

August 2021



Information Technology

LEGISLATIVE INFO TECH COMMITTEE
Report Out



Report from CIO Shawn Riley

Report from CIO Agenda

Overview of NDIT

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CARES / ARPA Overviews

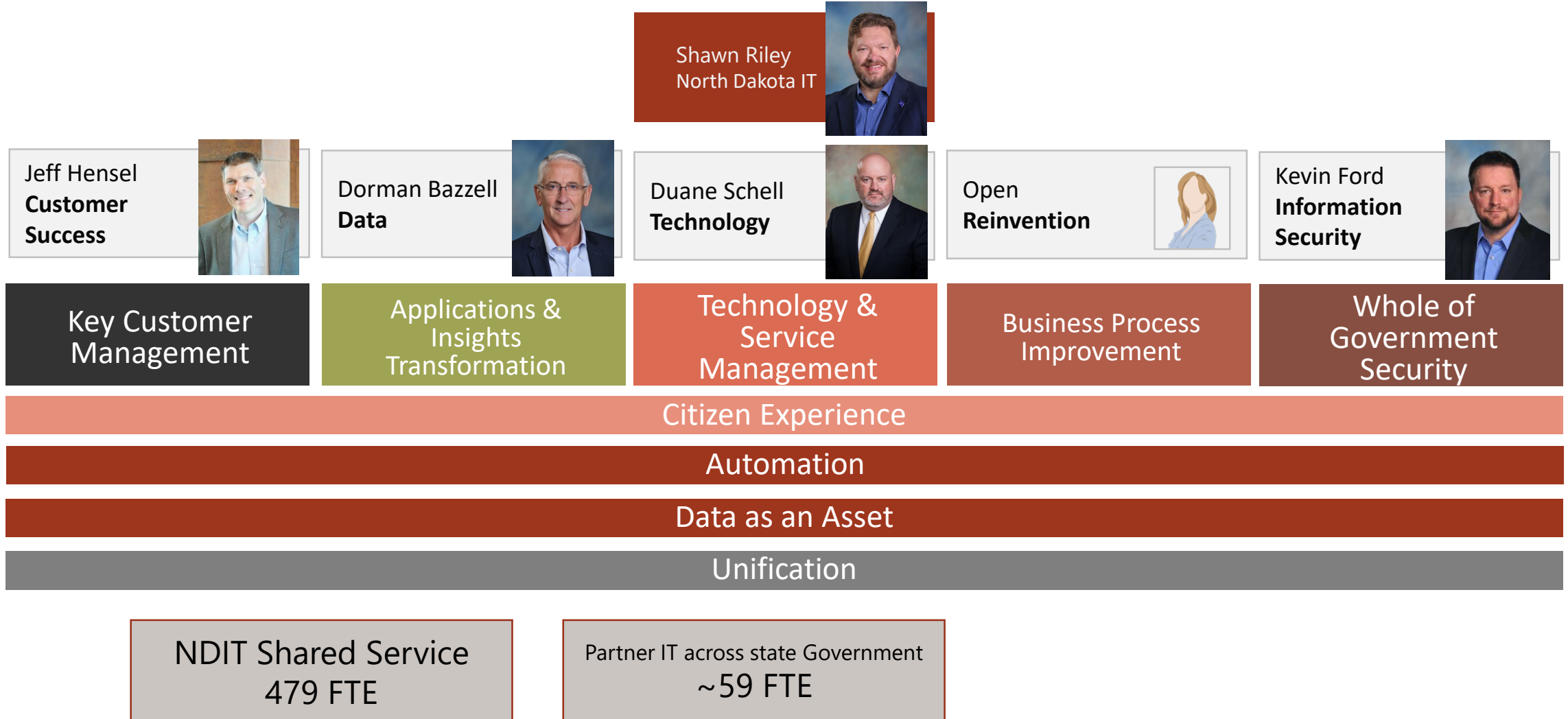
1

Strategies moving forward

2



NORTH DAKOTA INFORMATION TECHNOLOGY



Technology staff Resources across Executive Branch

Unified Shared Service	Fully Managed by Shared Service*	Matrix Agencies	Partner IT across state government			~FTE
Transportation	Governor's Office	Workforce Safety & Insurance	Historical Society	3	Attorney General	17
Trust Lands (partial)	Indian Affairs	Game and Fish	Trust Lands	1	Housing Finance	3
Human Services	Securities		Industrial Commision	5	Career & Tech Ed	5
Emergency Services	Financial Institutions		Insurance Commision	1	School for the Blind	1
Parks & Rec	Labor		Public Employee Retirement System	2	School for the Deaf	1
Information Technology Dept			Public Instruction	5	State Library	1
OMB			Public Service Commission	3	Tax Commissioner	8
Health			Secretary of State	1		
Environmental Quality			Water Commission	2		
Highway Patrol						
Job Service						
Commerce						
Bank of ND						
Corrections						
Retirement & Investment Office						
Total: 479 FTE		Total: 0 FTE	Total: 14 FTE		Total: 59 FTE	

