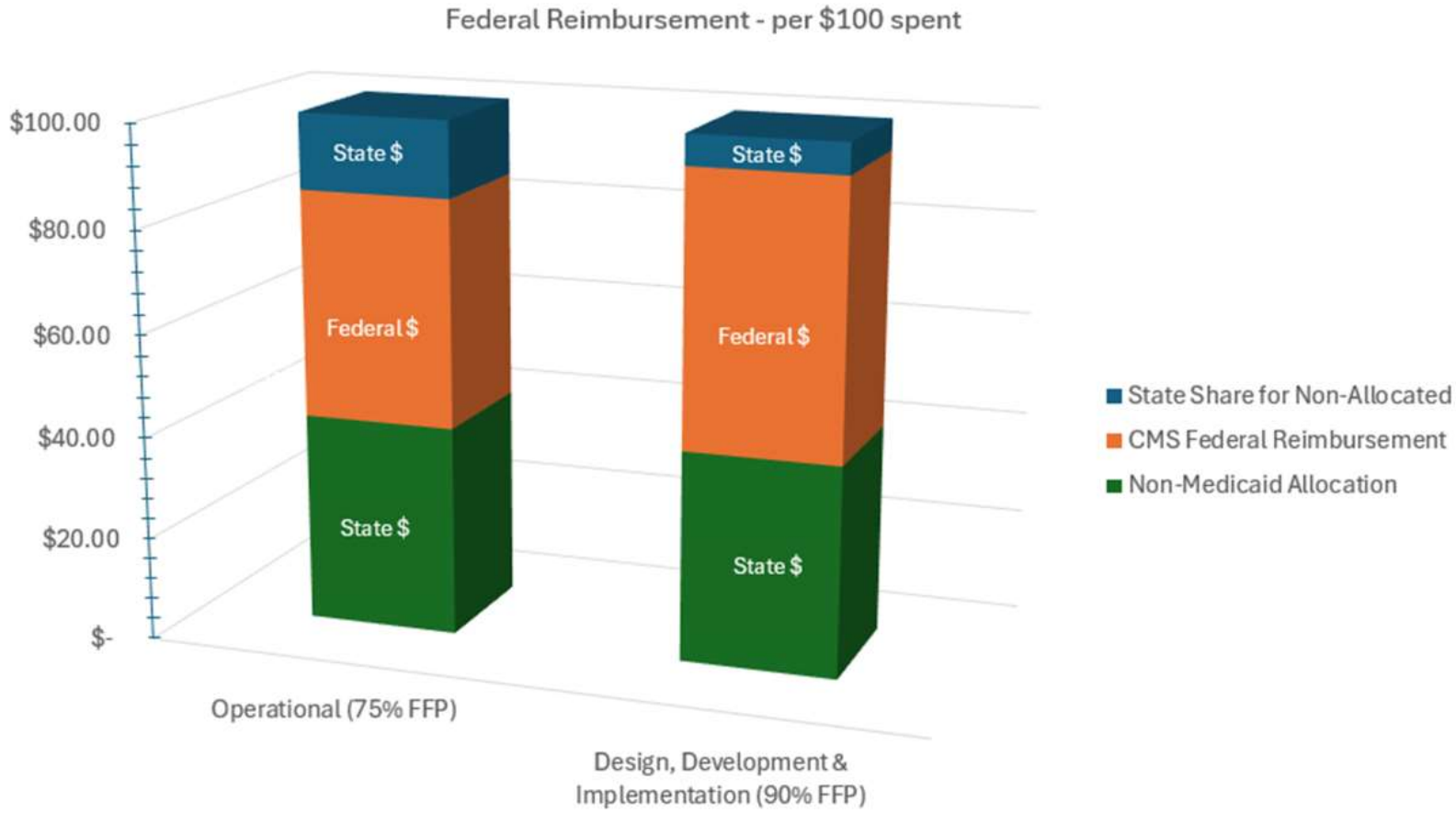
Future Target State



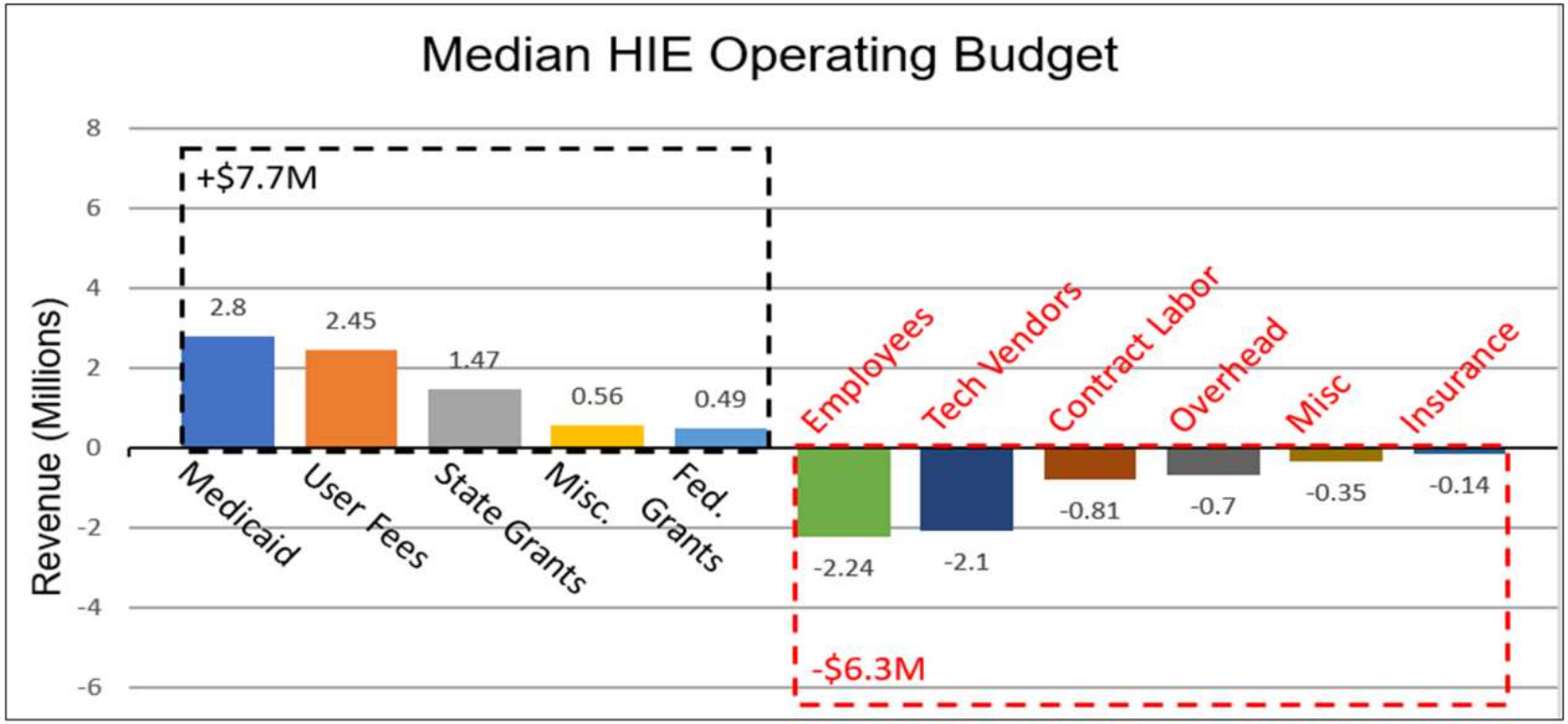
NDHIN Proposed Funding Breakdown



Federal Reimbursement with Current Cost Allocation (59%)



National Annual Median HIE budget



Source: CIVITAS Networks for Health, 2024

EduTech

Overview of EduTech

1990-1995
- Dial Up Service
- @sendit Mail
- Web hosting
- Teaching Practice
- Establish TECO Community

2009 - 2014
- Authority to build
- IES SLDS grant for K12

2010-12
- Workforce developed through a WDQI grant

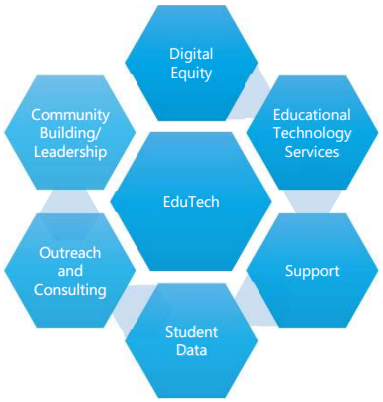
2012- 2016
- Higher Ed build
- IES Grant

2015 - 2022
- IES Grant for data utilization
- Dashboards and secured access for teachers

2015-2020
- Unification
- ETC dissolution
- Retire @sendit services
- High Octane/IgniteND
- PK20W Initiative
- STEM Education
- SETDA

2020-2025
- Computer Science/Cybersecurity Education
- ClassLink
- Cyber Madness
- Retire Web hosting
- Microsoft EES

2025-
- PowerSchool->Infinite Campus
- Digital Equity
- Artificial Intelligence
- CoSN



Improve Capacity and Equity

Reduce Technology Effort Required of K12 IT Leaders, Staff, Educators, and Students

Snapshot of Now and The Future

Professional Outreach

- 199 Topics
- 731 Engagements
- 11,700 attendees
- E-rate
  - State Application/STAGEnet
  - $6.7M to schools
- Skills for All
- Student Data User Group
- IgniteND Conference
- Cyber Madness
- Technology Showcase

Technical Services

- Identity Management
- Microsoft 365
- Microsoft EES Agreements
- ClassLink
  - 87 Districts
  - These cover 73% of students

Into the Future

- Artificial Intelligence
- Infinite Campus
- Training Management Application

Community and Leadership

- Technology Coordinator Forum
- Statewide K12 Technology Town Hall
- SETDA
- CoSN
- PK20W

Broadband (CPF, BEAD, and DE)

ND State Broadband Program Update

1. Broadband Programs Overview
2. Capital Projects Fund Update
3. Broadband Equity, Access, and Deployment Update
4. Digital Equity Update
5. Timeline and Next Steps

The State of North Dakota has been awarded ~$172M in Federal Funding to provide reliable access to affordable, high-speed[1] broadband

$37 M — **Capital Projects Fund (CPF)**

Purpose | To fund critical capital projects that provide North Dakotans access to the high-quality modern infrastructure, including broadband, needed to access critical services

$130 M — **Broadband Equity, Access, & Deployment (BEAD)**

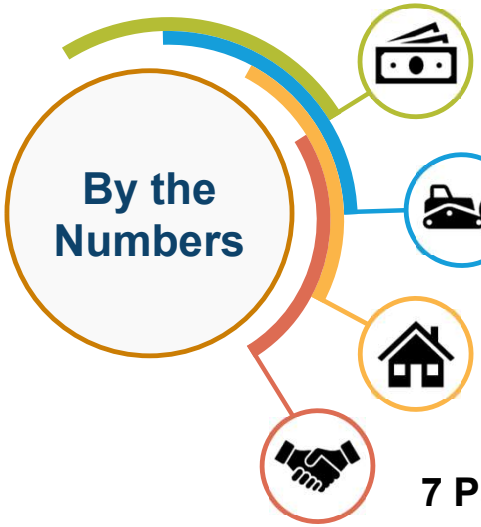
Purpose | To expand high-speed Internet access in North Dakota by funding broadband planning, infrastructure deployment, and digital adoption programs

$5 M[2] — **Digital Equity (DE) Act Programs**

Purpose | To fund programs that promote North Dakotan's access to the skills, capacity, and technology to fully participate in the modern economy

1: *Defined as speeds at or above 100/20 Mbps* | 2: *$4.5M in funds have been allocated to ND, with potentially more anticipated*

CPF | Projects funded by CPF are working to address infrastructure needs, with $37.3M to be deployed by end of 2026



$37.3 Million Committed[1]
- $6M Expended
- $31.3M Remaining

11 Projects Awarded
- 2 completed
- 9 underway

~2,150 Locations Funded
- ~1.9k Residences
- ~250 Businesses

7 Participating ISPs

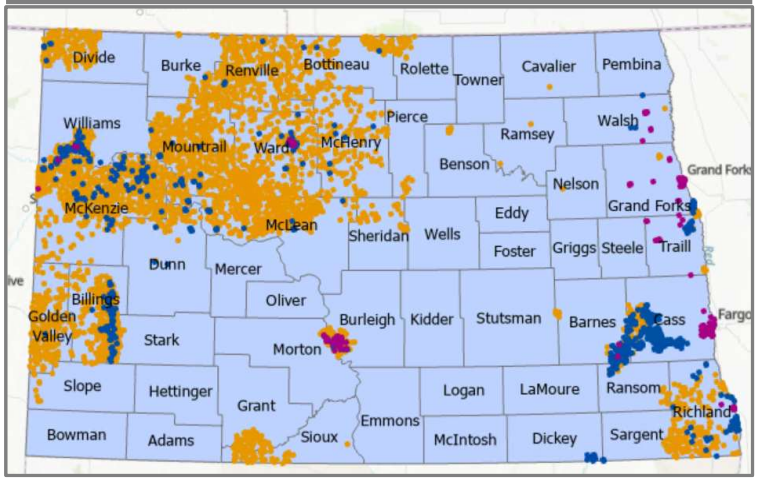
Organization	Locations	Status	Project End[2]
NCC	64	Completed	Q4 2023
Nemont	45	Completed	Q4 2024
West River	47	Near Complete	Q2 2025
Halstad	221	50%	Q4 2025
Polar Walsh	318	50%	Q4 2025
Polar Grand Forks	394	Not Started	Q4 2025
Polar Traill/Steele	218	50%	Q4 2025
Red River	323	50%	Q3 2025
MLGC Cass	80	< 50%	Q4 2025
MLGC Steele	146	< 50%	Q4 2025
NCC/MVC	291	Not Started	Q4 2026

[1] The total CPF allocation is $38.7M. $37.3M represents the project grants.
[2] Operations initiation dates based on Q4 P&E Report projections and monthly progress updates

BEAD | In 2024, the federal government updated its definition of broadband internet to a minimum standard of 100/20 Mbps[1]

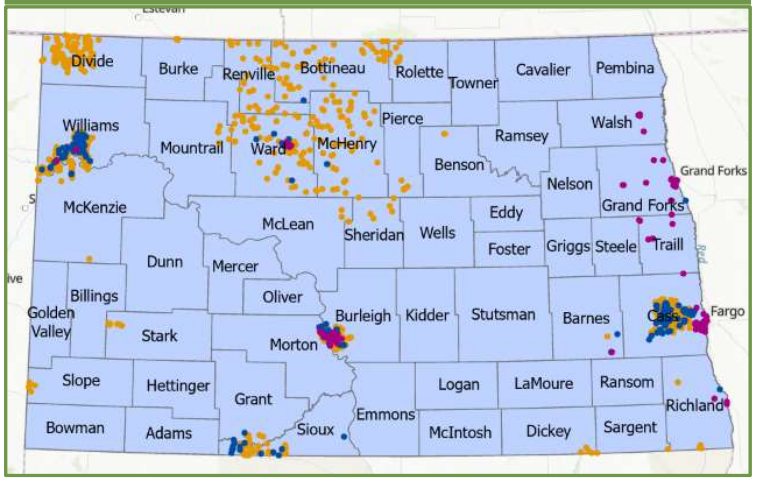
- The goal of BEAD is to deliver broadband service to locations where this standard is not met
- Initially, over 7,000 North Dakota residences and businesses lacked access to broadband
- Today, significant progress has been made refining this list to ~2,000 locations

2023 | Eligible Locations



Unserved Underserved Unserved CAIs

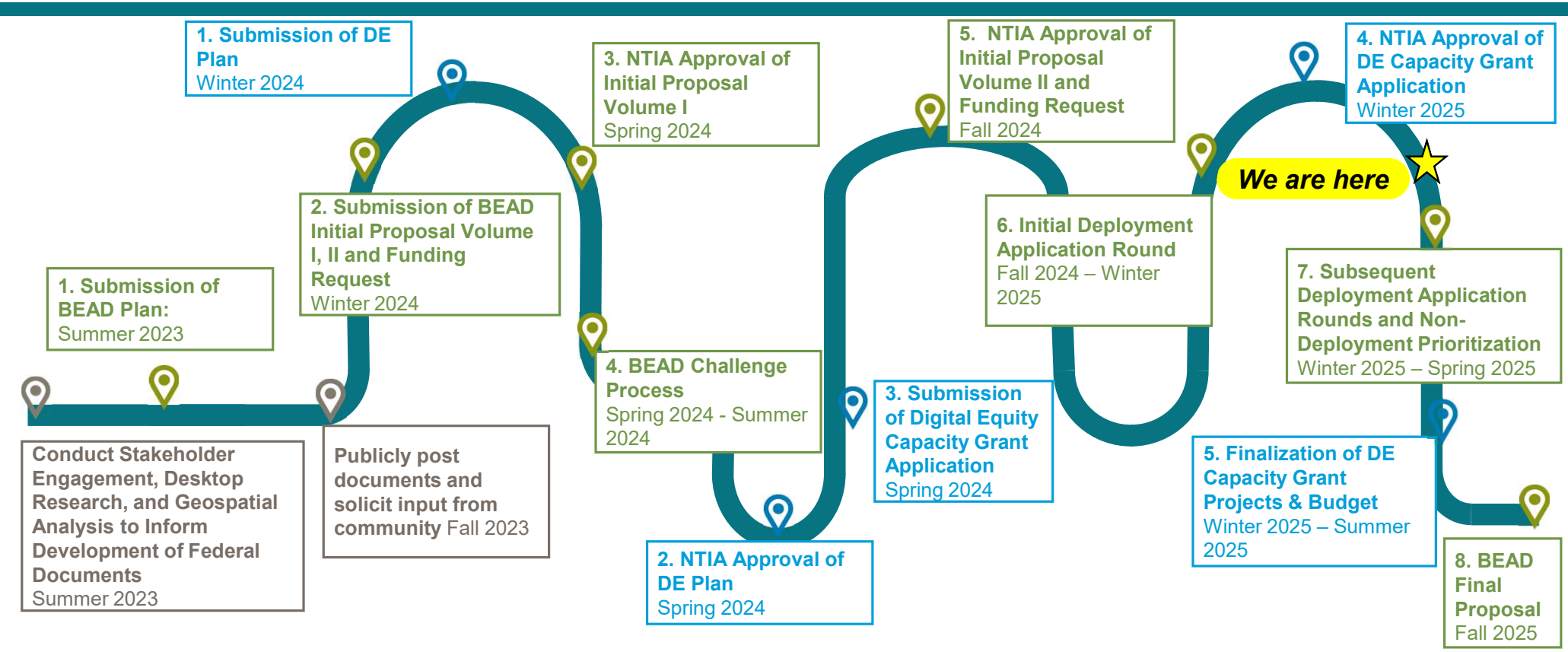
2025 | Eligible Locations[2]



Unserved Underserved Unserved CAIs

1: *1/1 Gbps for Community Institutions (CAIs) such as Libraries and Schools* | **2:** *Does not include locations that will be served through CPF projects*

BEAD | North Dakota has made significant strides from initial inception to preparation for final project selection

