ND State Broadband Program Broadband Update

BAND Summer Conference

July 9th – 10th, 2024

1. Program Updates
2. BEAD Challenge Process
3. What's Next

NORTH Dakota | Information Technology
Be Legendary.™

Through our continued collaboration, North Dakota is poised to allocate $172M+ over the next five years to support "BroadbaND for All"

FOCUS FOR TODAY

$37M

Capital Projects Fund

Funds critical capital projects, including broadband infrastructure

Funding Priorities:

- Broadband infrastructure projects
- Digital connectivity technology projects
- Multi-purpose community facility projects

$130M

Broadband Equity, Access, & Deployment

Funds deployment of broadband service to unserved and underserved areas

Funding Priorities:

- Broadband planning and data collection
- Deploying broadband infrastructure
- Advancing digital adoption

$4.5M+

Digital Equity Act

Establishes three capacity grant programs that promote digital equity and inclusion; fourth, competitive grant details forthcoming

Funding Priorities:

- Promoting digital inclusion
- Enhancing digital literacy and skills
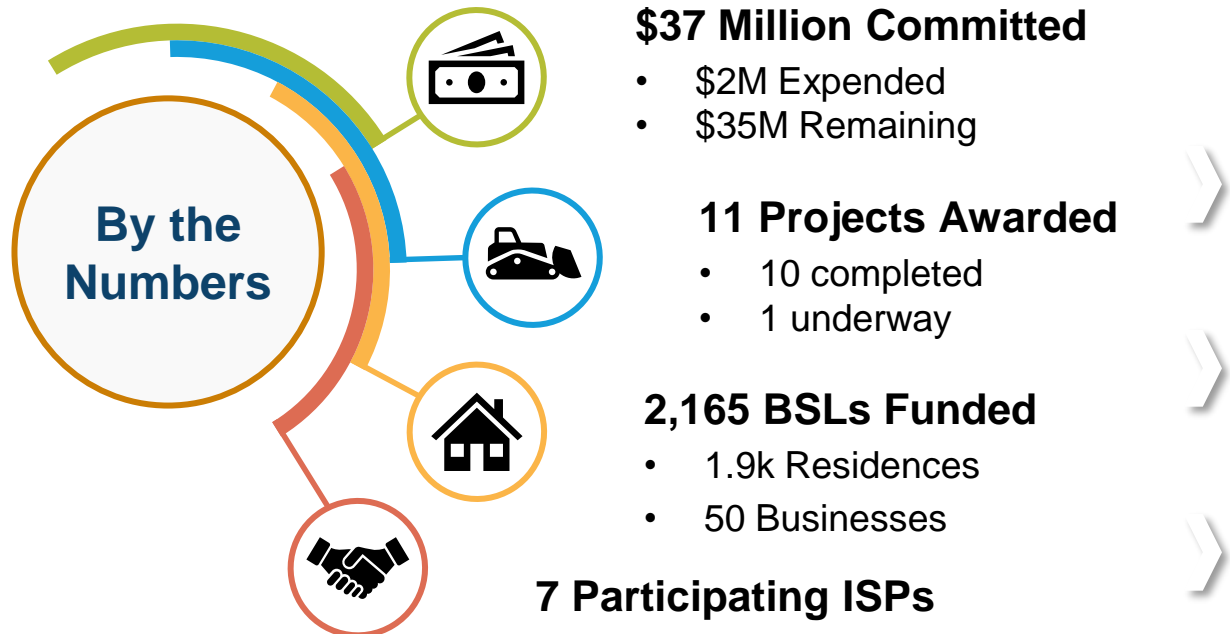- Facilitating affordable and equitable access

"Thanks to the dedicated long-term commitment of North Dakota's ISPs, North Dakota is leading the nation in broadband deployment"