37
Agencies

45
Disciplines

Approx overall:
562.5
Technology FTE

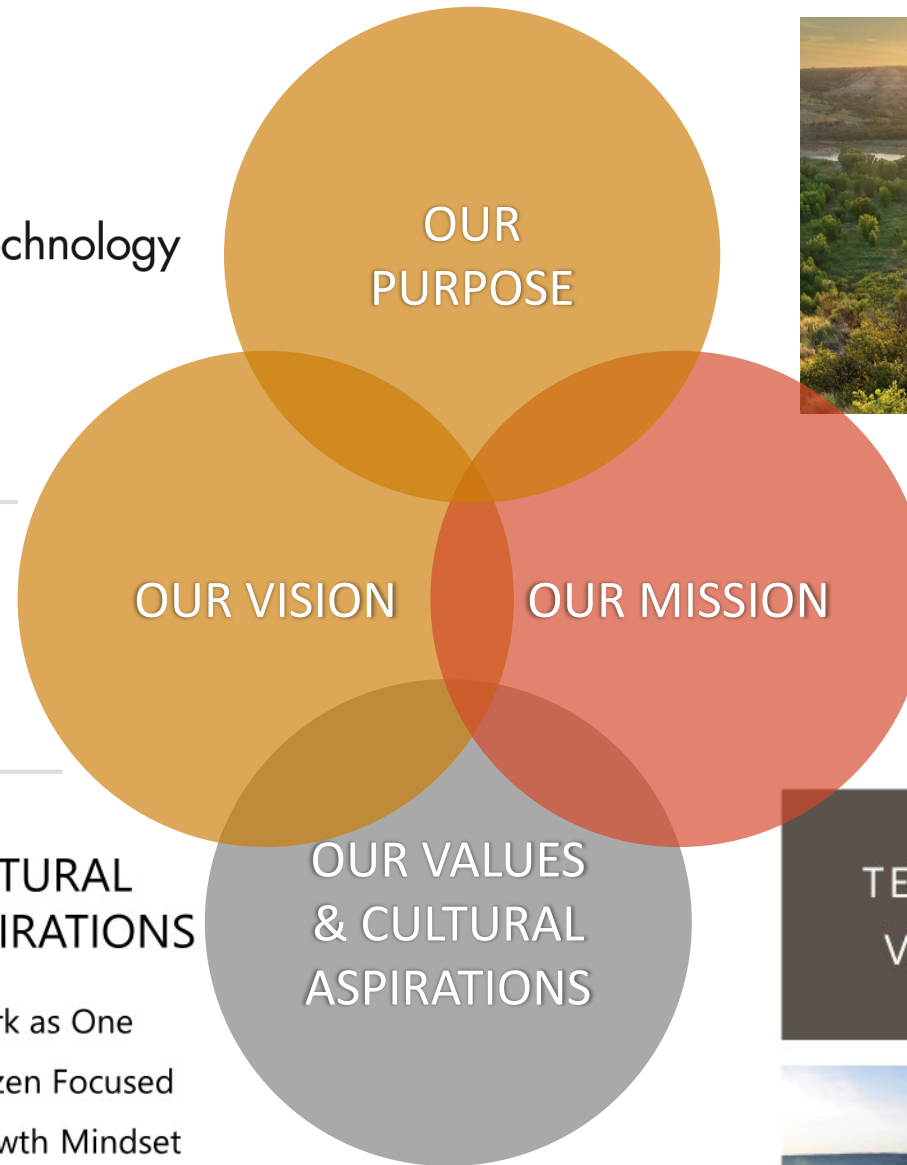
479
2021 within
NDIT

*additional agencies subscribe to the IT services as necessary

IDENTITY



How might we provide world class technology and service?