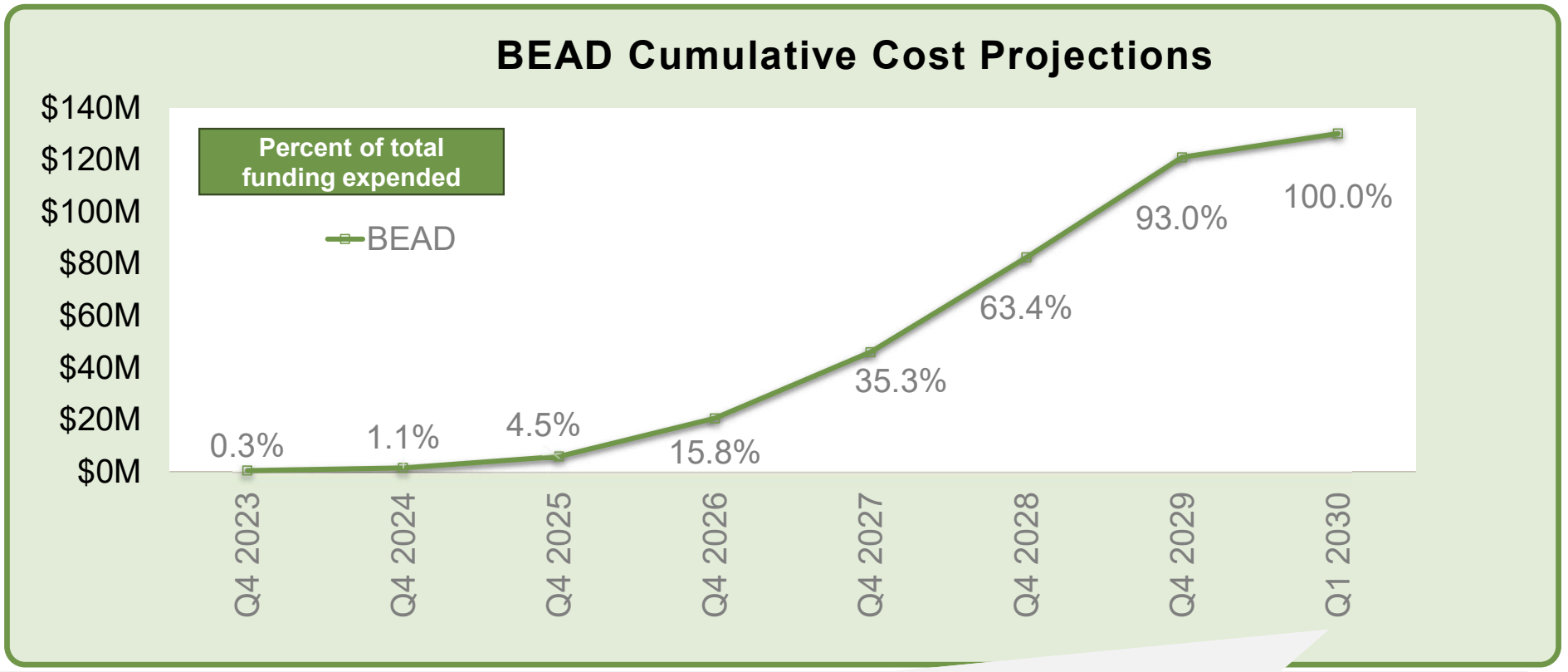


Broadband, Equity, Access and Deployment (BEAD)

Digital Equity (DE)

BEAD and DE

BEAD | At present, the program is on-track to have delivered broadband service to 100% of all locations in the State by 2030



*Note: Per NOFO, all deployment projects must be completed within 4 years of subgrant. Assuming completion of subgrantee selection in Q2 2025, deployment projects **must conclude by Q1 2030**.*

CPF | Projects are closing out under budget, creating an opportunity to use remaining dollars for connecting locations not addressed by BEAD

Using Remaining Funds for Line Extension Efforts if Projects Come Back Under-Budget

- **Supplant BEAD:** Remaining funds can help address connectivity gaps that do not merit BEAD awards
- **Quick Implementation:** Projects target locations near existing networks, avoiding lengthy start-up phases
- **Efficient Use of Funds:** Ideal for smaller, ad-hoc allocations where full-scale projects are cost-prohibitive
- **Alignment with Deadlines:** Extensions are more readily completed before the fund expiration deadline

Process and Next Steps

- **Establish** program guidelines and finalize eligible locations
- **Draft** solicitation documents and conduct outreach to ISPs
- **Open** application process and evaluate proposals on a rolling basis as funds become available
- **Award** funds to cost-effective projects and monitor completion
- **Emphasize** fiber as the priority technology, consistent with legislative intent

BEAD | Any remaining funds not used during the program may be repurposed for Non-Deployment initiatives

Non-deployment projects are activities beyond last-mile deployment that may include:

- Digital safety; digital literacy training
- Remote learning; computer science, coding, cyber security education
- Digital navigators; broadband adoption support
- Telehealth services
- Digital Equity Plan projects; stakeholder engagement

Process for selecting and finalizing non-deployment projects

- **Develop project long-list**
  Winter/Spring 2025
- **Prioritize and down-select projects**
  Winter/Spring 2025
- **Finalize projects for funding**
  Spring 2026 - 2027
- **Implement non-deployment projects**
  2027 and beyond

We know that certain BEAD non-deployment activities align with 2025-2027 legislative priorities (e.g., digital government transformation, education innovation, economic development)

However, non-deployment projects will not be finalized and selected until 2027, so funds cannot be allocated toward 2025-2027 biennium projects

DE | The DE Act provides $4.5M+ in funding to address North Dakotan's digital opportunity needs; existing programs would benefit from funds

Program Overview

Program Objectives

- Establishes three grant programs that promote digital equity and inclusion

North Dakota's Needs

- Closing broadband access gap among the eight federally defined Covered Populations

Planned Fund Use

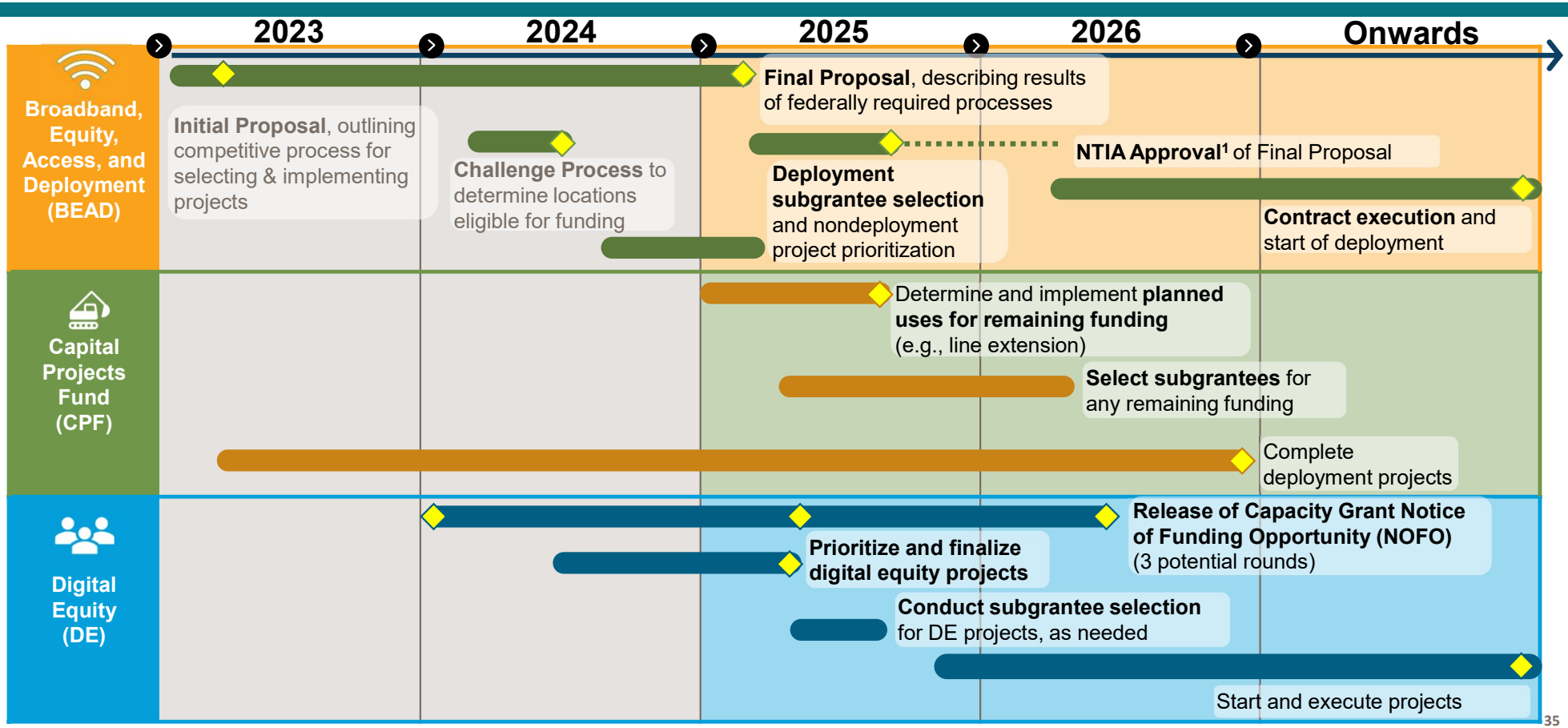
- **Project 1 |** Create one-stop inventory of all digital resources available in the State
- **Project 2 |** Fund existing DE programs run through state agencies / organizations
- **Project 3 |** Work with ISPs and experts to establish cybersecurity certification as a "North Dakota Trusted Source"

What Are Covered Populations?

Congress has identified the following groups as disproportionally impacted by the digital divide:

- Low-Income Individuals
- Incarcerated Individuals
- Veterans
- Racial / Ethnic Minorities
- Aging (60+) Individuals
- Disabled Individuals
- Have Language / Literacy Barriers
- Rural Inhabitants

Over the next few months, NDIT will be focused on deployment and non-deployment efforts across BEAD and CPF



[1]Assumes approval timeline will be similar to that of initial proposal

BEAD | A wide range of projects are being explored as potential uses for non-deployment funding

Per NTIA guidance, "non-deployment" projects are activities beyond last-mile deployment that may include:

- ☑ Digital safety training
- ☑ Computer science, coding, cyber security education
- ☑ Broadband sign-up assistance
- ☑ Broadband subscription subsidies
- ☑ Remote learning or telehealth services
- ☑ Digital Equity Plan projects
- ☑ Multilingual outreach to support adoption
- ☑ Stakeholder engagement costs
- ☑ Digital literacy/upskilling
- ☑ Prisoner education to promote digital literacy
- ☑ Digital navigators
- ☑ Other, as approved by NTIA

Ineligible activities may include:

- ☒ Purely administrative activities
- ☒ Activities that don't advance BEAD/DE goals
- ☒ Activities which the state would otherwise fund

Proof of Concept — ***Example Non-Deployment Projects*** — ***Requires Validation***

14 **Workforce development** to upskill broadband deployment workers

5 **Subsidized broadband** at affordable housing locations

4 **Middle Mile Broadband Network**

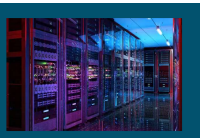
0 **Financial relief** for covered populations that subscribe to broadband

8 **Digital literacy programs** to promote broadband adoption

4 **Telehealth tech and services** to provide remote health access

4 **Precision agriculture** using IoT technology to enhance ag. productivity

0 **Data center accelerator** to promote development



Key: ◯ Number of states that have proposed a similar project in their BEAD and/or DE plans

BEAD | Any remaining funds not used during the program may be repurposed for Non-Deployment initiatives

Per NTIA guidance, "non-deployment" projects are activities beyond last-mile deployment that may include:

- Digital safety; digital literacy training
- Remote learning; computer science, coding, cyber security education
- Digital navigators; multilingual broadband adoption support (e.g., outreach, sign-up assistance, subscription subsidies)
- Telehealth services
- Digital Equity Plan projects; stakeholder engagement costs

Process for selecting and finalizing non-deployment projects

Develop project long-list (Winter/Spring 2025)
Develop long list of non-deployment projects based on BEAD requirements & ND-specific criteria

Prioritize and down-select projects (Winter/Spring 2025)
Evaluate and score projects to determine short-list of high-impact options

Finalize projects for funding (Spring 2026 - 2027)
Finalize set of projects eligible for funding and conduct sub-grantee selection following start of deployment projects

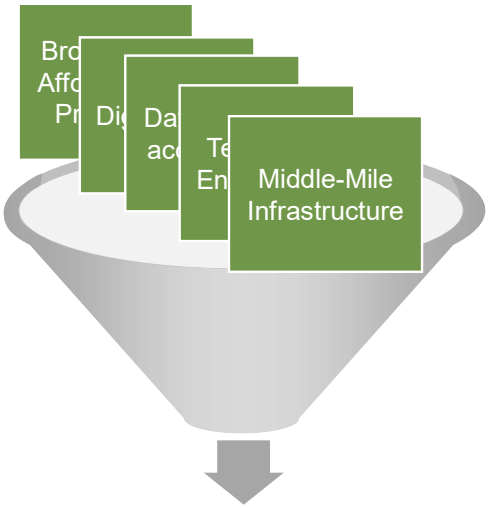
Implement non-deployment projects (2027 and beyond)
Subgrantees begin implementation of selected non-deployment projects

We know that certain BEAD non-deployment activities align with 2025-2027 legislative priorities (e.g., digital government transformation, education innovation, behavioral health and addiction, community economic development)

However, non-deployment projects will not be finalized and selected until 2027, so funds cannot be allocated toward 2025-2027 biennium projects

*Once North Dakota has a plan to deploy service to all unserved and underserved locations within its jurisdiction, it may pursue non-deployment initiatives using BEAD funds before or while deployment projects are underway

BEAD | BEAD non-deployment projects can be evaluated across a series of step-wide questions



Long-list of eligible non-deployment projects

Proxy	Workforce Size (new workers)	Number of Businesses	Total Payroll ($M)	Average Annual Wages ($)	Job Openings	GDP ($M)	Housing Cost-Burdened Households	NE CPI	MHI	Population Below 200% FPL	Persons Experiencing Homelessness
RHP											
Broad band											
BRF											
On-site					SAMPLE						
Healthy Homes											
HRP											

Projects scored and prioritized

Proposed Prioritization Methodology

- Projects will be evaluated based on responses to a **series of questions.**
- A rating of **High, Medium, Low (HML)** will be defined for each scored question (Questions 3-8 below).
- Projects that fail gating criteria will be deprioritized while those that pass will receive a H, M, L rating for each scored question.
- Projects are assigned a summary score and compared.

Example questions

Gating questions (Yes/No)

1. **Permissibility:** Is the project permissible?
2. **Redundancy:** Is this project redundant with other funding sources (e.g., would BEAD funding crowd out other funding sources)?
3. **Timeline:** Does the implementation timeline meet NTIA requirements?

Scored questions (H, M, L)

3. **Proof of concept:** Is there a precedent that demonstrates project success in ND or other states?
4. **Policy Alignment:** Will the project support key priority areas (e.g., NDIT and/or Governor Armstrong's priorities)?
5. **Direct Impact:** Is the project going to generate a positive impact (e.g., social, economic, environmental, workforce)?
6. **Indirect Impact:** Is the project going to augment or amplify the impact of existing programs or projects?
7. **Timeline:** How reasonable is the timeline to realize benefits from this project?
8. **Cost:** What is the project's investment cost?

SIRN


Send and Close
Reset
Exit
Unit
Unit Type
Coverage
Telephone No.
Recall
Officer/Passenger
Password
Code
Portable
Type
813
Radio OK
Emr. Kit
MDT OK
Receive copies of dispatches for these coverage areas
Fuel
Mileage
Tires
Vehicle Number
Oil
Radio ID
Light OK
Capabilities
Vehicle Condition
Remarks
The unit ID

History

- **2011** Exploratory Study Focused on Land Mobile Radio Interoperability
- **2015** Legislature Authorizes Feasibility Study
- **2016** Televate Study Conducted; Recommendations Provided
- **2017** Legislature Authorizes and Governor Signs into Law - Execution of SIRN 20/20
- **2017** SIRN 20/20 Program Initiated
- **2018** Requests for Proposals
- **2019** January - Contract Awarded to Motorola
- **2019** April - Legislature Authorizes and Governor Signs SIRN Project Funding into Law
- **2019** May - Project Kick Off
- **2020** December – Backhaul and 10 PSAPs cutover
- **2021** December – 7 additional PSAPs cutover
- **2022** November – 5 additional PSAPs cutover along with approx. 65 sites completed

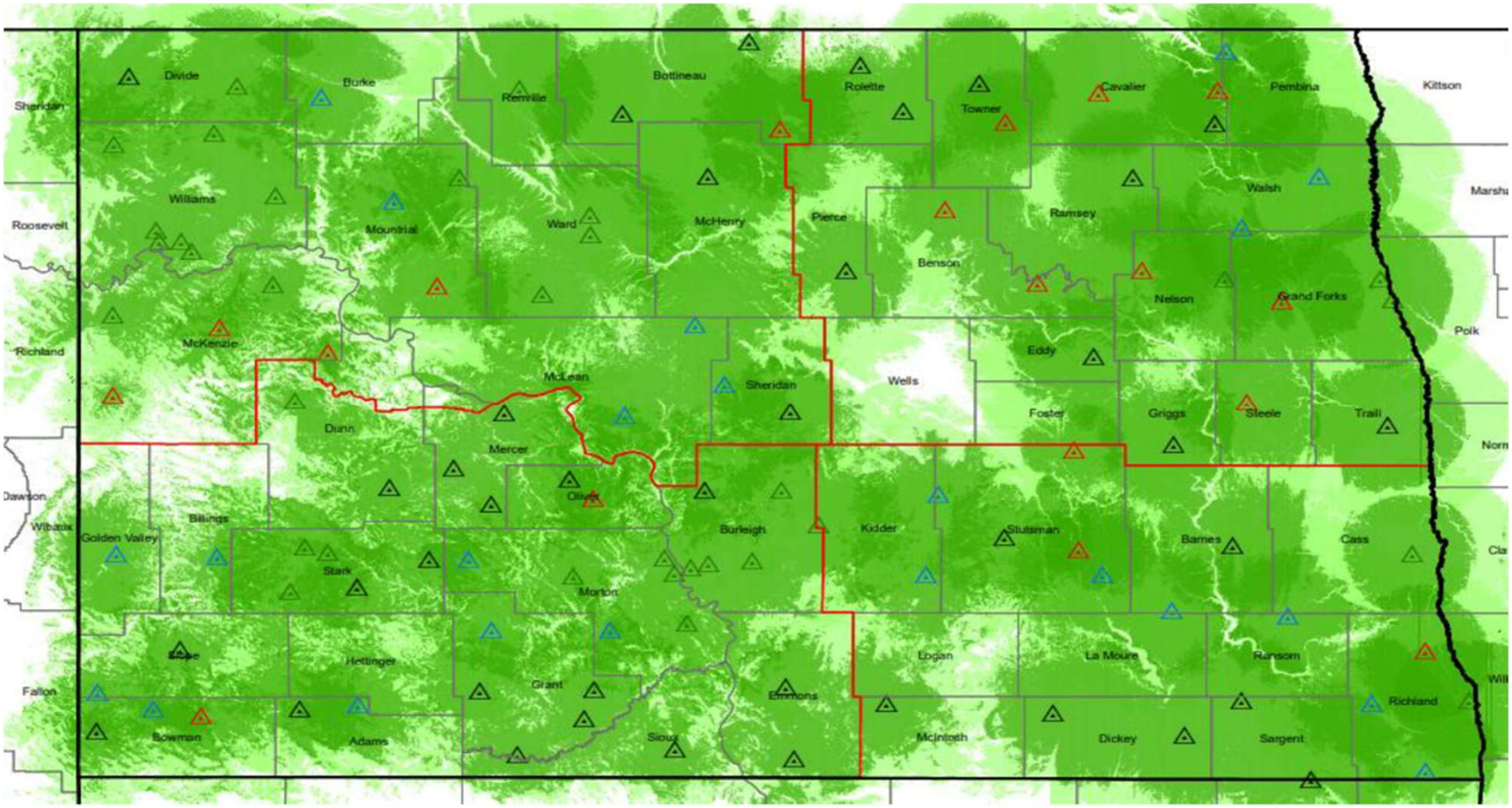
What is SIRN building?