- **NTIA, 2023 Connectivity and Growth Annual Report**

Recap | *The Capital Projects Fund (CPF) is a Federal program established under the American Rescue Plan Act (ARPA) to fund critical capital projects, including broadband infrastructure, that enable work, education, and health monitoring in response to the COVID-19 pandemic.*
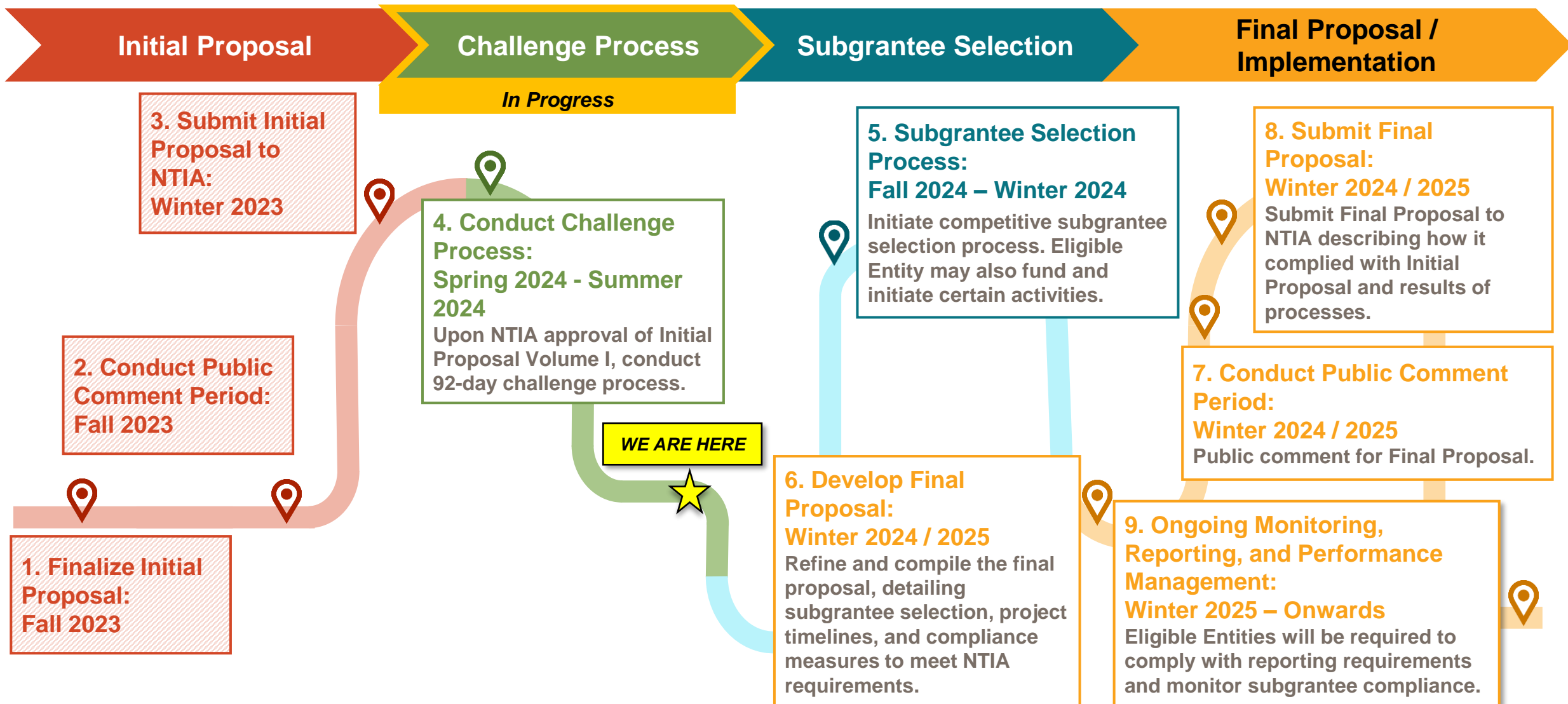
By the Numbers

$37 Million Committed
- $2M Expended
- $35M Remaining

11 Projects Awarded
- 10 completed
- 1 underway

2,165 BSLs Funded
- 1.9k Residences
- 50 Businesses

7 Participating ISPs

Red River COMMUNICATIONS

Nemont

nCC TELECOM

MLGC INTERNET • TV • PHONE *Moving you @ the speed of light*

HTC HALSTAD TELEPHONE COMPANY *Since 1904*

WRT

polar

Findings and Implications for Other Programs

Fabric Corrections | CPF subrecipients are identifying and reporting false, misclassified, and / or missing BSLs to the FCC, improving the Federal data

BEAD Deduplications | CPF subrecipients' participation in the State BEAD Challenge Process reduces remaining locations to be served and helps mitigate redundant awards through BEAD