Efficiently empower with trusted information

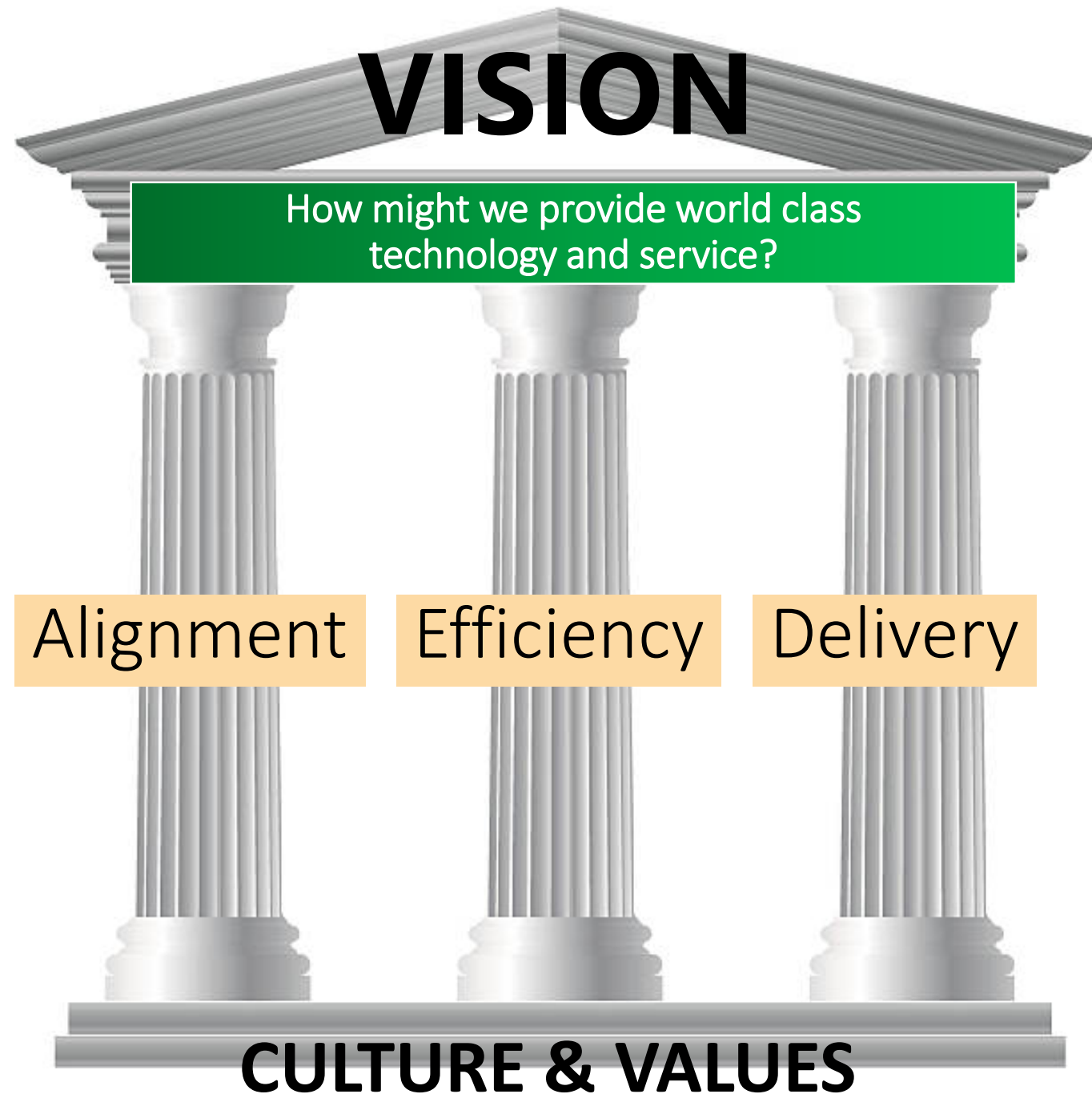


CULTURAL ASPIRATIONS

- Work as One
- Citizen Focused
- Growth Mindset
- Make a Difference
- Leadership Everywhere



PILLARS



PLANNED PRIORITY INITIATIVES

Unification

Complete realignment and redesign of information technology delivery across the cabinet

Transformation of Service

Due to COVID NDIT implemented 10+ years of technology in only 8 months, while enabling new methods of doing business. Workflow models need to be significantly updated across the state to support these new ways of doing business

Cyber

Tools and processes to defend data across the whole of government

Data as an asset

Managing information as a core asset for decision making

Ancient Technology

Eliminating ancient technology

1

2

3

4

5

UNPLANNED PRIORITY INITIATIVES

Cyber

All cyber incidents are unplanned work. Currently this work volume is growing due to the expansion of visibility into the state's network

COVID-19

COVID-19 continues to cause substantial unplanned work for nearly every team in the IT organization

ARPA / Fed Projects

ARPA & Federal dollars are flooding into the states. These dollars are being used for projects of all sorts and often require IT assistance or management

The Unknown

We expect more unplanned activities to arise given the instability in the national environment

1

2

3

4

LARGE PROJECT LISTS (HIGH IMPACT)