SIRN

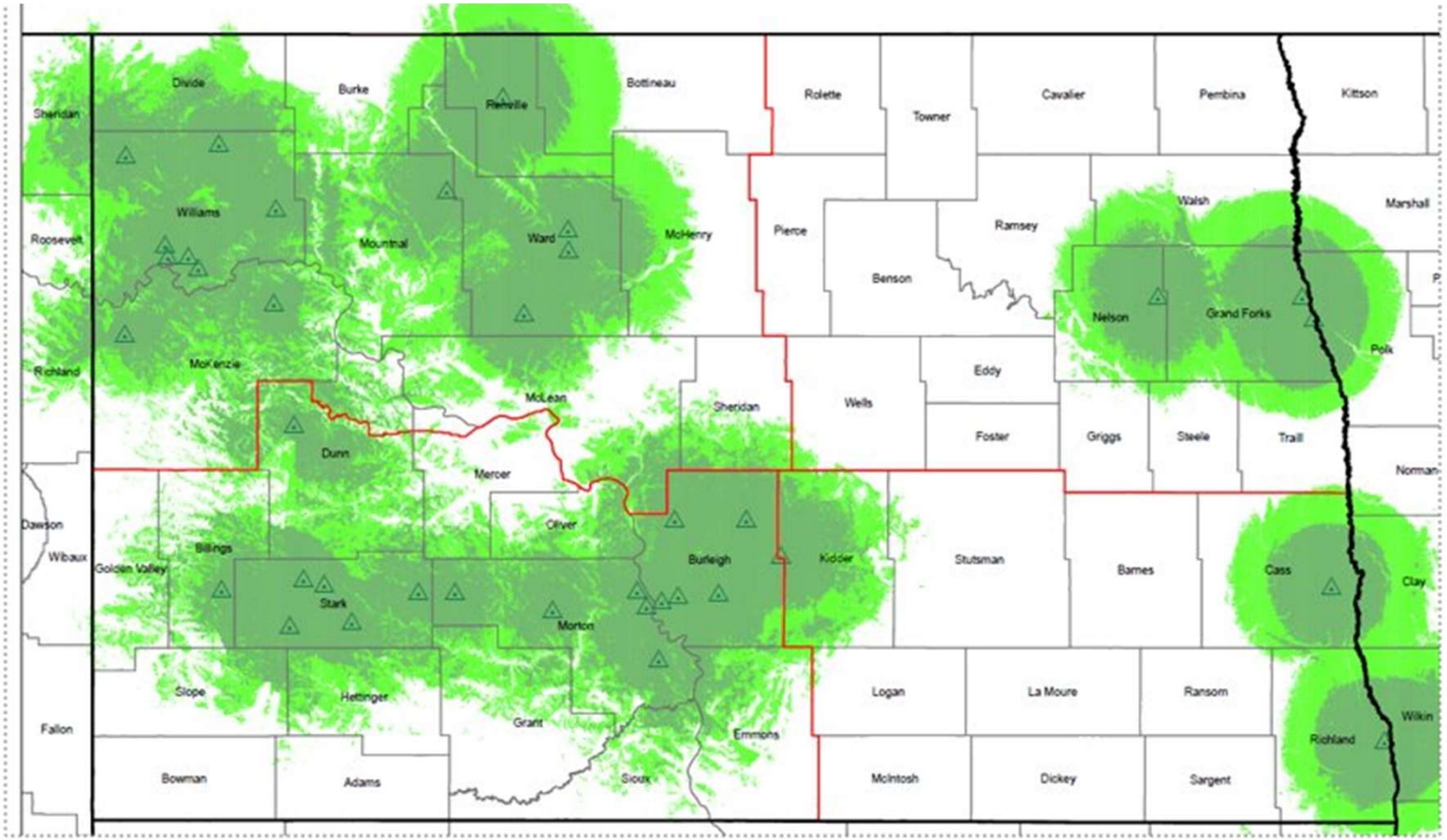
SOLUTION

- Shared Infrastructure Utilized by All Public Safety Users
- 800 MHZ Frequency Band
- Project 25 Technology
- 99.999 Reliable is the national standard for public safety communications hardware
- Hardware Meeting Standards Usable on SIRN System
- Guaranteed Coverage
  - 95% Mobile Coverage / 95% Reliability
  - 85% Portable Coverage / 95% Reliability
- Addresses End of Life & End of support of Equipment
- Future Integration with LTE & Wi-Fi Technology
- Guaranteed System Support for 25 years

Project Maps

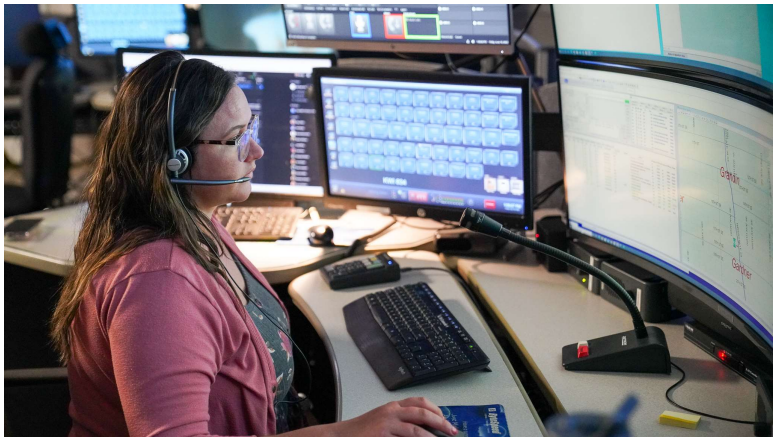


Project Maps



Latest Milestones

- **Law Enforcement Encryption** researched and statewide implementation in progress
  - Over the Air Rekeying in use
- **Radio Management** implemented
  - Over the Air Programming in regular use
  - More than 4000 radios entered



- **NDIT Public Safety Team** fully developed and SIRN responsibilities identified and assigned

- **Continued Tower Completions**
  - 72 complete
    - 33 currently in use
    - 39 not currently in use
  - 10 in civil construction phase
  - 2 awaiting radio equipment
  - 28 awaiting final site work
  - 28 remaining

Future Milestones

- Finish remaining tower buildouts
- Transition remaining PSAPs and agencies
- Begin project closeout activities

2026

2025

2027

- Continued tower buildouts
- Transitions additional PSAPS as coverage allows
- Implement Status Board and Cirrus Central

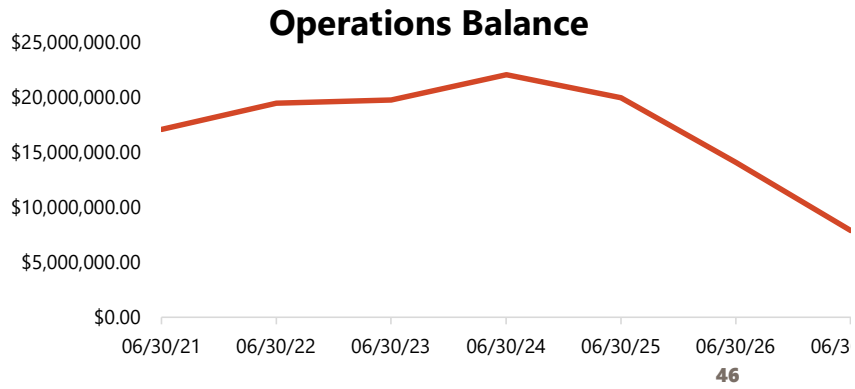
- Complete project closeout (decommission and surplus VHF system components, take down original state-owned towers, divest/surplus purchased towers not needed for SIRN, fully transition to operational status)

Financial Update

Operating Expenses	25-26	26-27
Connectivity & Equipment	2.7M	2.8M
Towers	1.1M	1.2M
Labor (Additional Resources)	1.7M	1.8M
Vendor Maintenance	3.3M	3.3M
NDIT Program Expense*	**8.8M**	**9.1M**
DOT Expense (+1 Additional Resource)	1.6M	1.6M
Total Expense	**10.4M**	**10.7M**
911 Fee Revenue	4.5M	4.5M
Shortfall**	5.9M	6.2M

*Expenses are projected. New operational contracts and project decisions are still impacting the long-term operational expense.

Cash Flow	
911 Fee Balance (January)	~21.9M
Est Rev 23-25 Remaining Biennium	~2.2M
Total Revenue	**23.9M**
Est exp 23-25 Remaining Biennium	~3-4M
End of '23-'25 Biennium Balance	**~20M**



Intelligent Transportation Systems

Intelligent Transportation Systems

- PTZ and Fixed Highway Cameras
- Dynamic Message Boards – Stationary & Portable
- Wrong Way Driver & Collision Warning Systems
- Meteorologic Stations
- Automatic Traffic Recorders/Weigh-in-Motion Systems
- NDDOT Smart Corridor

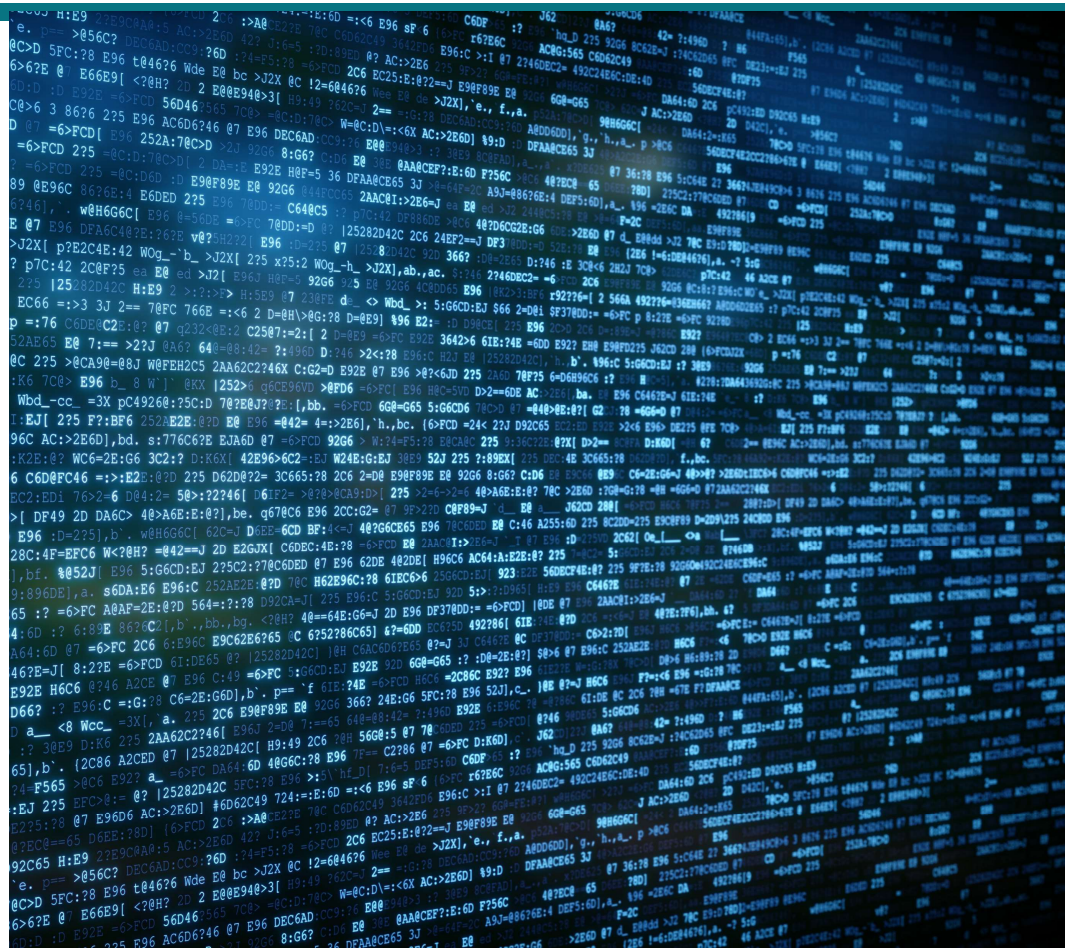
ITS Systems - 2011	ITS Systems - Present	ITS Systems - Planned
47	335 *1800 Individual Devices	~500+

VISION ZERO

Enterprise Digitization and Modernization

Digital Maturity

- Digital Maturity Efforts
  - Call Center
  - Capitol Security/Wiring
  - Enterprise Architecture – Technical Debt
  - AI Support



Call Center

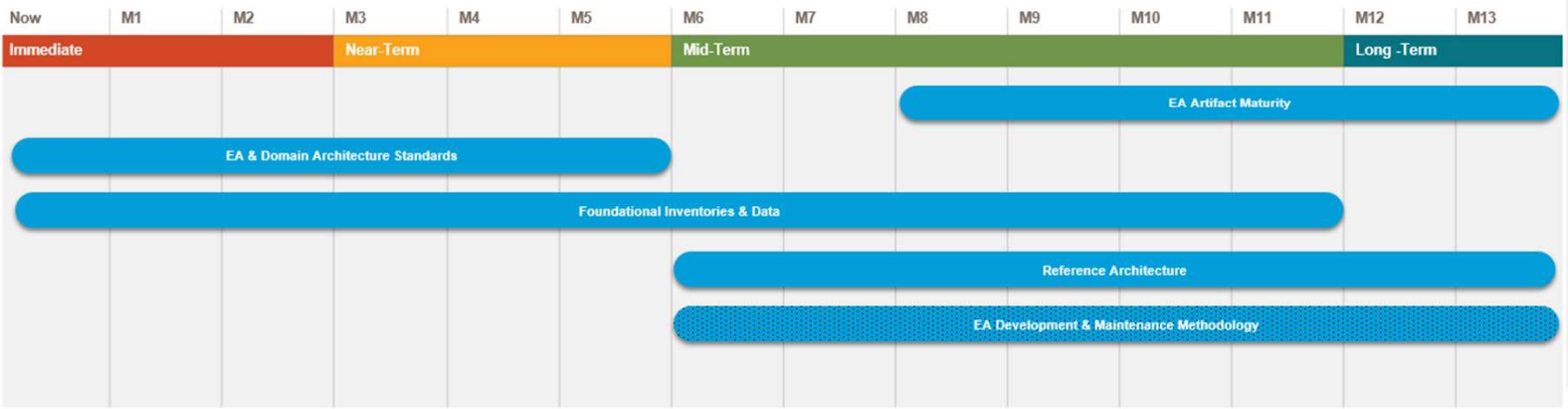
- **Budget:** $3M
- **Accomplishment to Date:**
  - All Migrations Completed
  - Fully Deprecated the Old Solution
  - Industry Leading Solution/No Major Outages
- **Upcoming Activities:**
  - On Track to be wrapped up this biennium
- **Risk/Issues:**
  - Completed

Capitol Security/Wiring

- **Budget:** $2.5M
- **Accomplishments to Date:**
  - Capitol Security Project
    - Implementation Underway
  - Capitol Wiring:
    - Conduits installed in the Capitol Complex.
    - Expected to be completed this biennium.
- **Upcoming Activities:**
  - Capitol Security Project:
    - Execute on SOW with the vendor
  - Capitol Wiring:
    - Run the fiber and install hardware
- **Risk/Issues:**
  - Vendor resource availability

Enterprise Architecture – Digital Maturity

- Enterprise Architecture
  - Where are we?
    - Assessments with 19 Agencies
  - Where are we going and how do we get there?
    - 20 Total Recommendations



20 Total Recommendations

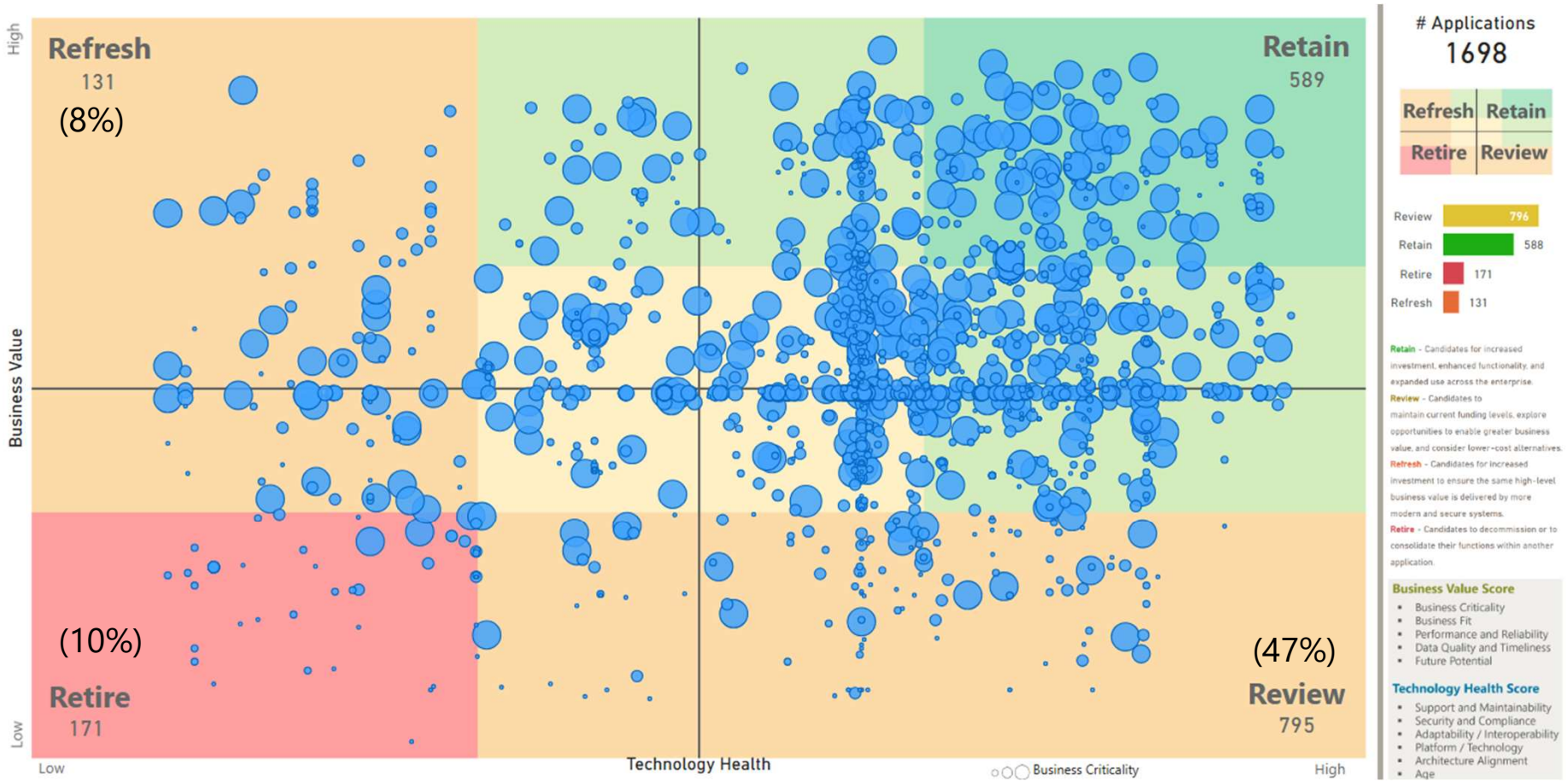
7 People Recommendations
4 Immediate
2 Mid-Term
1 Long-Term