Looking Ahead | Knowledge gained from CPF projects will help to streamline future BEAD deployments by identifying known hurdles / solutions

North Dakota is progressing along the NTIA's outlined stages for the BEAD program, with the Challenge Process currently underway

Initial Proposal → **Challenge Process** *In Progress* → **Subgrantee Selection** → **Final Proposal / Implementation**

3. Submit Initial Proposal to NTIA:
Winter 2023

2. Conduct Public Comment Period:
Fall 2023

1. Finalize Initial Proposal:
Fall 2023

4. Conduct Challenge Process:
Spring 2024 - Summer 2024
Upon NTIA approval of Initial Proposal Volume I, conduct 92-day challenge process.

WE ARE HERE

5. Subgrantee Selection Process:
Fall 2024 – Winter 2024
Initiate competitive subgrantee selection process. Eligible Entity may also fund and initiate certain activities.

6. Develop Final Proposal:
Winter 2024 / 2025
Refine and compile the final proposal, detailing subgrantee selection, project timelines, and compliance measures to meet NTIA requirements.

8. Submit Final Proposal:
Winter 2024 / 2025
Submit Final Proposal to NTIA describing how it complied with Initial Proposal and results of processes.

7. Conduct Public Comment Period:
Winter 2024 / 2025
Public comment for Final Proposal.

9. Ongoing Monitoring, Reporting, and Performance Management:
Winter 2025 – Onwards
Eligible Entities will be required to comply with reporting requirements and monitor subgrantee compliance.

North Dakota is progressing along the NTIA's outlined stages for the BEAD program, with the Challenge Process currently underway

Status

✓ **Initial Proposal** ❯ ◼ **Challenge Process** ❯ ⋯ **Subgrantee Selection** ❯ ⋯ **Final Proposal**

Initial Proposal | 2023

Draft proposal for BEAD funds demonstrating how ND will connect all remaining locations
- Finalize Initial Proposal
- Conduct Public Comment
- Submit to NTIA

Challenge Process | 2024

Process to determine which BSLs within ND are eligible for BEAD funding.
- Challenge Phase
- Rebuttal Phase
- Final Review **CURRENT STAGE**

WE ARE HERE

Subgrantee Selection Process | 2024

Competitive subgrantee selection process to fund and initiate BEAD activities
- Application Submissions
- Subgrantee Selection
- Award Announcement

Final Proposal | 2024 Onwards

Detailed proposal describing subgrantee selection, timelines, and compliance measures
- Develop Final Proposal
- Public Comment Period
- Submit Final Proposal
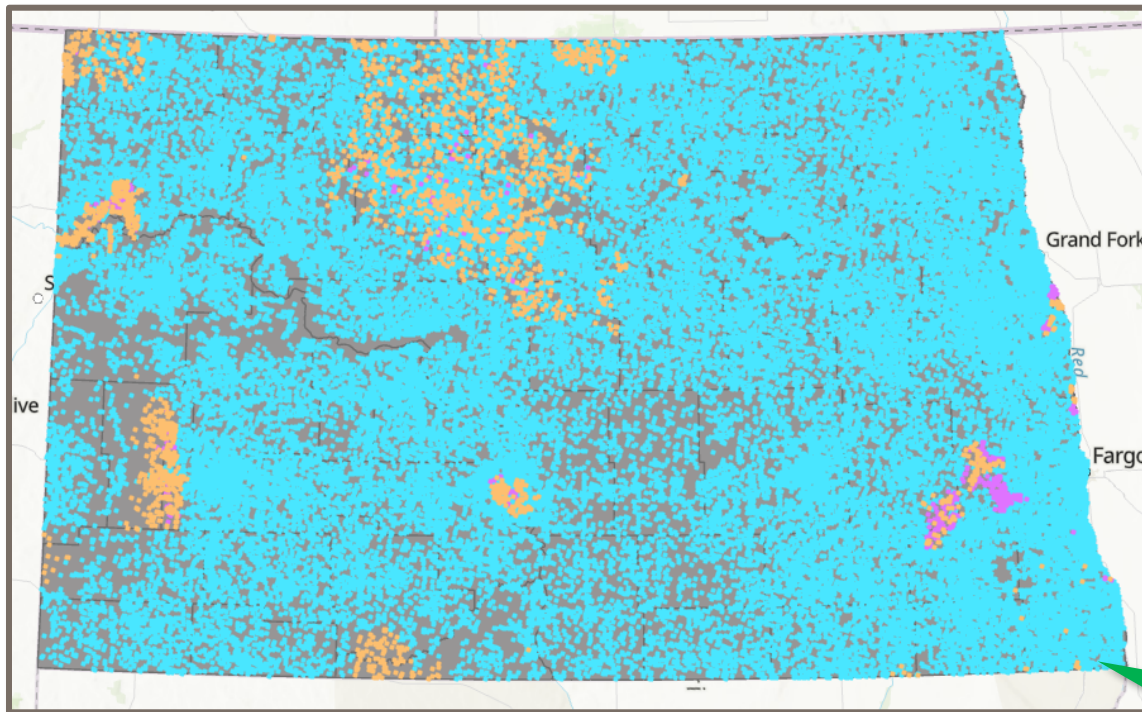- Ongoing Monitoring & Reporting