Short list of Projects

Secretary of State Systems

DOT Drivers License Rewrite

RIO Pension System Replacement

DHS MMIS Tech Stack Upgrade

K-20W Cyber Education Initiative

Build Data Management Culture

DHS CCWIPS Mainframe Migration

Citizen Experience

MSI Dashboards

DOCR EHR

DPI State Automated Reporting System Rewrite

DOH Lab Information Management System Upgrade

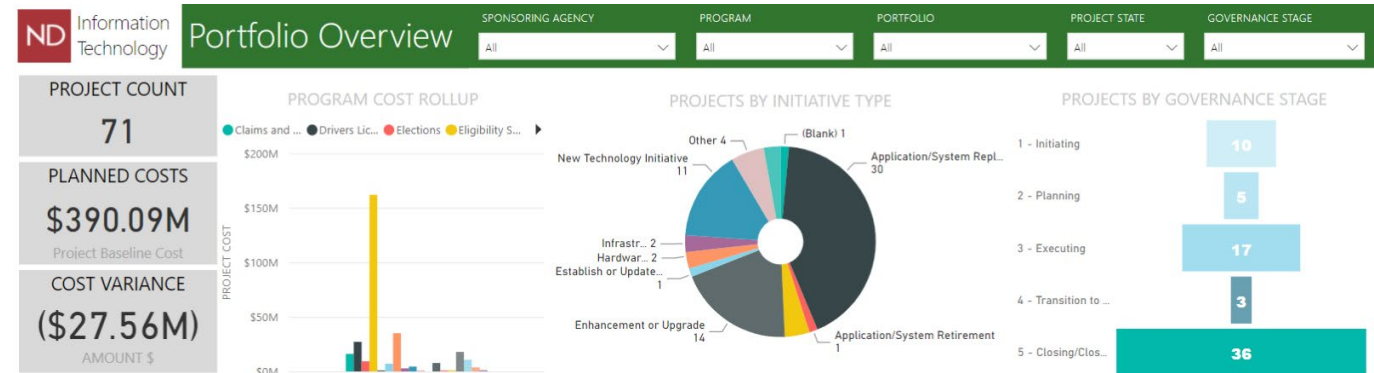
DEQ Air Quality Data System

UAS Infrastructure

FirstNet & SIRN

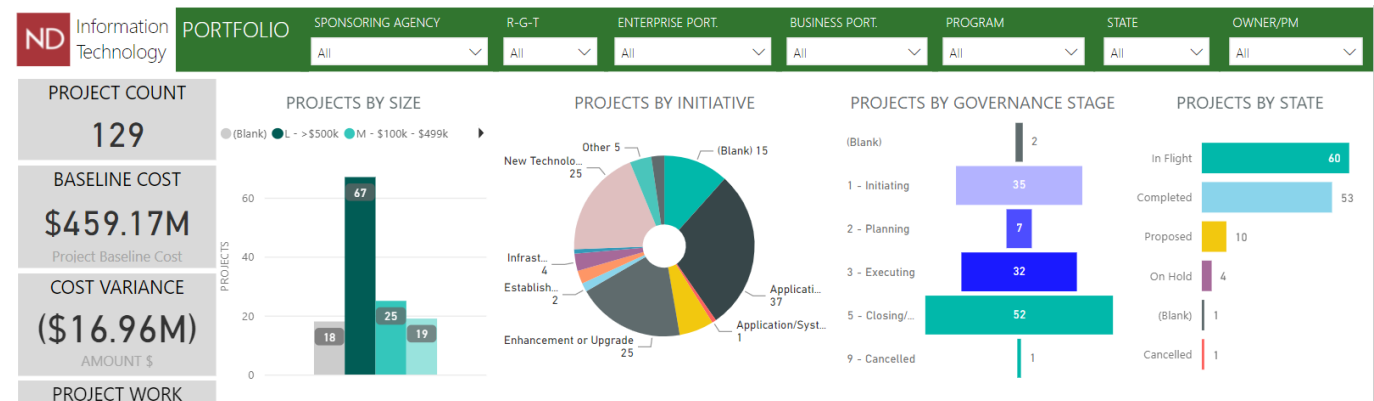
North Dakota IT is involved in the delivery of ~90% of all projects in State Government today

2021 Q2 - ND \$500K+ Project Dashboard



[Link to live dashboard](#)

Project Dashboard of all projects currently tracked through the project office*



(*) This dashboard not publicly accessible

FUNDING DEDICATED PROGRAMS



*Specific Details in the Appendix

2021 - 2023 Biennium Budget Appropriations					
	General Funds	Special Funds	Federal Funds	2021-23 Appn	FTE