5 Process Recommendations
3 Mid-Term
2 Long-Term

5 Tools & Artifacts Recommendations
3 Near-Term
2 Mid-Term

3 Governance Recommendations
1 Immediate
1 Near-Term
1 Mid-Term

The Output


Refresh
131
(8%)
Retain
589
(10%)
Retire
171
(47%)
Review
795
High
Low
Business Value
Low
Technology Health
High
Business Criticality
Applications
1698
Refresh
Retain
Retire
Review
Review 796
Retain 588
Retire 171
Refresh 131
Retain - Candidates for increased investment, enhanced functionality, and expanded use across the enterprise.
Review - Candidates to maintain current funding levels, explore opportunities to enable greater business value, and consider lower-cost alternatives.
Refresh - Candidates for increased investment to ensure the same high-level business value is delivered by more modern and secure systems.
Retire - Candidates to decommission or to consolidate their functions within another application.
Business Value Score
Business Criticality
Business Fit
Performance and Reliability
Data Quality and Timeliness
Future Potential
Technology Health Score
Support and Maintainability
Security and Compliance
Adaptability / Interoperability
Platform / Technology
Architecture Alignment
Age

Legacy Systems Analysis Project

- **Down to 2 Major Agencies on the Mainframe**
  - High-Level Analysis Project
  - Looking at all options
  - Two Bienniums away from completion
- **Scope**
  - Mainframe – AS400 – Legacy AIX Platforms
- **Use of Applications**
- **Integrations**
- **Application Lifecycle**
- **Feedback Loop with Agencies**

Keys to AI Success In North Dakota

Key 1 **AI is not a magic bullet.**

Instead, it is a tool for speeding up data-driven decision making. A more appropriate description of current AI technology is data-enabled, automated, adaptive decision support. Use when appropriate.

Key 2 **Garbage in, garbage out still applies to AI – and is even more relevant!**

AI technology has its foundations in data. Lots and lots of it. Rich, relevant, accurate, and timely data from interconnected systems is essential to effective use of AI. How good is the data?

Key 3 **Learn from early adopters.**

AI is a rapidly evolving field, and there are many published use cases with documented business value. Using a use case-based approach, we can learn from the successes and failures of others, including other states, to more rapidly narrow down how AI can deliver value for the state.

Key 4 **Start small to gain experience and to lay a solid foundation.**

Too many big projects have failed in the past. Start small with AI and then wash, rinse, repeat. Keep in mind, though, that the real value will come from the enterprise adoption of AI, and for that we will need to create an AI strategy.

Key 5 **Give AI a purpose. Pick the right use cases.**

AI strategy and current exploration activities should closely align with the strategic goals and drivers of the state. The key question you should be asking is not "What can AI technologies do?" but rather "What can they do for us?" and "How much would we benefit from AI if we were to invest in it?"


Data Center

Data Center

- **Secondary Data Center**
  - Cooling Plant is No Longer Supported/Failing Pumps (~$300-400K)
- **Primary Data Center**
  - Single Point of Failure Identified this Biennium (~$1.4-1.7M to remediate)
  - Within Minutes, the data center will shut down
  - Infrastructure Damages to all State Equipment
  - What is the cost in lost productivity if team members, legislature, and Courts are stopped?
- **Risk Assessment completed in December**
  - Identified both risks as *Critical* to the State with a recommendation to either remediate both issues or move 1 location
  - Data Center skillsets are in short supply – We only have 1.5 FTE

Data Center….The Plan

- **The Plan….**
  - Phase I
    - Use one-time funding to shut down 1 data center and partner with private market (leased space)
    - Estimating $500k+ to transition, but full costs are unknown
  - Phase II
    - Shift the roles of the two data centers after deprecation of 1 data center (multiple biennium)
    - Will require temporary hardware and coordination
  - After shifting the roles, the new secondary datacenter would have the cooling risk

Vulnerability Remediation

Funding

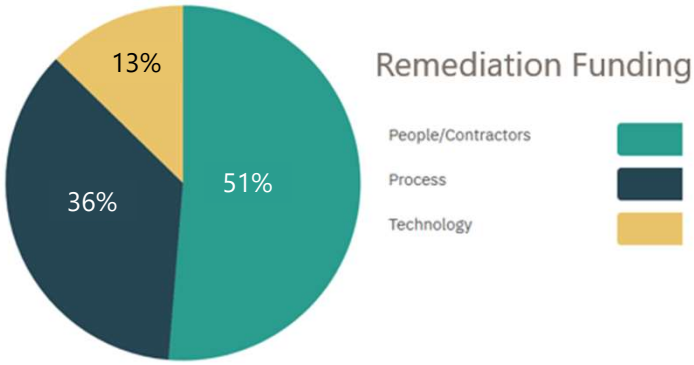
Vulnerability Remediation

Last Biennium NDIT was appropriated $1 million dollars to reduce vulnerabilities. There were three areas where this funding was used. People, Process, and Technology

People – Engaged contractor resources to patch vulnerabilities in applications developed or maintained by NDIT for our agency customers.

Process – Partnered with Guidehouse to continue enhancing the state's vulnerability management program.

Technology – Identified and procured technologies designed to accelerate the remediation of vulnerabilities.



Progress and Challenges

Vulnerabilities

A vulnerability is a weakness, flaw, or shortcoming in a system, infrastructure, database, software, process, or set of controls that can be exploited by a threat actor.

Progress

596k system vulnerabilities patched in 2024

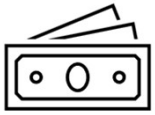
326 application vulnerabilities remediated

Challenges

40,000 new and unique vulnerabilities published in 2024

Legacy technology (tech debt) complicates remediation efforts

Third-party software we don't control

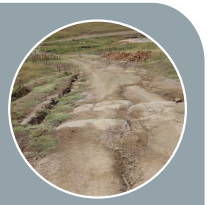


Some agencies lack funding for updating applications or hardware

Vulnerability Program/Process Maturity

We are here

Phase 1
Current State



- Manual process to determine remediation prioritization
- Funding for fixing critical vulnerabilities not defined
- Risk acceptance & exceptions not formalized from agencies

Phase 2
Design Program

- Establish Cyber Risk Board to determine remediation path for critical vulnerabilities
- Risk-based prioritization of vulnerabilities
- Build formal exception process

Phase 3
Implement to State Agencies

- Information Security Officers to educate and align with agencies
- Robust reporting & follow-up on exceptions
- SAST: determine feasibility for future implementation

Proactively address vulnerabilities in reducing cyber risk to systems and citizen data

Static Application Security Testing (SAST)

What it does

- Static Application Security Testing (SAST) scans an application's source code during development to identify vulnerabilities
- Validates code as it is built, ensuring security issues are addressed before deployment

Why it matters

- **Reduces cost:** fixing vulnerabilities during development is significantly more cost-effective than after production
- **Lowers risk:** Identifying vulnerabilities before deployment reduces the likelihood of security incidents in production, protecting sensitive data and services.

Why we should fund it

- Decreases long-term costs by catching vulnerabilities earlier.
- Strengthens application security, reducing risk to critical systems.
- Provides the tools necessary to build secure, reliable applications, that citizens and agencies depend on.

Reactive Incident Response

Reactive Incident Response

Reactive incident response focuses on addressing and mitigating incidents after they have occurred, with the goal of restoring normal operations and minimizing damage

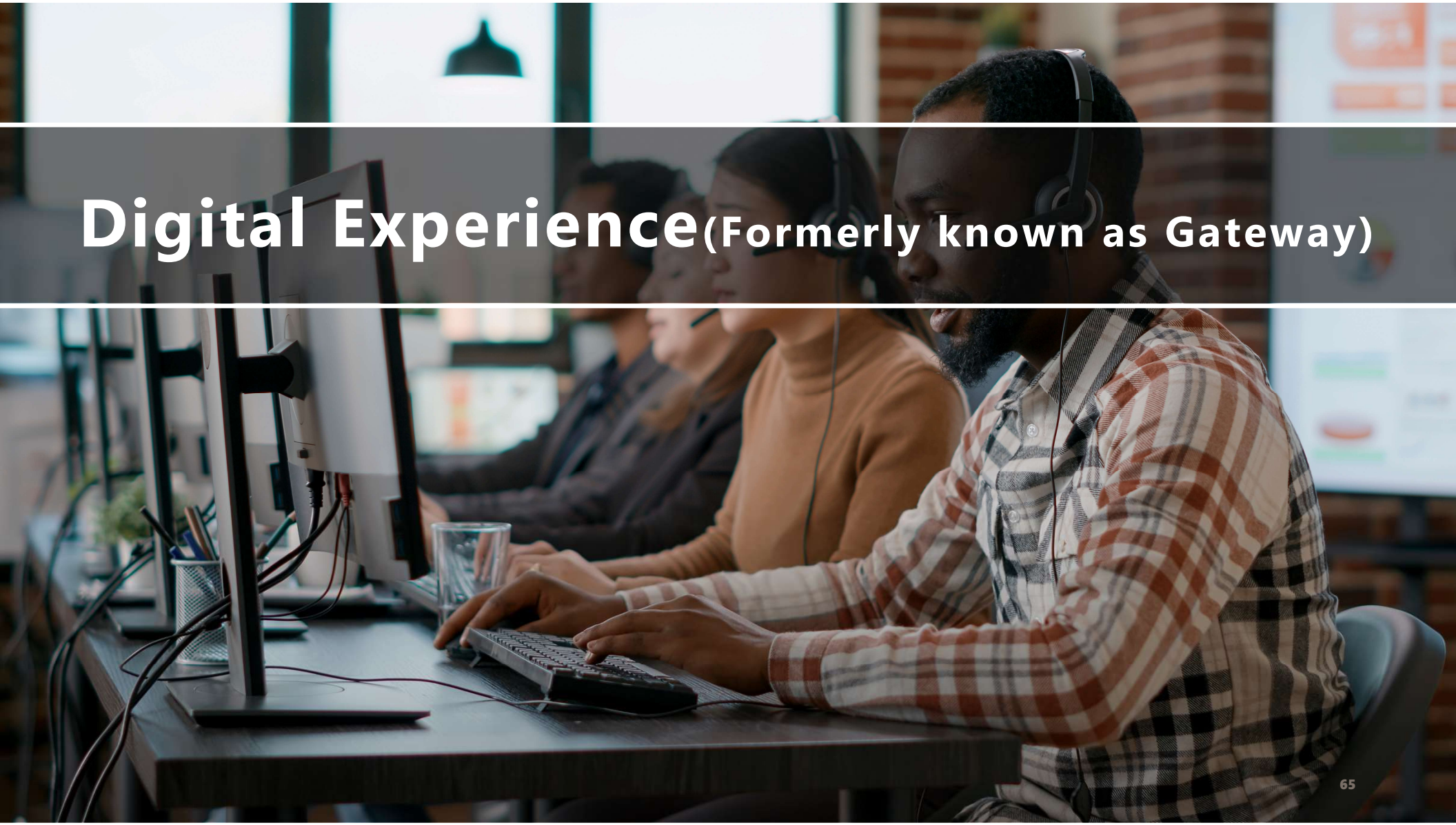
Cyber Operations works an average of **50,000** incidents per year.

Screen Connect	325 Hours	9+ FTEs
VPN Brute Force	480 Hours	18+ FTEs
Denial of Service	450 Hours	14+ FTEs
Log4J	1098 Hours	20+ FTEs
PowerSchool	350+ Hours	15+ FTEs

In-depth Analysis

In just one incident, Log4j, the NDIT team spent 27 weeks of work on remediation. During this time other critical work for agencies had to be slowed or delayed to prevent a reportable breach

Digital Experience(Formerly known as Gateway)



Program Objectives | *Goals*

Clear Directions

Provide business users with clear direction on the actions they need to take when starting a business, maintaining a business, remaining in compliance with state regulations, and closing a business

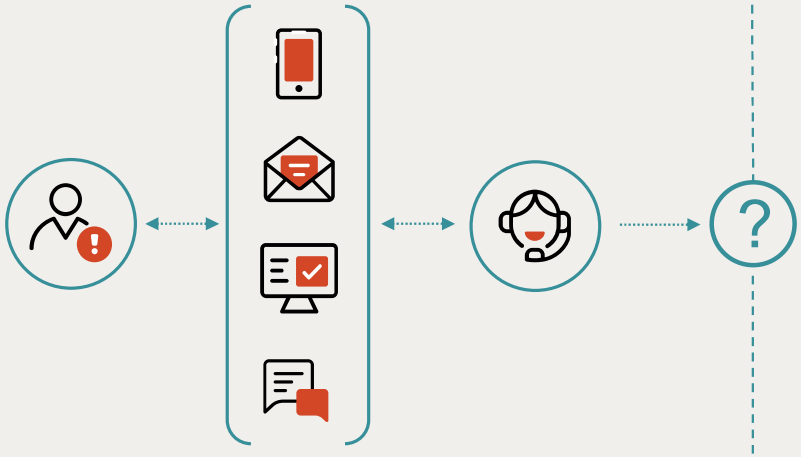
Digitize Data

Digitize the collection of business-related data that can be used by the Gateway and across participating agencies to further enable digital services, growth, compliance, and fraud prevention

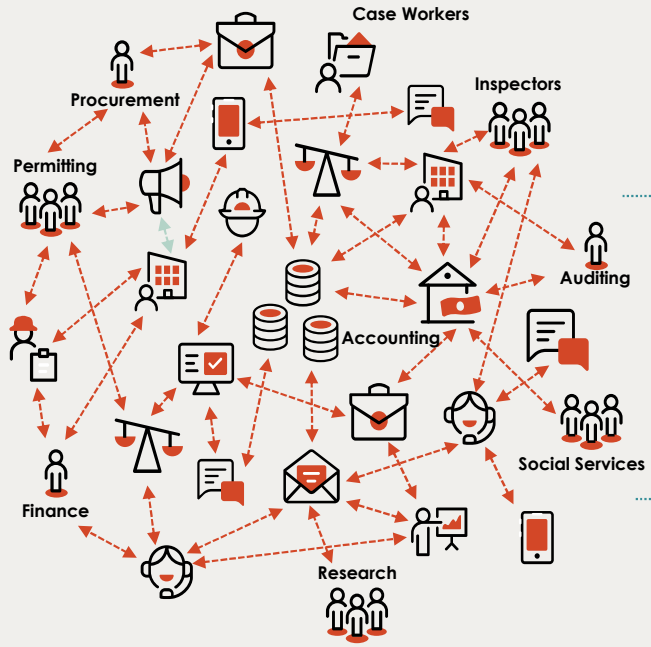
Provide Guidance

Guide users and encourage them to take advantage of available services, help businesses remain compliant with registration, reporting requirements, drive accuracy, auditability and begin to reduce the number of access points businesses rely on today and wrap it in a modern, friendly user interface.

HUMANS STILL DO THE HEAVY LIFTING TO SERVE CUSTOMERS



Engagement-focused Investments



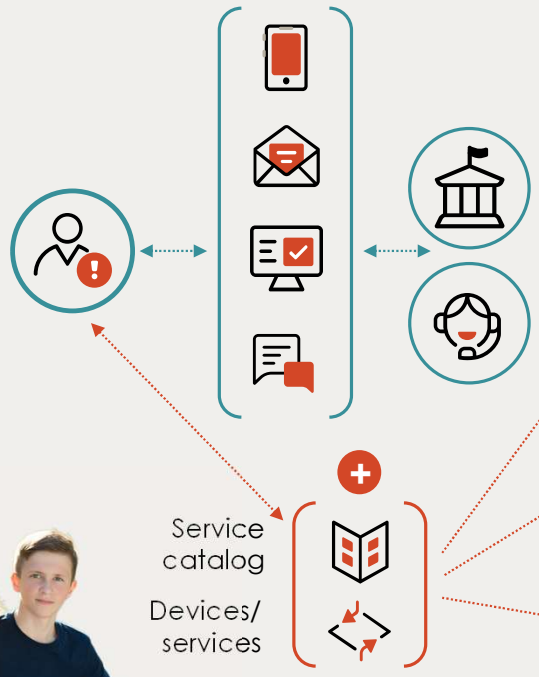
Human middleware bridges people, process and data silos

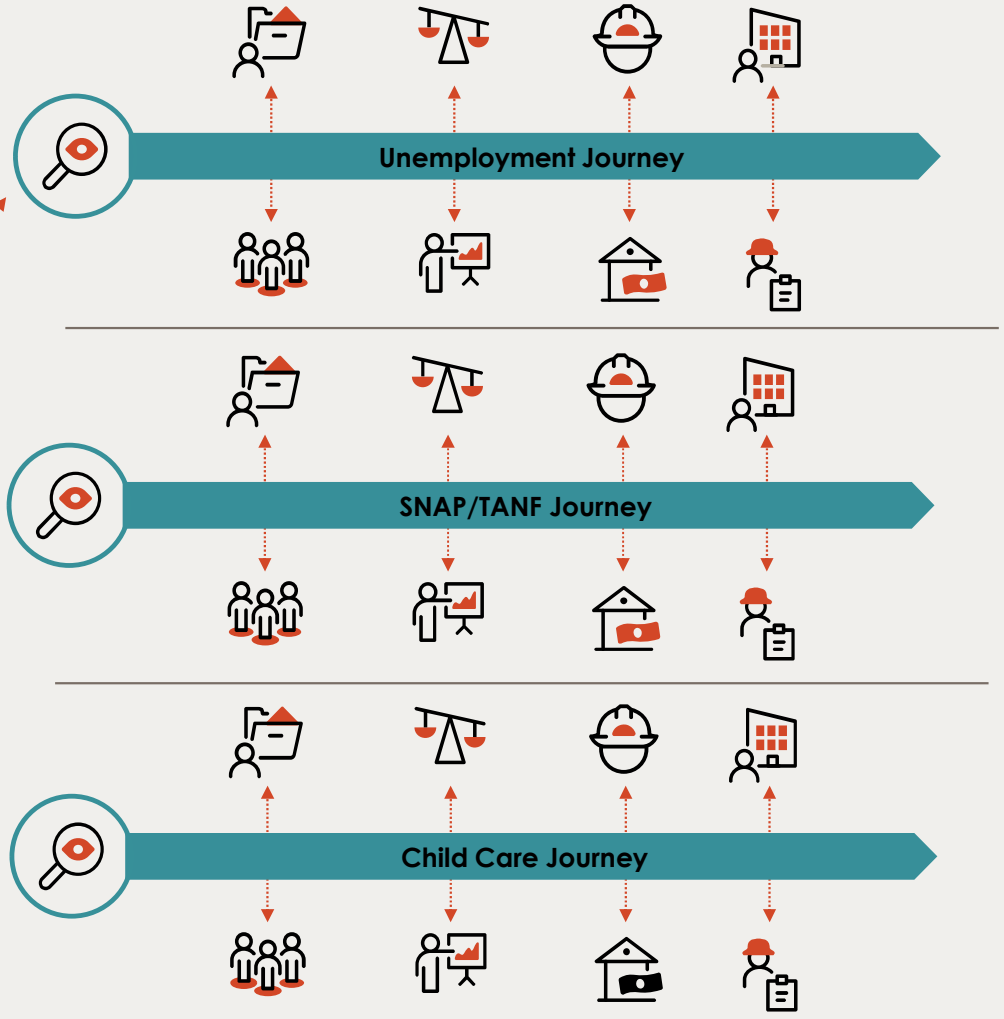
Increased customer expectation leads to bad experience