NDIT is steadfast in its goal to provide service to all unserved and underserved locations as quickly as possible...

BEAD

Top 10 States / Districts by Percent of Locations Served

Rank	State / District	Total Locations	% Served (≥ 100/20 Mbps)	% Unserved + Underserved	Unserved % Change (since last release)
1	DC	122,883	>99%	0.1%	-40%
2	CT	1,091,459	99%	0.7%	-8%
3	RI	339,313	99%	0.7%	-3%
4	NJ	2,588,614	99%	0.7%	-4%
5	MA	1,960,600	99%	0.7%	-1%
6	ND	339,068	99%	1.2%	-40%
7	DE	402,483	98%	2.3%	22%
8	NY	4,706,782	97%	2.5%	-1%
9	MD	1,848,205	97%	2.7%	-14%
10	NV	994,958	97%	2.9%	-47%

When we began the Challenge Process, thanks to you, North Dakota was already a national leader in bringing fast, reliable internet to all

Note | *Whereas ~7% of Americans lack access to 100 / 20 Mbps service, pre-challenge figures indicated that only ~5% of North Dakotans lack access. According to a recent US News and World Report analysis, North Dakota ranks #4 for internet access – **and #1 in gigabit connectivity***

Pre-Challenge Map, Service Speeds by BSL

|	
~348K	Broadband Serviceable Locations (BSLs)
50+	Internet Service Providers (ISPs)
~342K	BSLs with 100 / 20 Mbps (98% of all BSLs)
~6.4K	BSLs lacking broadband service pre-challenge

North Dakota has identified a goal of 100% broadband connectivity; the BEAD program will help connect remaining locations.

Key
- ≥ 100/20 Mbps
- < 25/3 Mbps
- Populated with no plans
- ≥ 25/3 and < 100/20 Mbps
- Unpopulated with no plans

8

Your participation in the BEAD Challenge Process has been essential to refine the accuracy of the state's connectivity needs

Recap | *The BEAD Challenge Process was established by the NTIA as a method to improve data accuracy on broadband service across the nation; the outcome of this effort will allow BEAD Funds to be directed to ISPs to improve and expand their 100/20 Mbps+ networks.*