10 - Salaries and Wages	8,939,051	92,795,578	-	101,734,629	432
30 - Operating Expenses	5,610,628	108,464,984	7,012,500	121,088,112	0
50 - Capital Assets	131,034	3,312,875	-	3,443,909	0
71 - State Longitudinal Data System	3,986,278	-	500,000	4,486,278	7
73 - EduTech	2,824,877	6,367,062	500,000	9,691,939	30
74 - Wide Area Network	4,589,718	90,000	-	4,679,718	4
76 - Geographic Information System	1,036,127	-	65,679	1,101,806	1
77 - Health IT Office	-	8,725,871	6,000,000	14,725,871	4
78 - SIRN	1,858,240	12,335,556	-	14,193,796	1
Total	28,975,953	232,091,926	14,078,179	275,146,058	479
General Fund	28,975,953	-	-	28,975,953	
Federal Fund	-	-	14,078,179	14,078,179	
Special Fund - 780	-	204,889,488	-	204,889,488	
Special Fund - 300 (PowerSchool)	-	5,081,838	-	5,081,838	
Special Fund - 408 (EduTech)	-	1,059,173	-	1,059,173	
Special Fund - 325 (HIE)	-	8,725,872	-	8,725,872	
Special Fund - 476 (SIRN)	-	12,335,555	-	12,335,555	
	28,975,953	232,091,926	14,078,179	275,146,058	