Slow Delivery of Services

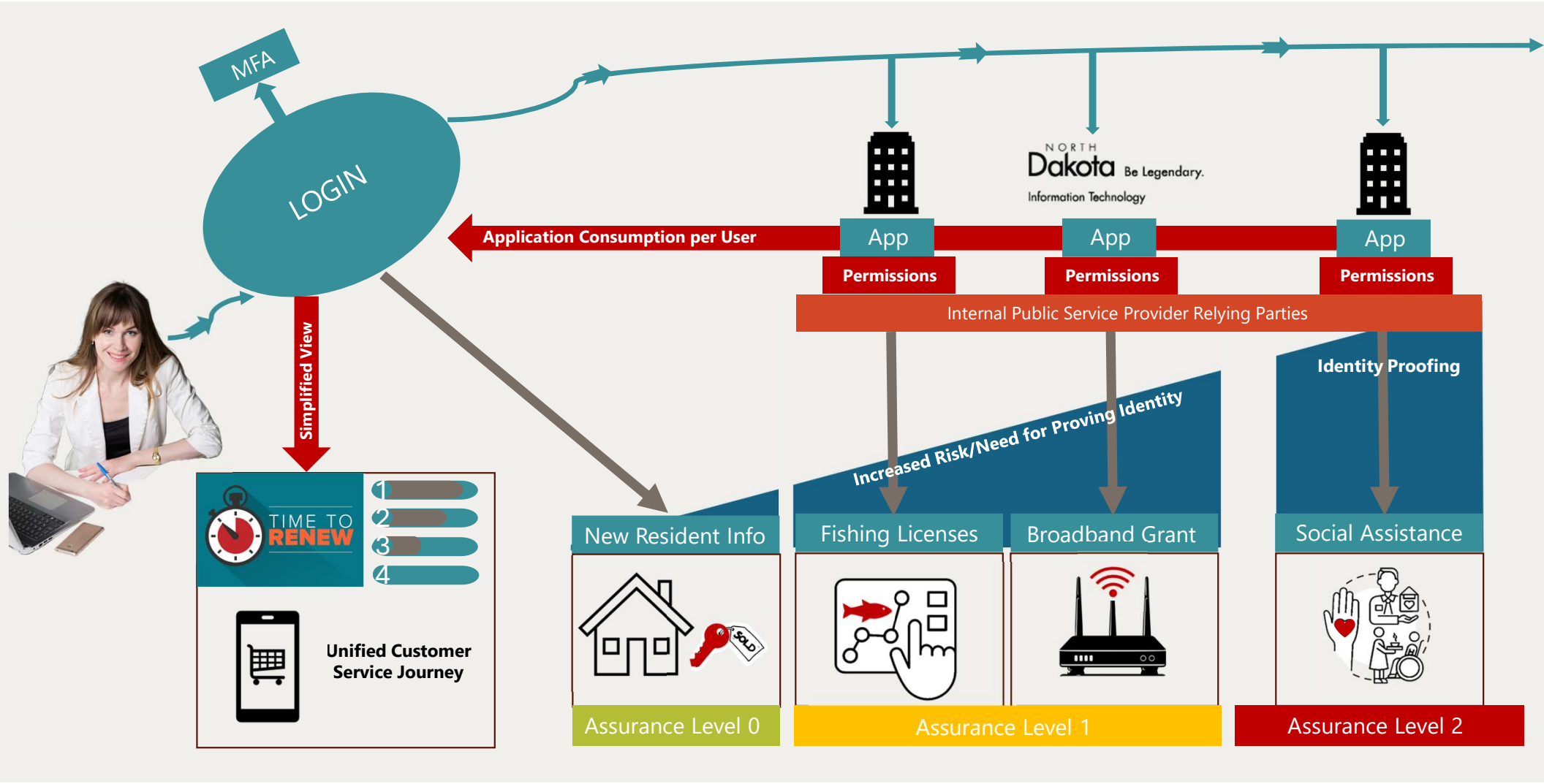
OPERATING AT SCALE

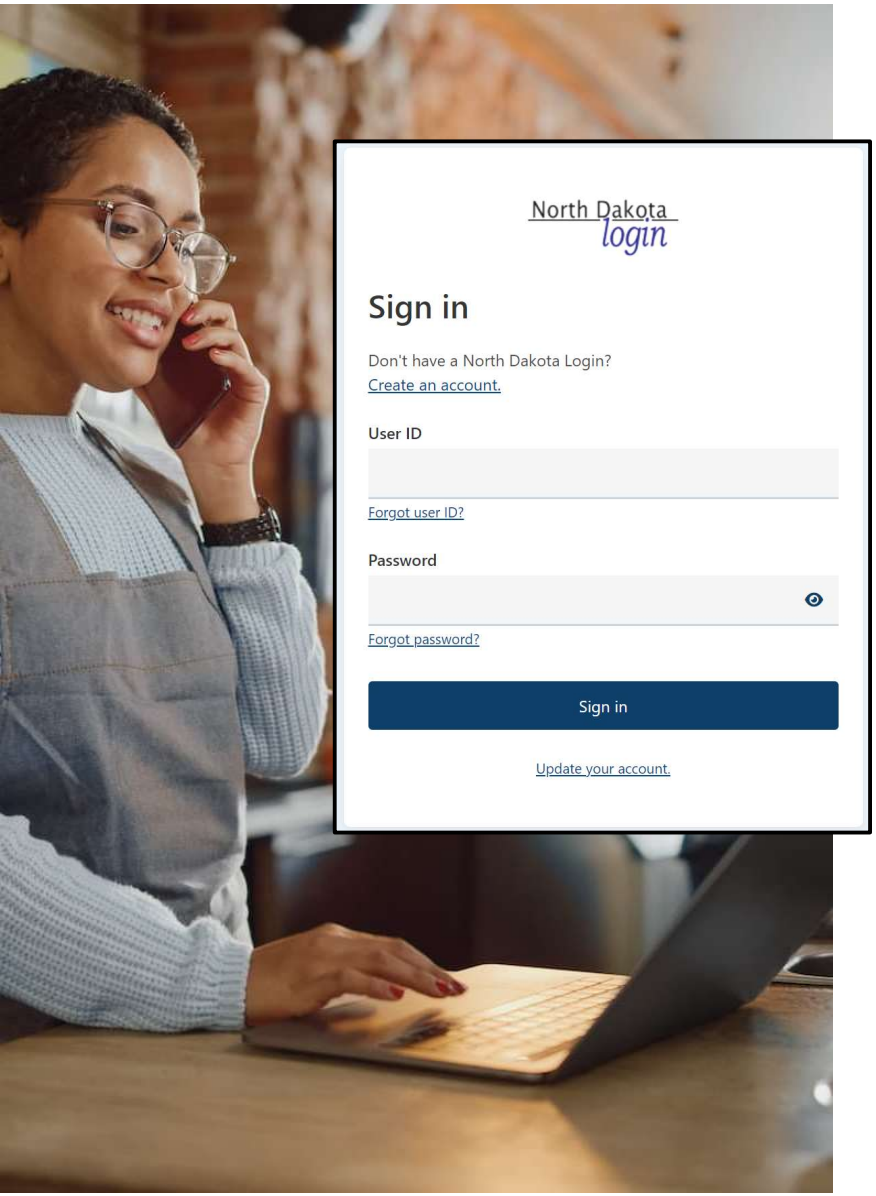
Each Agency or department gets the necessary Citizen information to complete their specific program process





Customer Experience Data





Single Sign On (SSO)

SSO to be completed in Phase 2, but subsequent phases will need to incorporate it.

ND Login

The Gateway will integrate with the existing North Dakota Login functionality, eliminating the need for users to create new registration credentials and helps to achieve the program goal of reducing the need for duplicative identities across State systems. This will improve ease of access and best position the Gateway to continue onboarding additional partner agencies and services.

Single Sign On (SSO)

Users benefit from not having to remember multiple passwords for different services. With a single set of credentials, they can access a variety of governmental and associated services.

Compliance Ease

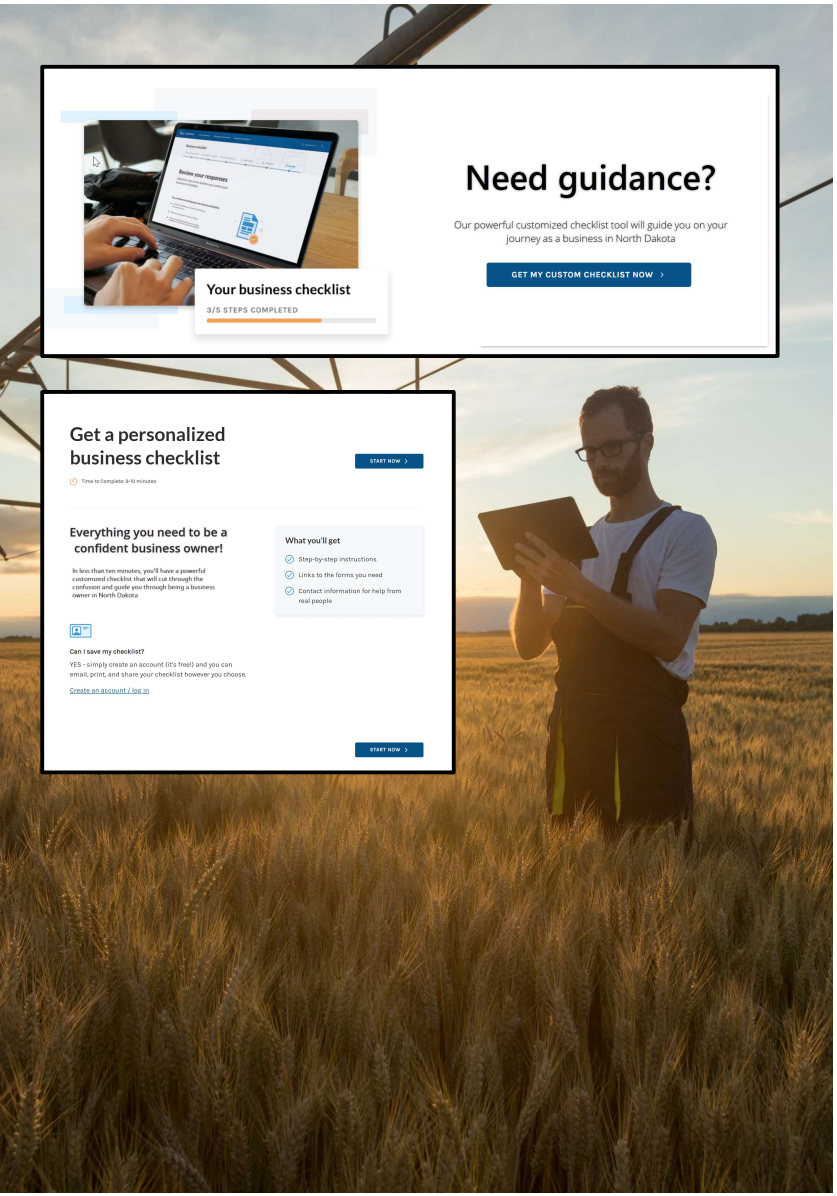
Integrating with North Dakota's login system ensures that the application is in compliance with the State's regulations regarding data security and privacy, having already been designed to meet these standards.

Enhanced Trust and Credibility

Using a state's login system can increase the perceived reliability and credibility of the service, as users often trust governmental systems for security and data protection.

Increased User Adoption

The trust factor can lead to higher adoption rates among users, as they feel more confident in the security and integrity of the service.



Establishing a North Dakota Business

The **web tool will initially act as a digital Green Book** and continue to expand as the Gateway program matures. Clear structured guidance empowers new entrepreneurs and large businesses to take confident steps towards establishing new businesses, operating those businesses, and remaining compliant over time.

Personalized Guidance *The tool provides customized guidance based on specific responses of the user, keeping information relevant to their unique business and needs*

Streamlined Process *By guiding users through a series of conditional questions, the tool streamlines the process of understanding state and department-specific requirements*

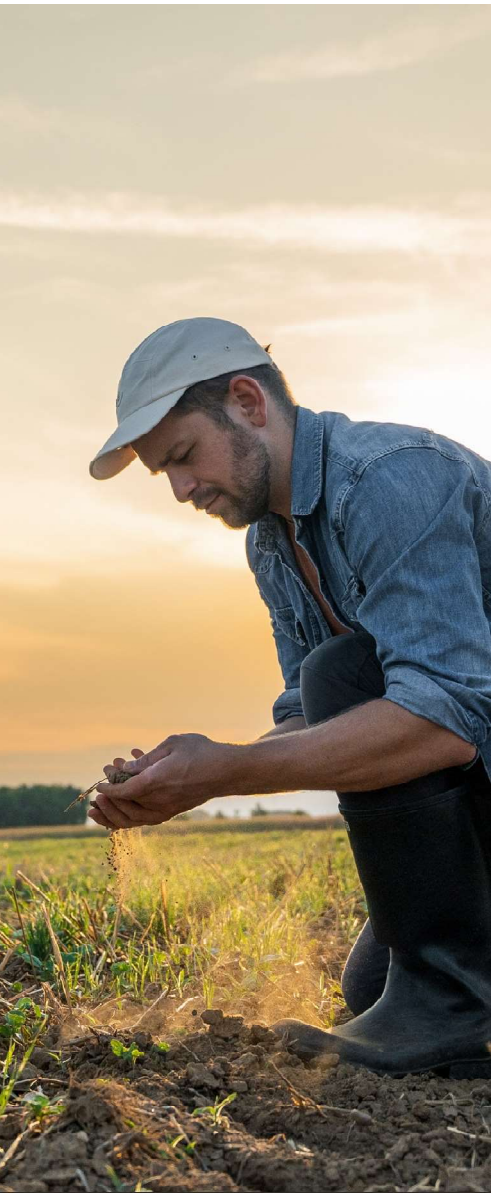
Centralized Resource *Acts as a one-stop resource for the information needed to establish a new business, consolidating data that might otherwise be scattered across various websites*

Enhanced User Experience *A well-designed web tool offers an intuitive and user-friendly interface, making information accessible to include those individuals with limited technical skills or business acumen*

Scalable *The tool can accommodate a wide range of business types and sizes, from sole proprietorships to large enterprises*

Adaptable *Once implemented the tool can be continuously updated with new information and features, it can grow with the evolving needs of businesses and regulatory changes*

Business Profile *The information entered in the tool serves as the foundation for the user's Business Profile*



My Dashboard **Design is currently being finalized*

This feature enhances departmental engagement by linking Gateway users to resources and services previously unknown to them, thereby boosting adoption and participation in services and programs.

Serving as the hub for logged in Gateway users, the My Dashboard section provides the following benefits:

Task and Activity Overview A list or summary of pending tasks, To-Do items, and recent activities to help users manage their business' efficiently

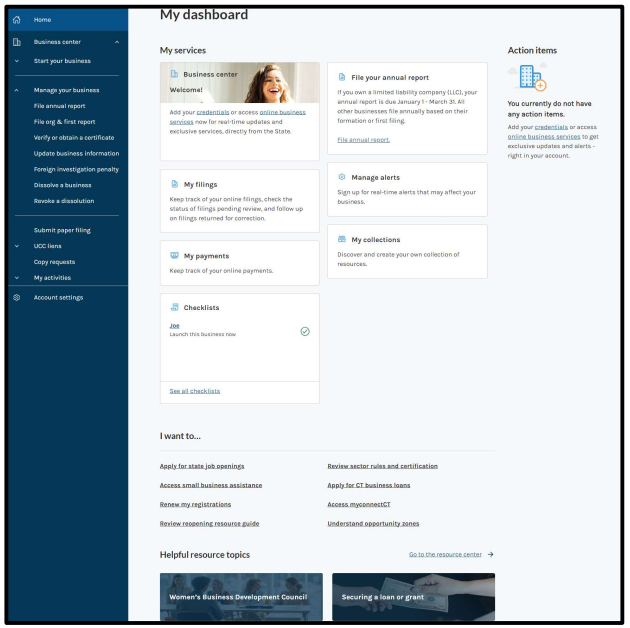
Calendar An integrated calendar displaying upcoming events, deadlines, and important dates to help users remain current and compliant

My Services Information regarding department-specific services currently being used by the logged in user's business

Frequently Used Tools Shortcuts to the most used applications, documents, and resources

Helpful Articles List of most popular knowledge articles

Document Repository A centralized location for storing and accessing documents



Other Applications Using Digital Platform

- In Production
  - QSP (Qualified Service Provider) Enrollment
    - Reduced time to enroll, currently 11 days
  - ND Rent Help
    - Helped over 30,000 renters, 14,666 of those households have children 18 or younger
  - ND Homeowner's Assistance Fund
    - Assisted nearly 6,000 ND Homeowners
  - ND Housing Stability Fund
    - Individualized Case Management for ND households and housing providers
  - Best In Class
    - Implemented in 6 weeks
- Future Projects
  - DFI Enhancements
  - HHS Background Checks
  - Best In Class Enhancements

Statewide Data Strategy

Why does data matter?

- Investing in data allows us to
  - Deliver better, more effective services for our citizens
  - Save taxpayer dollars through cost savings and efficiencies
  - Drive accountability and transparency
  - Shift from reactive government to proactive, better preparing for future challenges

What are we hearing from state agencies?

Key data challenges and pain points…

- Staffing/resource constraints
- Data siloes
- Aging technologies (i.e., tech debt)
- No central data catalog/inventory
- Reliance on institutional knowledge
- Manual processes
- Massive amounts of data
- Data is undocumented
- Lack of trust, leading to redundant efforts
- Challenges in sharing/accessing available data

North Dakota Statewide Data Strategy (implemented through the Lighthouse Program)

Harness the value of data to help North Dakota *thrive*.