North Dakota BEAD Initial Challenges
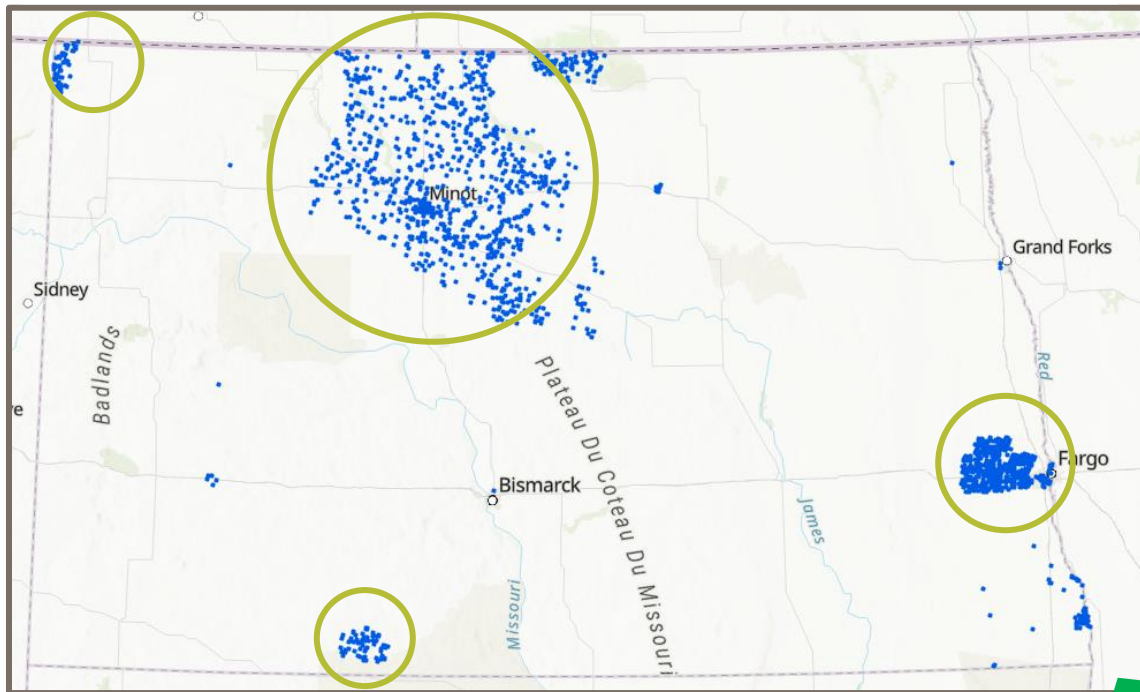
~2,000 challenges to locations were received; most were from ISPs identifying existing **planned service or enforceable commitments** to unserved BSLs

North Dakota will conduct a True-Up process using V4 of the Federal availability and fabric data, which will **further improve the accuracy** of NDIT's final challenge map

Throughout the process, unique circumstances the NTIA had not accounted for indicated **a need for supplemental data collection** from ISPs (e.g., locations incorrectly classified as BSLs)

Challenge submissions were largely concentrated in areas with BSLs marked as unserved (i.e., service speeds < 25/3Mbps) in Version 3 of the Federal fabric

Key
● BEAD Challenge Location (Pre-Rebuttal)

Of the initial ~6,400 BSLs marked as unserved or underserved, ~25% may be covered under enforceable commitments or planned service

Note | *The challenge process can refine the state's understanding of which BSLs are currently served or – in the case of Enforceable Commitments / Planned Service – will be, thereby freeing up BEAD dollars for those that lack service.*
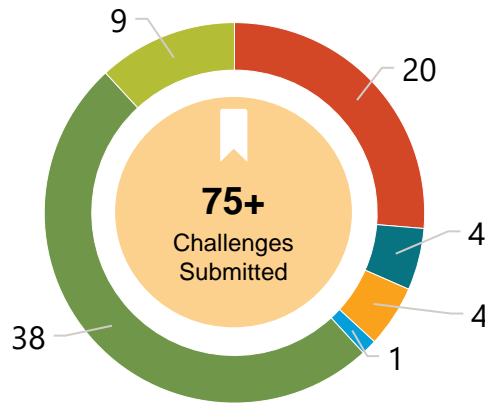
30
Entities Enrolled

75
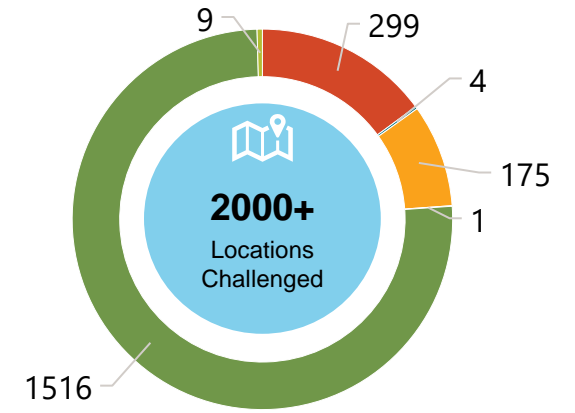Challenges Accepted

21
Rebuttals Received

>50%
All Challenges Were EC / PS

Challenges by Type

75+
Challenges Submitted

20
4
4
1
38
9

- ■ Availability
- ■ Location is a CAI
- ■ Enforceable Commitment
- ■ Latency
- ■ Planned / Existing Service
- ■ Speed