CARES ACT FUNDING SUMMARY

	Description	Original Allocation From CARES Act	Actual CARES Act Spend	2021-2023 Operational Tail*
Digital Government	Digital government. This funding will be used to establish an enterprise level call center, automation of manual processes to improve workflow, execute a Unified Data Platform for whole of government, and conduct an assessment to support working differently as a result of COVID-19.	\$26,750,000	\$13,197,266	\$0
Cyber Security	Cyber Security. This funding will be used to combat an increase in security incidents directly related to COVID-19. Resources needed include contractor support, additional toolsets and licenses, staff training and on-call third party for large scale incidents.	\$17,000,000	\$28,056,585	\$5,600,000
Telework	Telework. This funding will be used for an upgrade in Microsoft 365, and equipment such as laptops, headsets, network and server hardware to meet the additional capacity needs of the new telework environment.	\$23,868,226	\$24,021,739	\$0
Total		\$67,618,226	\$65,275,590	\$5,600,000

CARES ACT FUNDING – AGENCY PROJECTS

- *Dept of Agriculture – Animal Management System*
 - Allow the North Dakota Department of Agriculture's Animal Health Division to begin to move a number of business processes that are primarily paper driven to electronic storage and messaging between state and federal partners, while significantly increasing Animal Disease Traceability efforts in the event of an outbreak and streamlining a variety of inspection program processes to make it easier for staff to track status and communicate with stakeholders.
 - \$150,000
- *Dept of Public Instruction – K-12 Precision Adaptive Learning*
 - This project will address all of the long term NDPK-12 Strategic Vision outcome goals for students while addressing any Learning Loss due to the COVID19 Distance Education3
 - \$840,000
- *Dept of Transportation – Drivers License Kiosks*
 - Installation of Fifty-Two (52) Self-Service Kiosks throughout North Dakota, and placement of Re-Engineered Self-Service Kiosks to include Rural Cities and Tribal Nations.
 - \$6,800,000
- *Dept of Health – Contact Tracing & Test Registration*
 - Direct response to the COVID-19 pandemic, automating several functions in the testing of citizens, contacting those who were tested as well as possible close contacts.
 - \$4,500,000
- *K-12 Schools – Replacement and upgrade of CODEC video units in classrooms.*
 - Increased utilization of tele-learning and provided the tools needed for teachers to reach students remotely.
 - \$1,900,000

CARES ACT FUNDING – TELEWORKING

- *Microsoft M365E5 Productivity Suite License uplift*
 - Provided a Teams license and Teams Voice to FTE within state government. Allowed for mobile workforce and digital meeting capabilities.
 - \$1,650,000
- *Teams Voice Migration*
 - Allowed for the ability to utilize state phone services while being mobile or from locations other than primary location. Bundled licensing will reduce the overall cost of phone service.
 - \$1,700,000
- *Replacement of 3,500+ desktop machines with laptops*
 - This allowed for a mobile workforce and provided audio and video capabilities.
 - \$5,400,000
- *Agency conference room upgrades*
 - Upgraded the capabilities of agency conference rooms allowing for video calls and meetings
 - \$750,000 for Legislative Council
 - \$425,000 for Supreme Court
 - \$1,400,000 for agencies that requested the upgrade
- *Enterprise Service Management*
 - Expedite the roll out of Asset & Configuration Management and Service Catalog. Allows for standardization, documentation, and monitoring of equipment configurations.
 - \$1,400,000