Better government data & insights = **Better government decisions & actions** = **Better citizen & community outcomes**

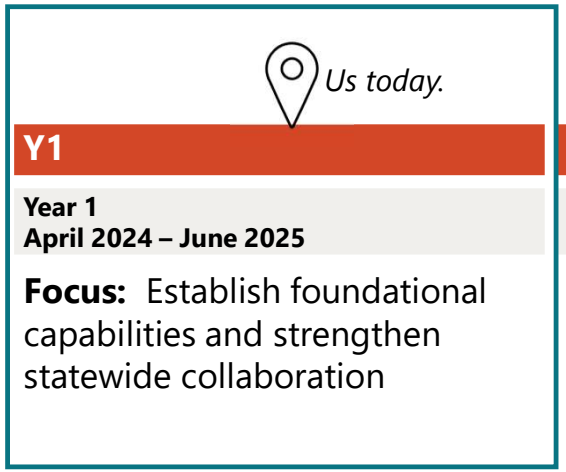
Key Outcomes by Year

Year 1	Establish foundations and strengthen statewide collaboration
Year 2	Facilitate agency-level adoption and expand into more transformational projects and initiatives.
Year 3	Continue transformation efforts, maintain momentum, and sustain stakeholder and agency adoption.

North Dakota Statewide Data Strategy

- Budget of $4.89M
  - Phase 1 completed in April 2024: Development of statewide data strategy and implementation roadmap
  - Phase 2 kicked off in April 2024 and currently underway: Implementation of data strategy through June 2025

Data Strategy Roadmap Implementation



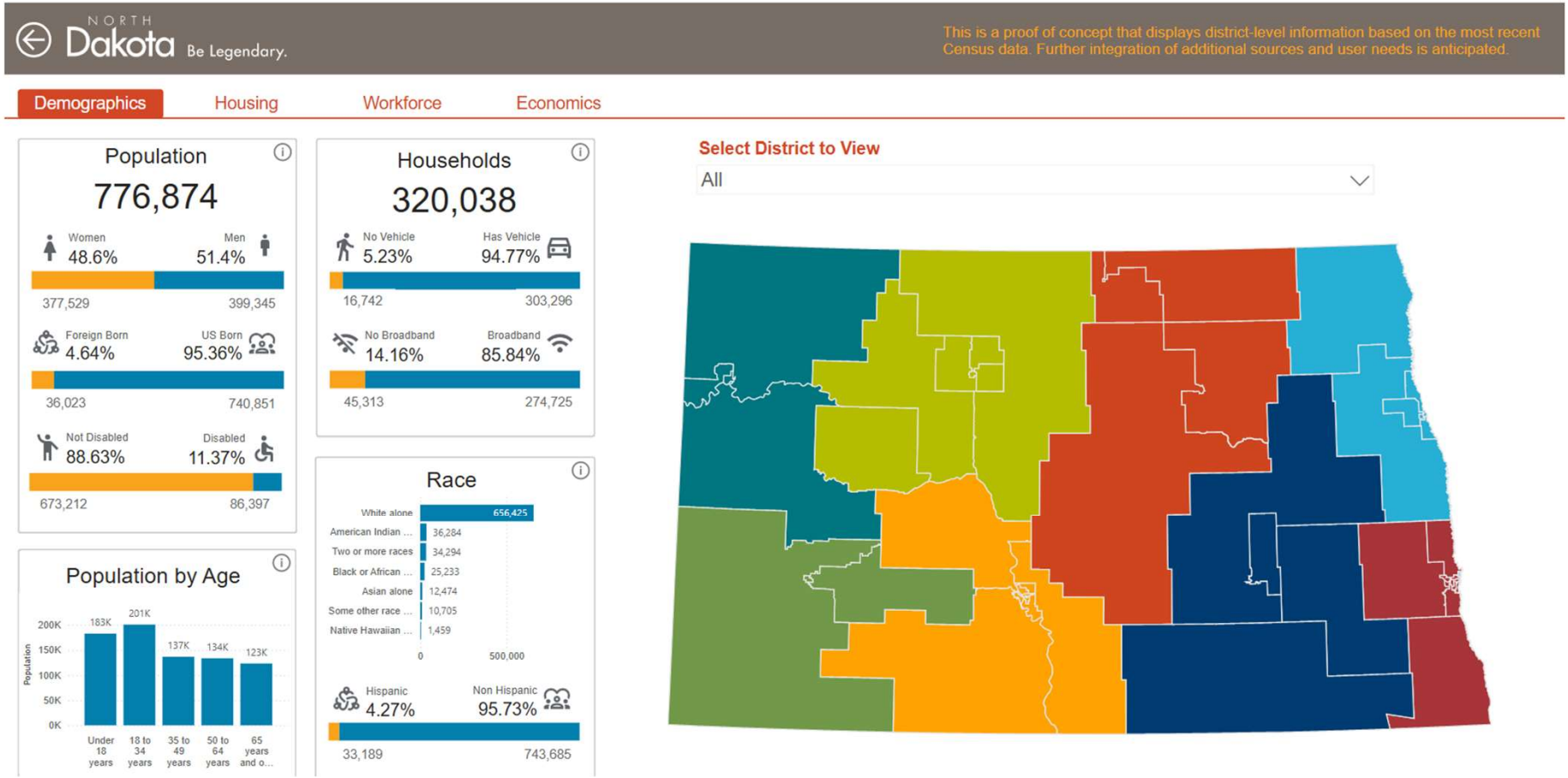
26+

Projects envisioned as part of this roadmap

Key Accomplishments in 2023-2024

Strategy Rollout and Agency Collaboration *Building agency awareness and plans for adoption*	• Conducted roadshows with various state agencies to promote the statewide data strategy • Developed a comprehensive strategy report to help agencies create their own plans and tailored initiatives • Refined the NDIT Data Division's organizational structure to better align with and support the state's data needs
Statewide Data Governance Program *Establishing the overarching program that directs data management and use practices*	• Defined a statewide data governance operating model and Concept of Operations, outlining the structure, roles, and responsibilities • Established the Statewide Data Governance Council to advise the State on formalizing a data governance program • Initiated the Tactical Data Governance and Stewardship working group to address agency-specific governance needs • Developed the initial release of the Tactical Data Governance Toolkit, providing resources such as accelerators and guides to help agencies implement key data governance actions
Data Catalog *Determining requirements and approach for implementation*	• Defined requirements for a statewide data catalog, including business, functional, technical, and vendor services specifications
Data Literacy *Providing a statewide data skills and literacy curriculum*	• Defined data literacy learning paths for three data personas and an AI learning path to build skills/knowledge in AI
Modern Data Platform *Reimagining the current COVID data lake, creating a solution that is valuable to all agencies*	• Reviewed the current data lake implementation and proposed architectural enhancements. • Conducted testing for the Data Exploration Zone • Created an onboarding framework for agencies to start using the data lake solution
Analytic Proof of Concept *Exploring ways to join data from different agency sources, creating opportunities for greater diagnostic and predictive insights*	• Conducted use case scoping and discovery with the Department of Commerce • Developed the MVP version of the State Data Hub POC dashboards

State Data Hub



What is happening with AI in North Dakota?

NDIT wants to support the vision of AI-enabled Agencies throughout ND but is also committed to doing it in a controlled and considerate fashion that appropriately considers ***data privacy, risk management, ROI realization,*** and ***organizational and workforce readiness.***

AI is not new to the State and has been in use in government in a variety of ways, but in the last two years, the explosion of GenAI and new technologies and capabilities has provided new focus, opportunities, and oversight/governance considerations.

Consideration	Action	Status	Overview
Policy and Oversight	**Statewide AI Policy and Guidance Release**	**Released** *Early 2024*	A first step was establishing an overarching policy The policy's initial focus and supporting guidance is on directing responsible use of commercial tools (e.g., ChatGPT)
Productivity and Efficiency Tools	**Microsoft Copilot Release**	**In Progress** *Release – Q2 2025*	Publicly available tools (i.e., ChatGPT) currently in use by many Team ND members to enhance productivity M365 Copilot technical configuration and technical pilot underway in Q1 2025, with Agency pilot to follow in Q2
Workforce Engagement	**Data and AI Literacy and Training Supports**	**In Progress** *Q1-Q2 2025*	We are curating AI and data literacy learning paths and also developing custom guidance and materials to support building awareness and workforce skills in engaging with AI Consideration for both end-users and technical personas are in the planning
Operationalize AI	**Custom AI Products and Targeted Solutions**	**Started**	**Underway/Complete** • An initial Chatbot pilot has been developed with Commerce • Preliminary use cases were collected this summer **Upcoming** • Prioritization and risk evaluation framework • Broader agency use case collection and analysis • Selection and development of additional pilots • Exploration of commercial AI solutions to address particular organizational needs

What is to come in 2025 and beyond?

Building North Dakota's 'Data Muscle"

Completion of Year 1 activities & Year 2 planning/ implementation

Agency Empowerment

Empowering Agency data governance/stewardship, data literacy, data platform and analytic maturity and capabilities

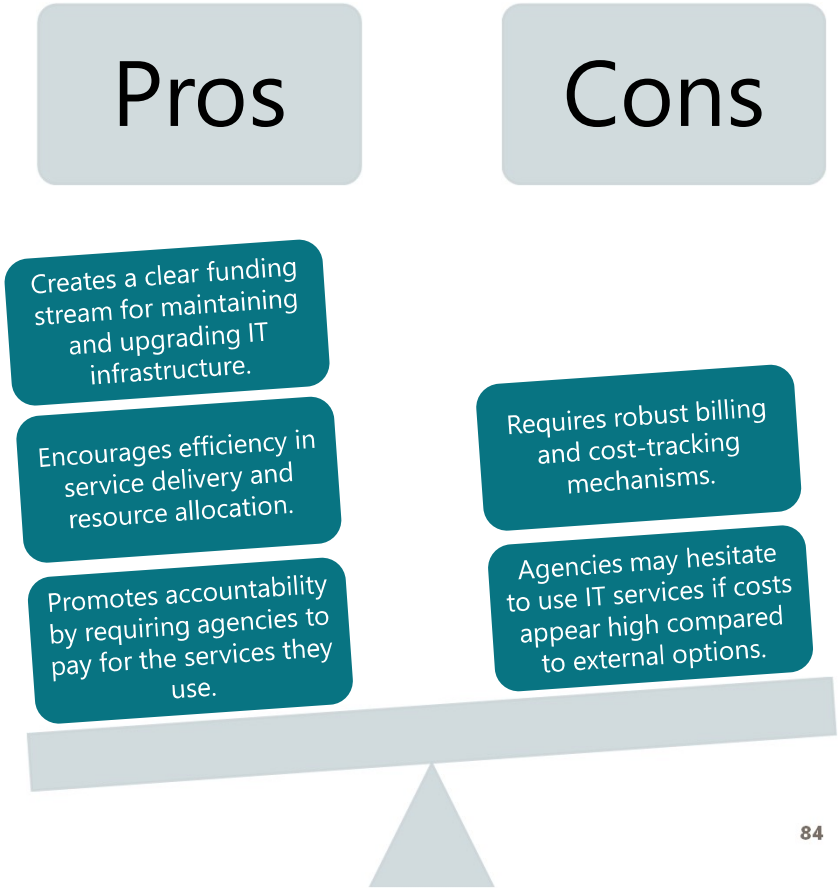
Data in Action

Onboarding and supporting new analytic use cases

Budget Breakdown

Internal Service Fund (ISF)

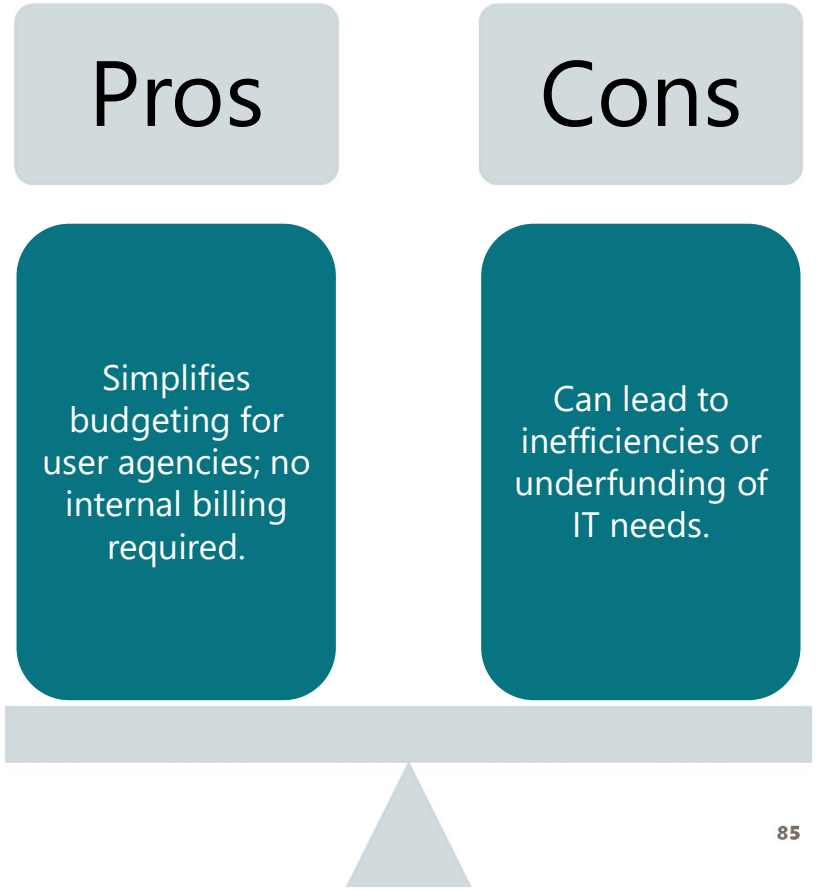
- **Definition:** ISFs are self-sustaining financial models used by government entities to deliver services to other agencies, with costs recovered through chargeback.



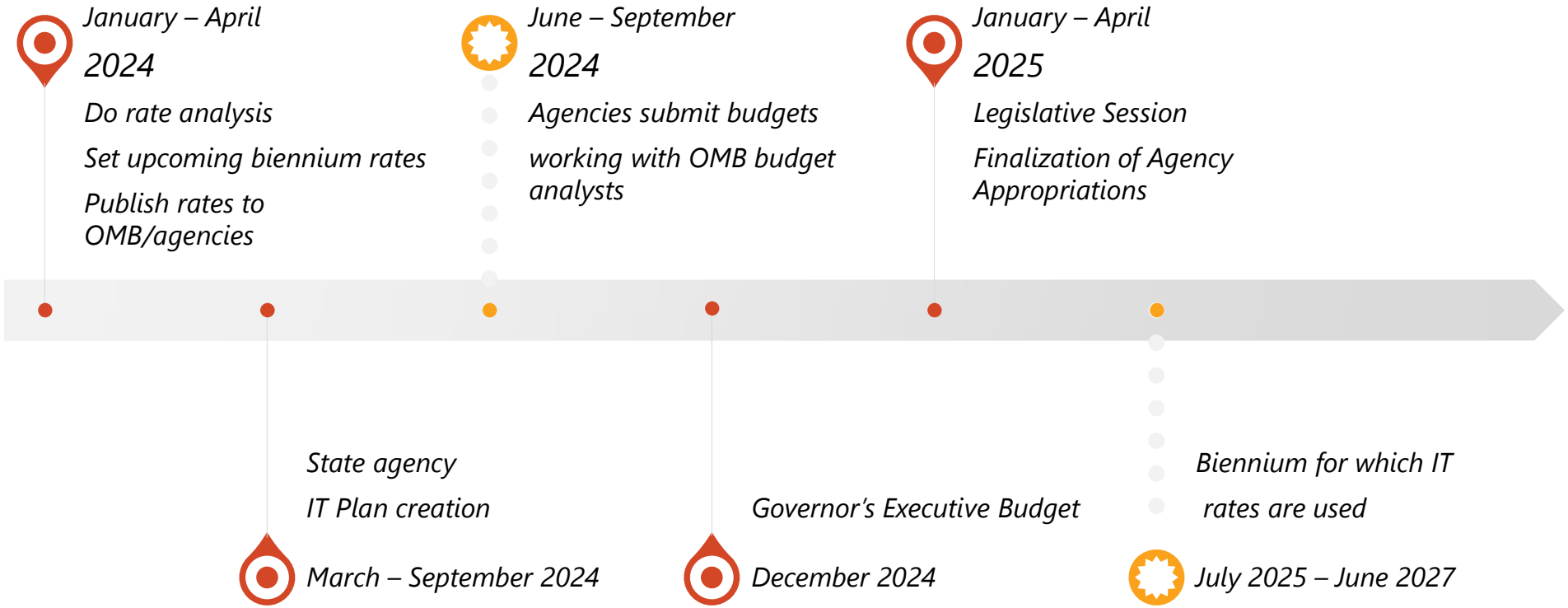
Alternative Models

- **General Fund Allocation:** IT services are funded through appropriations from the state's general fund, often making them appear "free" to the receiving agency.

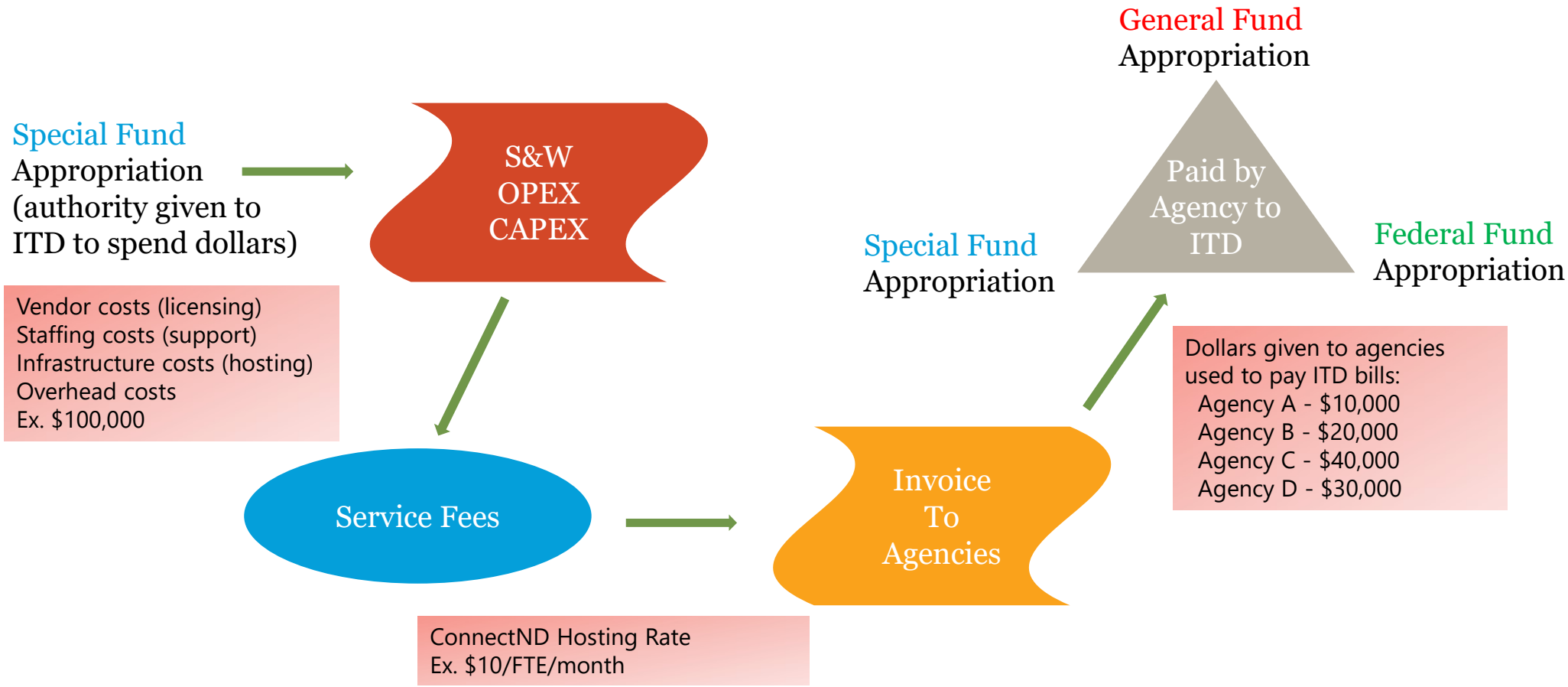
- **Hybrid Models:** Some states use a combination of ISFs and direct appropriations, where certain core services are funded through the general fund and other services operate as ISFs.