Challenges by Location

2000+
Locations Challenged

9
299
4
175
1
1516

- ■ Availability
- ■ Location is a CAI
- ■ Enforceable Commitment
- ■ Latency
- ■ Planned / Existing Service
- ■ Speed

Looking Ahead | *While the final number of BSLs that are served, underserved, or unserved is still being calculated, North Dakota's deployment needs may be more targeted than initially indicated – if so, this creates an opportunity for funds to be directed toward non-deployment initiatives.*

This quarter, the State will prepare CPF performance reports, host a broadband summit, and begin BEAD subgrantee selection

July 2024

CPF | Prepare and submit CPF Annual Performance Report

BEAD | Complete Challenge Process and begin Subgrantee Selection

Aug 2024

Summit | Host *BroadbaND 2024!* Summit in Bismarck, ND

Feb 2025

DE | Develop prioritized list of digital opportunity programs
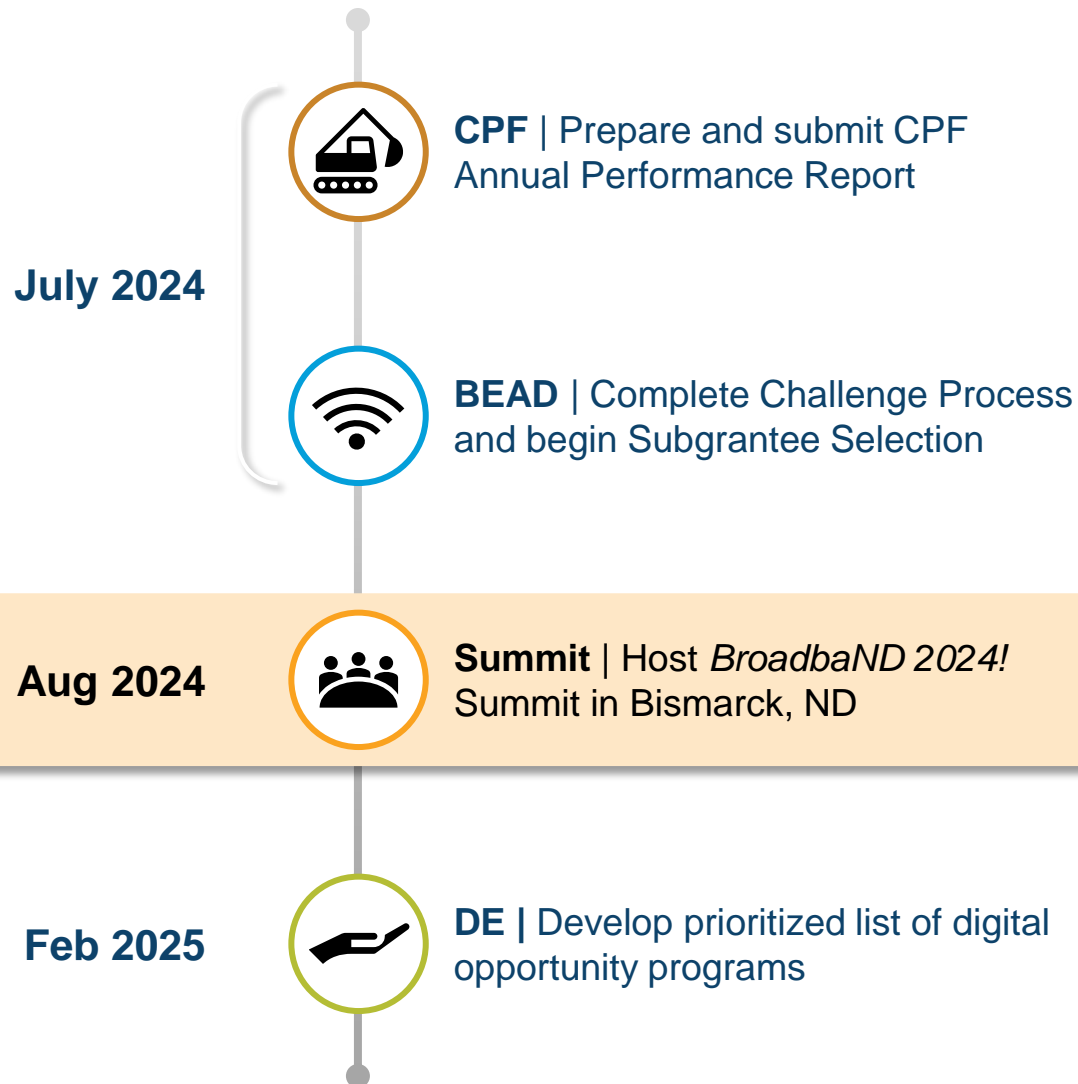
Summit Details