CARES ACT FUNDING – TELEWORKING

- *Toolsets to enable teleworking*
 - Virtual desktop integration (VDI), Klaxoon whiteboarding, Adobe Sign, PowerBI expansion, Remote Support tools, Dynamics licenses, Redsky (911 software)
 - \$2,500,000
- Continuity of Government
 - Professional services for assessments to support working differently, post-COVID. Explore options and capabilities to lower costs across government. Lockbox Service, Digitized Mailroom, Facility Utilization, Citizen Engagement
 - \$4,500,000
- *Business Support Professional Services*
 - Training and assistance with deploying numerous new tools. Utilized best practices for implementation and optimized the time to value during deployment.
 - \$1,600,000

CARES ACT FUNDING – DIGITAL GOVERNMENT

- *Call Center Solution*
 - Implement a call center that is highly scalable and flexible. Resources to establish an enterprise call center, replacing individualized, agency specific ones.
 - \$2,100,000
- *Robotic Process Automation Projects*
 - Professional Services to implement small projects in Human Services, NDIT, JSND Chatbots, Insurance Chatbots, Center for Distance Education
 - \$750,000
- *Dynamics Projects*
 - Professional Services to implement Microsoft Dynamics applications for Human Services, Commerce, Dept of Ag
 - \$500,000
- *Unified Data Platform*
 - COVID-19 centered data lake, professional services to establish best practices around developing, implementing and managing an enterprise data environment
 - \$3,500,000
- *Returned Unspent Funding to OMB*
 - \$5,000,000

CARES ACT FUNDING – CYBERSECURITY

- *Tools and Resources*
 - XDR endpoint monitoring, detection, alerting and response. XSOAR Data Lake for aggregation, correlation and storage of firewall and endpoint logs. PA resources to establish best practices around developing, implementing and managing new toolsets. Toolsets and resources under contract until Spring 2023.
 - \$12,000,000
 - Expected cost in Spring 2023 of \$5,600,000
- *Tenable Scanning and Analysis*
 - Works in conjunction with Palo Alto endpoint tools for the monitoring, detection and alerting of cyber threats on the network.
 - \$500,000
- *Albert Sensors*
 - Endpoint tools for the monitoring, detection and alerting of cyber threats on the network.
 - \$750,000
- *Staff Augmentation*
 - Contractor support for responding to the spike in incidents as a result of COVID-19 and the increase in tools used to detect threats.
 - \$11,000,000
- *Education and Outreach*
 - Training for staff as well as education for anyone on the network about cyber awareness, phishing, and identity protection. KnowBe4, Maltigo, DarkOwl, HackNotice, PagerDuty, SANS Institute, VirusTotal
 - \$1,300,000

CARES ACT FUNDING – CYBERSECURITY

- *ID.me Fraud Detection*
 - Identity verification solution deployed at Job Service with capabilities to expand across state government
 - \$1,500,000
- *Governance, Risk, & Compliance program*
 - Professional services to establish best practices around developing, implementing and managing a GRC program for state government.
 - \$1,250,000
- Predictive Analytics (JSND)
 - Professional Services to respond to the fraudulent unemployment claims
 - \$250,000

Overview of potential ARPA funded initiatives

Each item included has substantial impacts to the state of North Dakota and/or its citizens – prioritized by return for the state

1. Transformation acceleration of NDIT services that are supplied to 252,000 StageNet users across the state
2. Comprehensive Broadband coverage for every serviceable address in the state – including tribes
3. Cleanup of discovered Cyber Security issues across the state
4. Two programs to transform the experience of the citizen and lower costs of Government operations
 - North Dakota “App” - Business Gateway
 - Enterprise Content Management – paper to digital strategy
5. Expansion of 5G internet services to core areas in the state