Service Fee Timeline



Appropriation & Chargeback Example



Service Fee Example – Legislative IT Committee

What would a service fee for this committee look like?

What happens if you are directed to have 10 meetings?

What if it were an hourly rate per member?

Where does the cost of creating your Legislative Management report go?

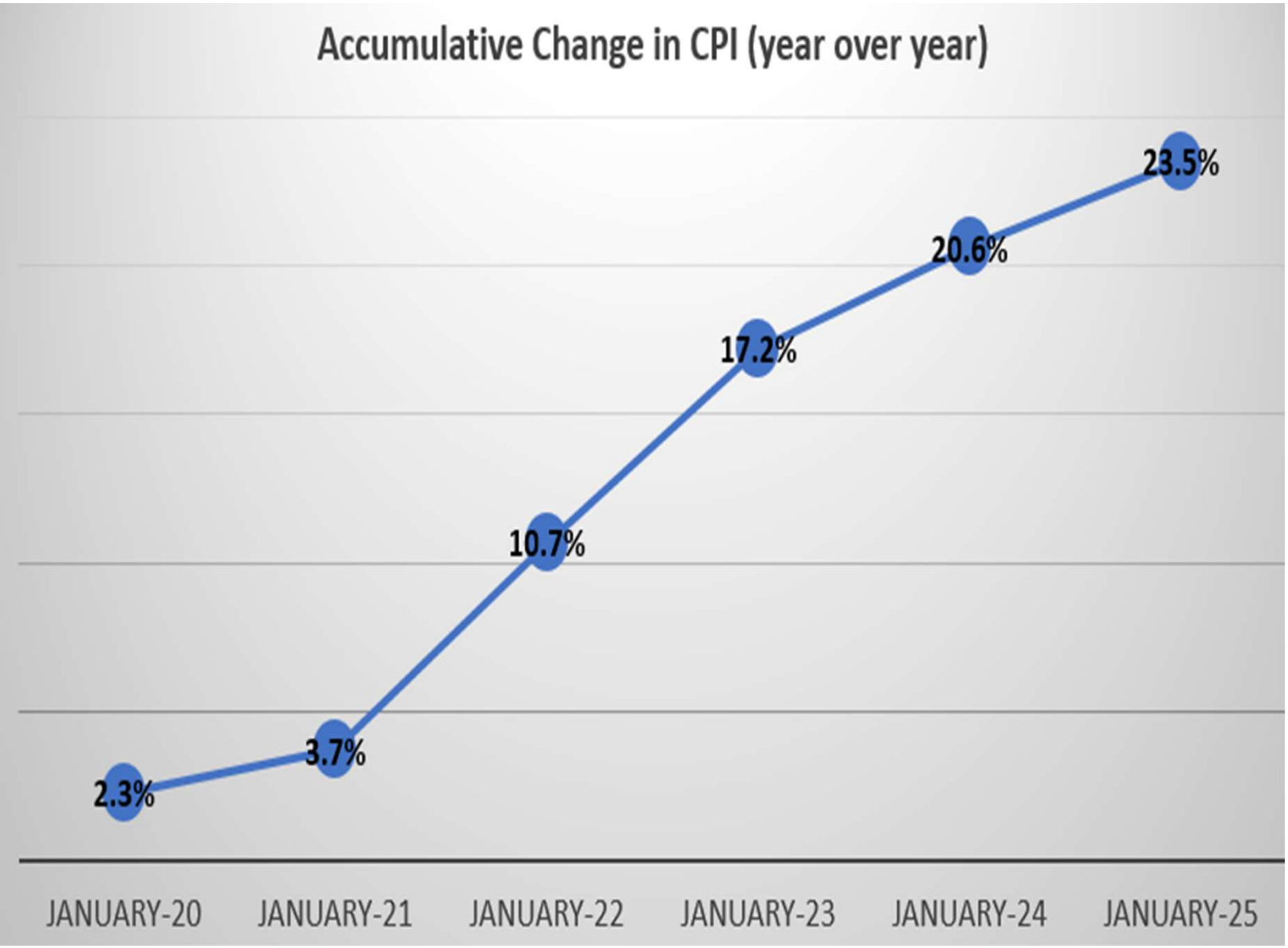
Assumptions:
6 meetings during an interim
11 committee members
1 citizen member
2 support staff

Staffing:
- Portion of salaries/benefits for nine committee members
- Travel costs for nine committee members
- Any direct training needed to serve on the committee

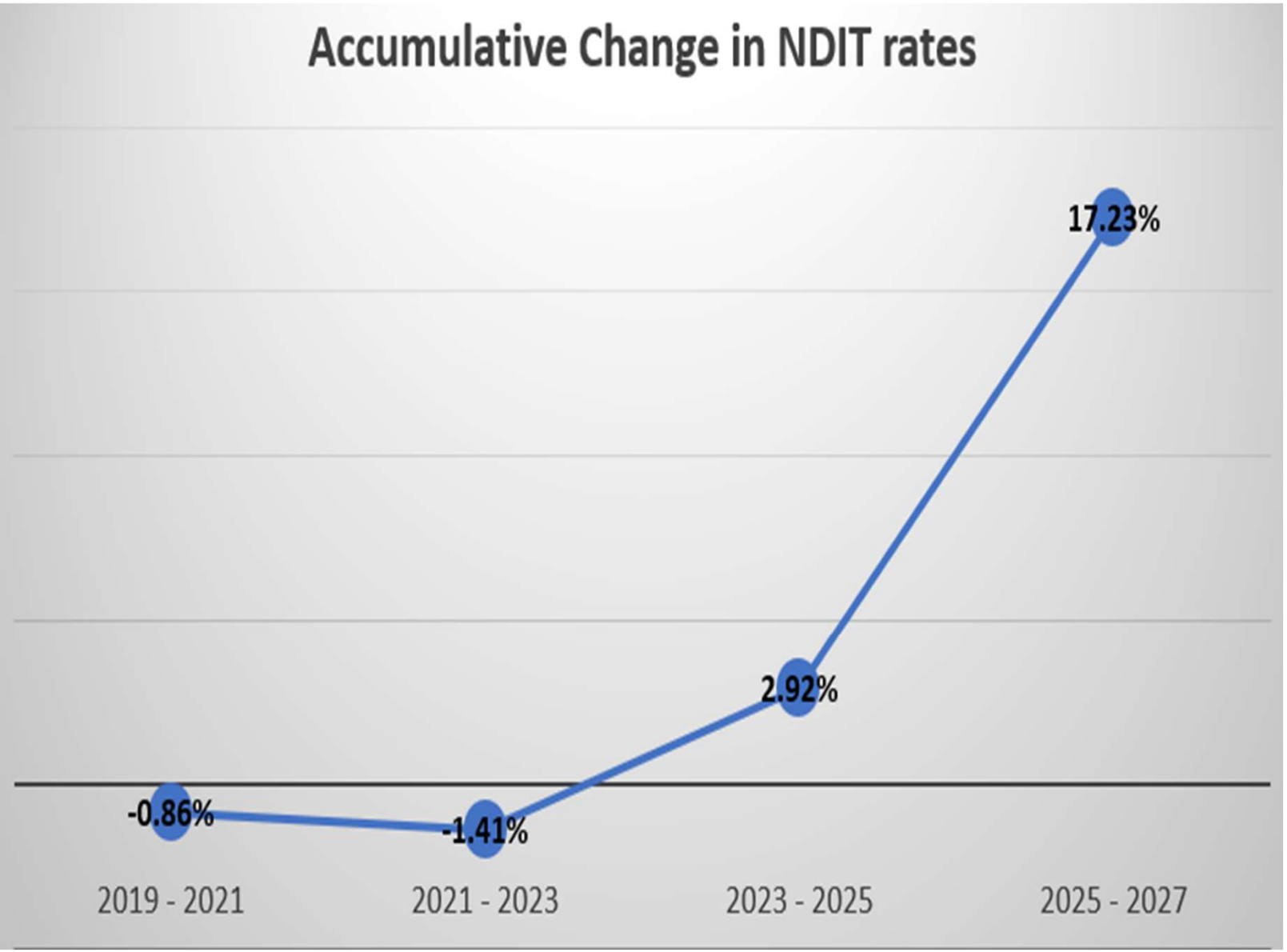
Operational:
- Portion of contractor cost (CIO Mock)
- Portion of end user license costs (M365, Adobe, LC applications)
- Portion of end user equipment
- Cost of Harvest Room (includes technology within room)

Overhead:
- Portion of salaries/benefits for chairman/vice chairman (leadership)
- Portion of salaries/benefits for support staff

Billing metric could be a flat rate per meeting.



Source: Consumer Price Index Data from 1913 to 2025

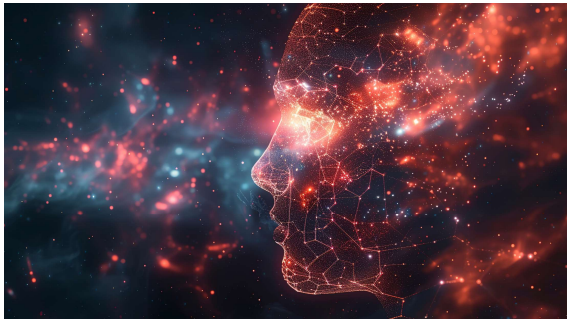


Rates set in April of 2018, 2020, 2022 and 2024 for next biennium services

Costs Absent From 2023-2025 Rates

- Current biennium rates do not include:
  - Equity Package
    - $5.2M, including the 6/4% legislative increase
      - Would increase current rates by 10.2%
  - Legislative Increase of 6/4%
    - Rates only included a 3/3% increase
      - Approx. $1M difference for the biennium
- Efforts to remediate critical security vulnerabilities
  - Unmanaged desktop apps
  - Apps unable to migrate to new hardware

- New technology proof of concepts
  - Artificial Intelligence
  - Robotic Process Automation
  - Low code/No Code platforms



Cost Reduction Considerations

- Request for Information (RFI) for Managed Voice Services:
  - Issued March 2024, only 2 qualifying responses one of which submitted a cost proposal
  - $1.85M/yr. for just managed services (staffing)
  - NDIT staffing is $675,000/year
- Multi-year contract to lock in pricing
- Transition costs to change vendors
  - Network Endpoint Hardware – 1,336 switches
    - Over 7,000 firewall rules would need to be redone
  - Desktop Hardware – 7,350 devices
- Changes to support agreements

Desktop Support Examples

- South Dakota
  - January 2025 User Fee
  - $125.00 User/Month

  User Fee: The user fee is assessed based on each domain account or user name used to sign on to a computer. This fee covers services provided by BIT including statewide technical support for hardware and software on workstations and networks, installation of hardware and software, operating system research and development, cloning or developing a standard workstation set-up, Parts Center services (including warranty repair), application deployment, hardware and software inventory, printer support, and file restores.

- ND Legislative Council (estimate)
  - 3 Information Tech Specialists
  - $5,275 monthly salary (assumes mid-range)
  - 141 Devices – Legislative Assembly
  - 48 Devices – Legislative Council
  - $83.73 per device for support
    - (3 * $5275) / (141 + 48)
    - Does not include benefits, operational costs, management costs
  - NDIT support per device - $62.00

Budget breakdown

NDIT 2023-2025 Total Budget Appropriation (July 2023)					
Program	**FTE**	**General Funds**	**Special Funds**	**Federal Funds**	**Total**
NDIT Operations	468.0	$ 23,312,324	214,962,865	4,011,967	$ 242,287,156
Statewide Longitudinal Data System	3.0	5,082,678	-	500,000	5,582,678
EduTech	26.0	2,905,260	6,759,048	500,000	10,164,308
K-12 Network	4.0	6,272,610	90,000	-	6,362,610
Geographic Information System	1.0	1,142,213	-	65,679	1,207,892
Health Information Technology	4.0	2,000,000	6,742,111	-	8,742,111
Public Safety - (E911/SIRN)	1.0	1,858,240	16,543,229	-	18,401,469
Public Safety - (HB 1242)	0.0	-	20,000,000	80,000,000	100,000,000
Online Tax Portal Grant - (HB 1225)	0.0	300,000	-	-	300,000
IIJA Federal Funds	0.0	487,520	-	147,762,480	148,250,000
One-Time SIIF Funds	0.0	-	15,000,000	-	15,000,000
Total	**507.0**	$ 43,360,845	$ 280,097,253	$ 232,840,126	$ 556,298,224

Budget breakdown

NDIT 2023-2025 Budget Adjustments					
Program	**FTE**	**General Funds**	**Special Funds**	**Federal Funds**	**Total**
NDIT Operations	468.0	$ (2,950,000)	(24,831,876)	(3,499,467)	$ (31,281,343)
Statewide Longitudinal Data System	3.0	(1,075,000)	-	-	(1,075,000)
EduTech	26.0	-	-	-	-
K-12 Network	4.0	-	-	-	-
Geographic Information System	1.0	-	-	-	-
Health Information Technology	4.0	-	(3,000,000)	-	(3,000,000)
Public Safety - (E911/SIRN)	1.0	-	(20,000,000)	(80,000,000)	(100,000,000)
Public Safety - (HB 1242)	0.0	-	-	-	-
Online Tax Portal Grant - (HB 1225)	0.0	(300,000)	-	-	(300,000)
American Rescue Plan Act	0.0	-	-	-	-
IIJA Federal Funds	0.0	(487,520)	-	(147,762,480)	(148,250,000)
One-Time SIIF Funds	0.0	-	-	-	-
Equity & Retirement Additions		2,869,980	5,802,948	-	8,672,928
Total	**507.0**	$ (1,942,540)	$ (42,028,928)	$ (231,261,947)	$(275,233,415)

Budget breakdown

NDIT 2025-2027 Legislative Base Budget					
Program	**FTE**	**General Funds**	**Special Funds**	**Federal Funds**	**Total**
NDIT Operations	468.0	$ 23,825,903	210,453,888	512,500	$ 234,792,291
Statewide Longitudinal Data System	3.0	4,125,661	-	500,000	4,625,661
EduTech	26.0	2,738,726	7,110,100	500,000	10,348,826
K-12 Network	4.0	5,825,668	90,000	-	5,915,668
Geographic Information System	1.0	1,044,107	-	65,679	1,109,786
Health Information Technology	4.0	2,000,000	3,822,725	-	5,822,725
Public Safety - (E911/SIRN)	1.0	1,858,240	16,591,612	-	18,449,852
Total	**507.0**	$ 41,418,305	$ 238,068,325	$ 1,578,179	$ 281,064,809

Budget breakdown

NDIT Decision Packages - 2025-2027 Biennium					
Package	**FTE**	**General Funds**	**Special Funds**	**Federal Funds**	**Total**
#4 - Vulnerability Remediation	0.0	$ -	$ 3,042,960	$ -	$ 3,042,960
#5 - Public Safety	6.0	$ 209,520	$ 1,968,491	$ -	$ 2,178,011
#6 - Vendor Toolset Increases	0.0	$ 5,133,174	$ 265,447	$ -	$ 5,398,621
#8 - Continuing Appropriations	0.0	$ -	$ (99,168,477)	$ -	$ (99,168,477)
#11 - Inflationary Increases	0.0	$ 2,841,715	$ (1)	$ -	$ 2,841,714
#12 - Health Information Program	0.0	$ -	$ 8,182,968	$ -	$ 8,182,968
#14 - EduTech Program Funding	0.0	$ -	$ 411,793	$ -	$ 411,793
#15 - Data Center Infrastructure	0.0	$ -	$ 1,719,061	$ -	$ 1,719,061
Total Budget Changes	**6.0**	$ 8,184,409	$ (83,577,758)	$ -	$ (75,393,349)

Contains One Time SIIF Funds

Budget breakdown

NDIT 2025-2027 Senate Changes to Legislative Base					
Program	**FTE**	**General Funds**	**Special Funds**	**Federal Funds**	**Total**
NDIT Operations	468.0	$ 10,500,508	(85,138,855)	(512,500)	$ (75,150,847)
Statewide Longitudinal Data System	3.0	(4,904)	-	(500,000)	(504,904)
EduTech	26.0	(8,174)	203,515	(500,000)	(304,659)
K-12 Network	4.0	1,002,665	(90,000)	-	912,665
Geographic Information System	1.0	113,836	-	(65,679)	48,157
Health Information Technology	4.0	(1,356,779)	6,285,296	-	4,928,517
Public Safety - (E911/SIRN)	3.0	209,520	(2,445,835)	-	(2,236,315)
Total	**509.0**	$ 10,456,672	$ (81,185,879)	$ (1,578,179)	$ (72,307,386)