What | Convene stakeholders across the broadband ecosystem

When | August 29th, 2024

Where | Bismarck State College, National Energy Center of Excellence (BSC NECE)

Objectives

- Connect local broadband stakeholders to the Broadband Office and facilitate partnerships for successful deployment
- Inform local stakeholders of statewide broadband activities
- Create forum to discuss other key broadband topics

As we prepare for award selections, your input today will shape efforts to build the nation's best broadband network

Background | The <u>BEAD NOFO</u> provides numerous examples of allowable uses of BEAD funds; these existing examples can be broadly grouped into two categories:

Deployment	Non-Deployment

Deployment

- Deploying and/or upgrading broadband network facilities in connection with an **Unserved Service Project or an Underserved Service Project**
- Deploying and/or upgrading broadband network facilities to provide or improve service to an eligible **community anchor institution**
- Installing internet and Wi-Fi infrastructure or providing reduced-cost broadband within a **multi-family residential building**, with priority given to unserved and low-income locations

Non-Deployment

- **Data collection, broadband mapping, and planning** to the extent necessary beyond the planning fund allocation to facilitate the goals and deliverables of the BEAD Program
- **Broadband adoption**, including programs to provide affordable internet-capable devices
- **Training and workforce development**
- Other uses, including other Digital Equity programs not listed that support the goals of the Program

Discussion

Once the State's required BEAD deployment needs have been met, **what projects might fit here, offering the potential greatest impact** for North Dakotans?

BroadbaND 2024!

Broadband 2024! Agenda (Draft)

Start	End	Run Time	Agenda Item	Description	Speakers
9:00 AM	9:15 AM	15 min	**Welcome**	*An introduction and welcome by Brian Newby and Brian Nybakken to North Dakota's first annual Broadband Summit.*	**Brian Newby,** *Broadband Program Director,* NDIT **Brian Nybakken,** *Broadband Program Manager,* NDIT
9:15 AM	10:15 AM	60 min	**Keynote Address**	*Michael Romano, Executive Vice President of NTCA – The Rural Broadband Association, shares challenges that rural providers have faced and the challenges that remain.*	**Michael Romano,** *Executive Vice President,* NTCA – The Rural Broadband Association
			15 Minute Break		
10:30 AM	11:00 AM	30 min	**From the Biggest Picture to the Big Picture**	*The BEAD program presents a once-in-a-generation opportunity to increase connectivity and spur economic activity. Guidehouse will discuss the big picture of broadband programs across the nation.*	**Harrison Phelan,** *Director,* Guidehouse
11:00 AM	12:00 PM	60 min	**Legislation and Policy Panel**	*Legislators and subject matter experts will present on the current policy landscape in North Dakota and answer questions.*	**Hon. Glenn Bosch**, *State Representative*, North Dakota Legislature **Hon. Kyle Davison,** *State Senator*, North Dakota Legislature **Carissa Swenson,** *Executive Director*, Broadband Associate of North Dakota (BAND) **Mason Sisk**, *Senior Policy Advisory to Governor Doug Burgum*, State of North Dakota **Robyn Madison,** *Regional Director*, NTIA
			1 Hour Lunch Break		
1:00 PM	1:30 PM	30 min	**North Dakota Broadband Deep Dive**	*Guidehouse will present on North Dakota's accomplishments, progress, and outcomes thus far, and what to expect from the North Dakota Broadband program in the coming year.*	**Mary Najarian,** *Managing Consultant,* Guidehouse
1:30 PM	2:30 PM	60 min	**Technology and Strategy Panel**	*Representatives from tech companies will provide an overview of the technology landscape in North Dakota and how it relates to the State's broadband goals.*	**Andrew Curley,** *Senior Director of Government Relations*, Midco **Seth Arndorfer**, *CEO*, DCN **Carl Guardino,** *Vice President of Government Affairs and Policy*, Tarana Wireless **TBD**, Red River Communications
			15 Minute Break		
2:45 PM	3:45 PM	60 min	**Digital Opportunity Community of Practice Panel**	*Local representatives facilitate a dialogue on serving covered populations, the role of local communities in advancing digital equity, and coordination between State and Tribal Governments.*	**Tabitha Teel,** *Program Director,* NDIT-EduTech **Fred McLaughlin,** *General Manager*, Standing Rock Telecommunications
			15 Minute Break		
4:00 PM	4:30 PM	30 min	**Wrap Up/Close**	*Wrap up, closing address, and thank you*	**Brian Newby,** *Broadband Program Director*, NDIT