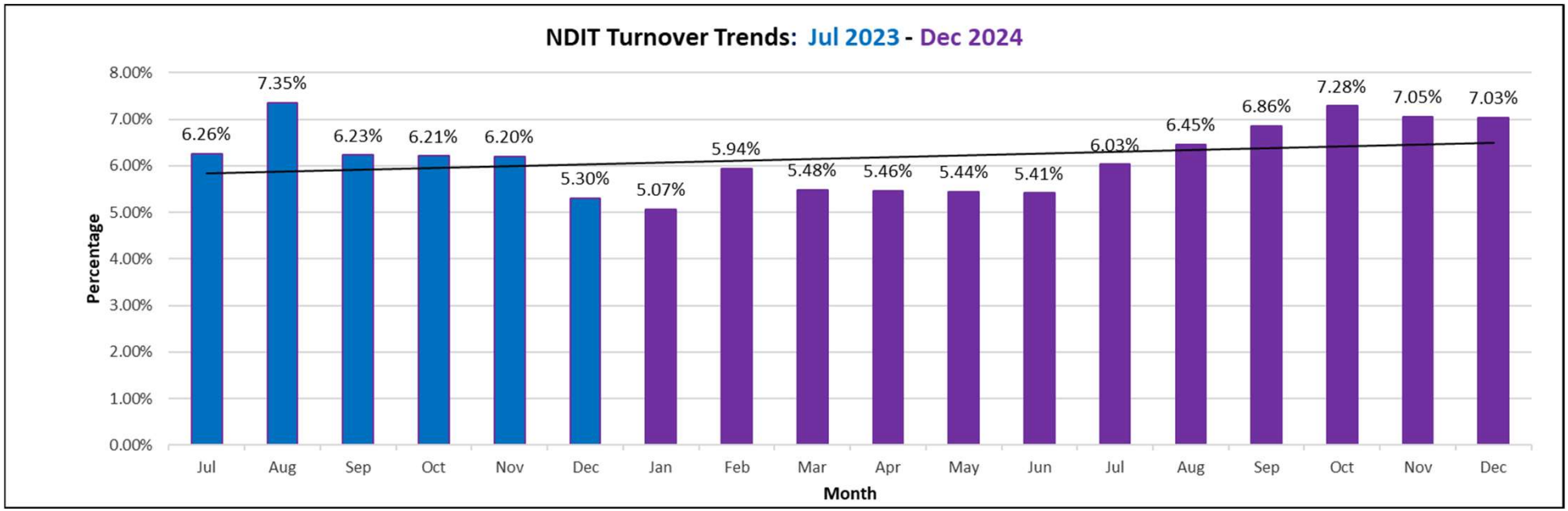
NDIT 2025-2027 Senate Budget					
Program	**FTE**	**General Funds**	**Special Funds**	**Federal Funds**	**Total**
NDIT Operations	468.0	$ 34,326,411	125,315,033	-	$ 159,641,444
Statewide Longitudinal Data System	3.0	4,120,757	-	-	4,120,757
EduTech	26.0	2,730,552	7,313,615	-	10,044,167
K-12 Network	4.0	6,828,333	-	-	6,828,333
Geographic Information System	1.0	1,157,943	-	-	1,157,943
Health Information Technology	4.0	643,221	10,108,021	-	10,751,242
Public Safety - (E911/SIRN)	3.0	2,067,760	14,145,777	-	16,213,537
Total	**509.0**	$ 51,874,977	$ 156,882,446	$ -	$ 208,757,423

Staffing

NDIT Talent

- 507 FTE
- Mixture of remote, hybrid and in-office
- Staff augmentation
- Apprentice roles

Biennium Turnover



NDIT Retirement Statistics

Years to meet Rule of Eligibility	Total Employees			Management			Non-management		
	# of FTEs	% of Total FTEs	Cumulative %	# of FTEs	% of Total FTEs	Cumulative %	# of FTEs	% of Total FTEs	Cumulative %
Currently Eligible	49	10.32%	10.32%	6	1.26%	1.26%	43	9.05%	9.05%
0-3 years	39	8.21%	18.53%	3	0.63%	1.89%	36	7.58%	16.63%
3.1 - 5 years	23	4.84%	23.37%	4	0.84%	2.74%	19	4.00%	20.63%
5.1 - 10 years	69	14.53%	37.89%	17	3.58%	6.32%	52	10.95%	31.58%
10.1 - 15 years	80	16.84%	54.74%	12	2.53%	8.84%	68	14.32%	45.89%
15.1 - 20 years	70	14.74%	69.47%	10	2.11%	10.95%	60	12.63%	58.53%
20.1 - 25 years	72	15.16%	84.63%	9	1.89%	12.84%	63	13.26%	71.79%
25+ years	73	15.37%	100.00%	0	0.00%	12.84%	73	15.37%	87.16%
Total	475	100.00%		61	12.84%		414	87.16%	

*Management includes all people managers

*Data as of 12/24

Recruitment: 2024 in Review

- 78 Total Hires
- 50 External – from the market
- 6 Transfers
- 22 Promotions within NDIT

Recruitment: What's Going Well

- Applicant pools for remote, entry level and mid level roles are robust
- Applicants for these roles often exceed qualifications
- Early career roles in Bismarck/ND: smaller pools but we have qualified applicants, thus successful sourcing

Recruitment: Pain Points

- Highly skilled/niche roles in ND
  - Small or no applicant pools
  - Cannot afford talent in the marketplace
  - Unable to match salaries & benefits in private sector
- Highly skilled/niche roles remote
  - Quantity over quality
  - Upon interview, many do not have level of knowledge expected/needed

What We're Working On

- People-first culture
  - Culture Roots train-the-trainer: Behavior-based leadership
- Workforce Planning
  - Knowledge management
  - Skills matrix/career pathing

New/Vacant FTE Pool

FTE Pool Calculation	Budget Reduction	Amount in NDIT Pool	Appropriation Reduction
75% of vacant FTE - Special	7,450,404	5,587,803	(1,862,601)
75% of vacant FTE - General	1,469,030	1,101,773	(367,258)
90% of new FTE - Special	2,967,987	2,298,667	(669,320)
90% of new FTE - General	1,998,699	1,725,377	(273,322)
Total	**13,886,120**	**10,713,620**	**(3,172,501)**

	Vacant FTE Pool Calculation
Salaries Permanent	91,481,377
Benefits (30%)	27,444,413
Total Salary Base Calculation	118,925,790
Vacancy Rate Assigned	7.5%
Vacant FTE Budget Reduction	**8,919,434**
New FTE Budget Reduction	**4,966,686**
	13,886,120

Combined New FTE / Vacant FTE pool					
	New FTE - GF	**New FTE - SF**	**Vacant FTE - GF**	**Vacant FTE - SF**	**Total**
Appropriaton Reduction	1,998,699	2,967,987	1,469,030	7,450,404	13,886,120
Pool Redcution	(273,322)	(669,320)	(367,258)	(1,862,601)	(3,172,501)
FTE Pool Available	**1,725,377**	**2,298,667**	**1,101,772**	**5,587,803**	**10,713,619**
Requests:					
July 1, 2023 Vacants			1,333,118	3,786,479	5,119,597
New FTE	1,121,088	1,138,682			2,259,770
Pending Request	*87,969*				*87,969*
Total Pool Requests	1,209,057	1,138,682	1,333,118	3,786,479	7,467,336
Balance Remaining	**516,320**	**1,159,985**	**(231,346)**	**1,801,324**	**3,246,283**

NEW FTE POOL POSITIONS

New FTE Pool			
Position	**Budget Amount**	**New FTE Pool Request**	**Position filled date**
General Fund Positions			
Information Services V, Grade 207	*283,986*	*87,969*	*Dec-24*
Information Services I, Grade 203	138,787	52,045	Oct-24
Manager II, Grade 107	268,434	163,950	Jun-24
Information Services VI, Grade 208	250,054	250,713	May-24
Information Services IV, Grade 206	237,318	175,000	Apr-24
Professional Services III, Grade 107	250,908	207,226	Mar-24
Information Services V, Grade 207	320,289	272,154	Jan-24
General Fund Total	**1,749,776**	**1,209,057**	
Special Fund Positions			
Program Management III, Grade 106	268,430	111,846	Sep-24
Information Serivices III, Grade 205	190,641	71,490	Oct-24
Information Services IV, Grade 206	276,723	142,413	Jun-24
Information Services IV, Grade 206	216,575	118,421	Jul-24
Information Services I, Grade 203	138,787	87,399	Jun-24
Information Services IV, Grade 206	190,646	137,113	Jul-24
Information Services IV, Grade 206	237,318	135,000	May-24
Program Management III, Grade 106	229,540	165,000	Apr-24
Manager II, Grade 107	294,358	170,000	Jun-24
Special Fund Total	**2,043,018**	**1,138,682**	
New FTE Pool Total	**3,792,794**	**2,347,739**	

VACANT FTE POOL POSITIONS

Vacant FTE Pool				
Position	**Budget Amount**	**Vacant FTE Pool Request**	**Position filled date**	**Position vacated date**
General Fund Positions				
Manager II, Grade 107	145,300	86,914	Nov-24	Jun-22
Information Services IV, Grade 206	199,853	137,645	Mar-24	Apr-22
Professional Services III, Grade 107	247,654	226,139	Nov-23	Dec-22
Information Services III, Grade 205	237,568	181,355	Aug-23	Feb-23
Information Services III, Grade 205	233,464	203,166	Jul-23	Mar-23
Information Services IV, Grade 206	295,192	192,600	Jul-23	Jul-22
Manager II, Grade 107	186,328	305,300	Jul-23	Apr-21
General Fund Total	**1,545,359**	**1,333,118**		
Special Fund Positions				
Information Services V, Grade 207	267,389	95,594	Nov-24	Apr-23
Information Services IV, Grade 206	269,895	155,000	Apr-24	Mar-23
Information Services IV, Grade 206	280,880	135,000	May-24	Jun-23
Information Services II, Grade 204	183,896	111,675	Mar-24	Mar-23
Information Services IV, Grade 206	280,911	170,400	Jan-24	Jun-23
Manager II, Grade 107	232,471	259,969	Dec-23	May-23
Information Services V, Grade 207	377,867	222,362	Dec-23	Jun-23
Manager II, Grade 107	185,597	245,071	Dec-23	Jul-21
Information Services IV, Grade 206	211,627	233,155	Nov-23	Jun-23
Profesional Services II, Grade 106	256,471	157,216	Nov-23	May-23
Information Services III, Grade 205	201,789	158,885	Nov-23	Mar-23
Profesional Services II, Grade 106	219,838	185,121	Nov-23	Nov-21
Information Services III, Grade 205	197,964	164,450	Sep-23	Aug-22
Professional Services III, Grade 107	227,113	206,080	Aug-23	May-23
Information Services IV, Grade 206	211,790	293,400	Jul-23	Apr-23
Information Services IV, Grade 206	205,379	195,040	Aug-23	Jul-22
Information Services III, Grade 205	260,420	215,400	Jul-23	Jun-23
Analyst IV, Grade 106	221,245	240,580	Aug-23	Jan-23
Manager III, Grade 108	204,899	342,080	Aug-23	Mar-23
Special Fund Total	**4,497,441**	**3,786,479**		
Vacant FTE Pool Total	**6,042,800**	**5,119,597**		

Appendix

Acronyms and Definitions

- **BAND** - Broadband Association of ND
- **Data governance** is the process of ensuring that data is accurate, secure, and used responsibly. It involves setting rules and responsibilities so everyone knows how to handle data properly and how to protect it.
- **EA** - Enterprise Architecture- the process by which organizations standardize, organize and develop roadmaps for IT infrastructure and applications to align with and facilitate the achievement of business goals and objectives.
- **Low Code-** is a software development approach that requires minimal hard-coding, allowing users to create applications and workflows through visual interfaces, drag-and-drop components, and pre-built templates. It is designed to simplify and speed up the development process, making it accessible to both professional developers and non-technical users (often referred to as "citizen developers").
- **SIRN** - Statewide Interoperable Radio Network
- **SLDS** - Statewide Longitudinal Data System
- **TBP** - Technology Business Partner knows the customer, their business, their technology, where they want to go and what is coming over the horizon.
- **Tech Debt**-happens when quick fixes or older systems are used instead of long-term, efficient solutions. While these choices might save time or money upfront, they eventually lead to more maintenance, slower systems, and higher costs to fix or replace.

Geospatial Acronyms and Definitions

- **Geospatial** - catch-all term for range of tools used for mapping and analysis
- **GIS** - Geographic Information Systems (e.g., the GIS Hub)
- **SGC** - State Geospatial Committee
- **Next Generation 911** - internet-based 911 system that requires GIS layers such as address points and emergency service boundaries
- **NDIT** - ND Information Technology
- **NDGF** - ND Game and Fish
- **NDDES** - ND Department of Emergency Services
- **Web services** - internet-based delivery of data
- **Parcel** - property boundary with associated information such as landowner

IT Procurement

IT Solution Lifecycle for State Government

	Month 1	Month 2	Month 3	Month 4	Month 5	Month 6	Month 7	Month 8	Month 9	Month 10	Month 11	Month 12
Large IT Procurement >$500,000	Funding & Project Start Up	Preliminary Research	RFP Draft, Approval & Issue			Response Period	Evaluations, Demonstrations & Best & Final		Contract Negotiations			Award & Protest Period
IT RFP >$100,000	Funding/ Initiatative Intake	Preliminary Research	RFP Draft & Issue	Response Period		Evals, Demos, & Best & Final	Contract Negotiations			Award & Protest Period		
Invitation for Bid <$100,000	Funding & Project Start Up	Preliminary Research	Draft & Issue	Response Period	Eval	Award & Protest Period						

Things to Consider:

- It is known what is needed.
- Team Availability
- ESC Availability
- Number of Responses
- Demonstrations & Clarification results
- Best and Final Offer
- Protest
- Contract negotiations
  - State Law
  - Retainage
  - Liquidated Damages
  - Deliverables
  - Limitation of Liability
  - Indemnification

5 Months is a unicorn

Transparency and Governance

Advisory Groups

- Enterprise Architecture Group (current) – review of IT standards, policies, guidelines
  - Agency representation
  - Technology domain representation
  - Service Delivery representation
- Data Governance Council (current) – statewide data strategy
  - Agency representation
  - Technology domain representation
- Customer Advisory Group (upcoming) – service feedback, strategic guidance of services
  - Agency representation
  - Service Delivery representation
- Portfolio Steering Committee (upcoming) – work prioritization
  - Agency representation
  - Portfolio Manager
  - Chief Information Officer

Incident Performance

Agency: All | Priority: All | Breach: All | Underlying Cause: All | Assigned To Group: All | Contact Type: All

- Exclude Tickets Resolved by Solarwinds
- Exclude Child Tickets
- Include only tickets assigned to NDIT

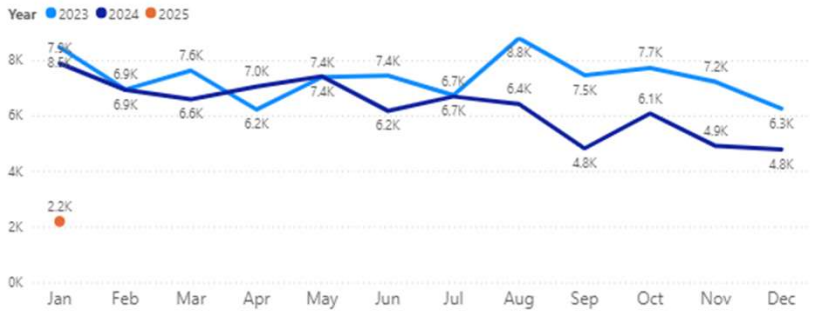
NORTH Dakota — Be Legendary.

Data last refreshed 1/12/25

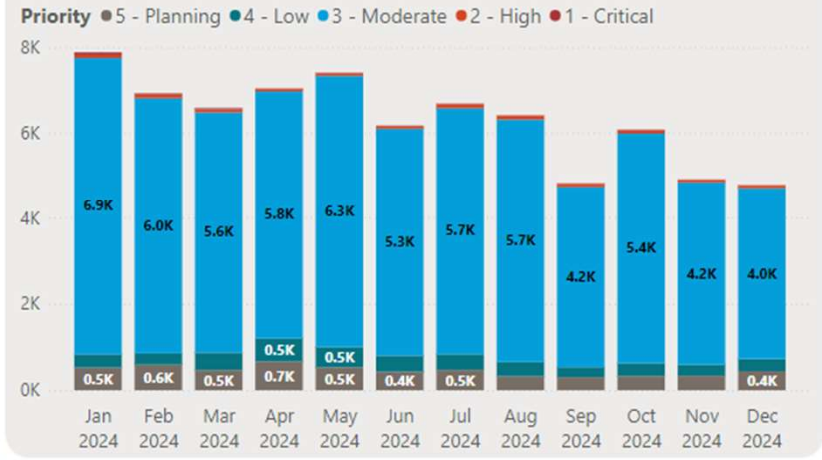
Select Metric: Incidents Created | Incidents Resolved | Incident Backlog | Avg Resolution Time(Mins)

Trend: Incidents Year over Year

Continuous | Year over Year | 3 Metrics



Trend: Incidents by Priority



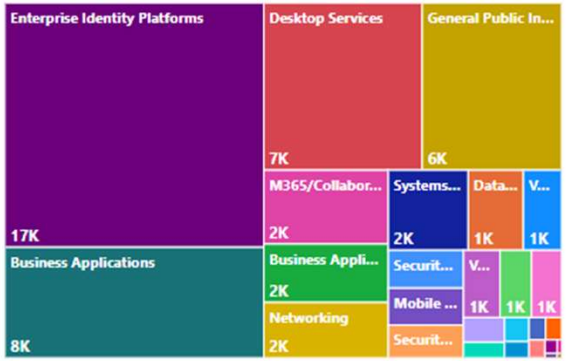
Summary Metrics for 1/1/2024 - 8/20/2024

Click for Video Tutorial

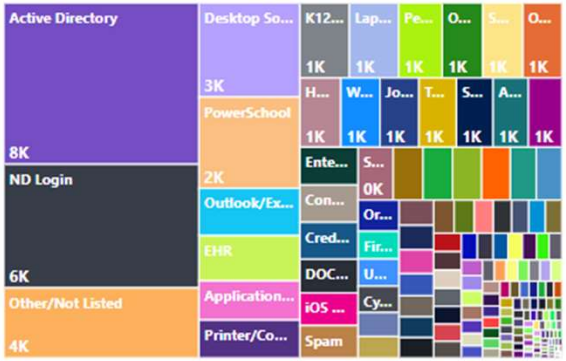
Select Time Period: 1/1/2024 – 8/20/2024

Incidents Created	Incidents Worked	Incidents Outstanding	Avg Resolution Time(Mins)	Pct Tickets Breached
53K	53K	761	790	5.7%

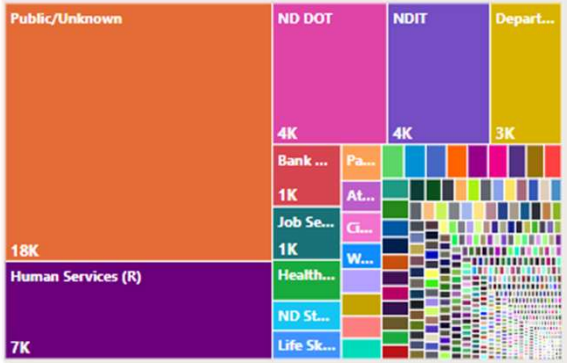
Incidents by Category



Incidents by Subcategory



Incidents by Agency



Incidents by Underlying Cause

Section Changes and Policy Bills

Appropriation Carryover Authority

- Add sections to SB 2021 for the following projects in flight:
  - Statewide Interoperability Radio Network (SIRN)
  - Capitol Security
  - Governance Risk & Compliance (statewide data strategy work)
  - Business Gateway
  - Enterprise Digitization (modernization work)
  - Broadband, Equity, Access and Deployment (BEAD / DE)
- Add ability to transfer funds from HIN Loan Fund to operating

Policy Changes

- Agency sponsored policy changes
  - Change to Statewide Project Plan-SB2048
  - Change to Executive Steering Committee make up-SB 2049

- Legislator sponsored policy changes
  - HB 1265