With our remaining time, we want to hear more from the audience as we prepare for what is around the corner

Broadband Equity Access and Deployment Program (BEAD)

Shifting federal requirements (e.g., Low-Cost Plan Option cost ceilings) may impact ISPs' ability to participate in BEAD; <u>how can NDIT best partner with industry</u> to help you serve North Dakotans in need? How to we capture and chase potential bold moves?

Capital Projects Fund (CPF)

In many ways, CPF-backed deployments have provided a window into the success and challenges that shall face BEAD-funded initiatives; <u>what have been your biggest lessons learned</u> from your CPF initiatives thus far?

Digital Equity (DE)

Closing the digital divide is the driving force behind the federal Digital Equity Act; <u>what does advancing digital opportunity for North Dakotans mean to you</u> as the State weighs plans for DE funding

Summit Preparation

We are excited to host the State's first annual BroadbaND Summit on August 29.

NDIT State Broadband Program Office broadband@nd.gov
Brian D. Newby, Broadband Program Director, bdnewby@nd.gov, 701-328-9009
Brian Nybakken, Broadband Program Manager, Nybakkenbrian@nd.gov, 701-328-1565

North Dakota is determined to be number one, but the definition of "number one" is yet to be determined
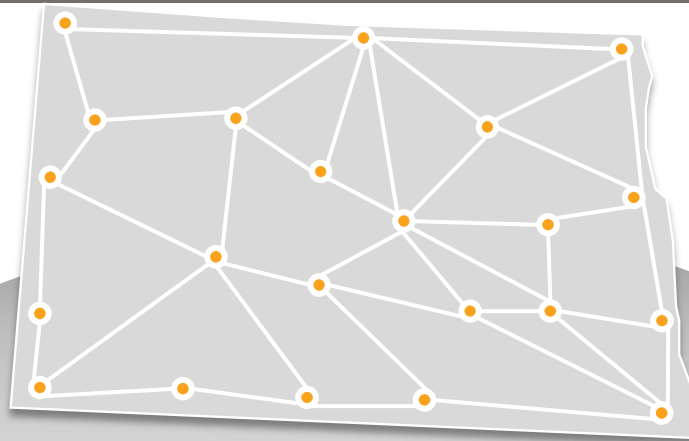
How can North Dakota connect the remaining BSLs and be the first to reach 100%?

1. Completion of Subgrantee Selection	2. Submission of Final Proposal	3. Completion of Deployment	4. 100% Availability based on ND Maps	5. 100% Availability based on FCC Maps
The subgrantee selection process is complete and all deployment project decisions have been made	The final proposal is submitted to the NTIA	Planned and funded deployment activities are fully complete	All locations in North Dakota-defined maps are served	All locations in updated FCC maps are served
1 Year	*1-1.5 Years*	*5 Years*	*5-6 Years*	*6+ Years*

With the latest BDC update, North Dakota saw a net decrease of ~9.6k Broadband Serviceable Locations

	Total BSLs Added	BSLs Added by Challenge	Total BSLs Removed	Net Change in BSLs
V3 → V4	▲ ~14,500	▲ ~330	▼ ~24,040	▼ ~9,600

FCC-Identified Reasons for Changes between Versions	
Data Updates: New or updated data sources used by CostQuest can indicate new BSLs, removal of old BSLs, or changes to addresses or unit counts.	*Example:* New imagery or building-footprint data reveals a former BSL has been demolished.
Model Changes: CostQuest updates its models with each release, incorporating new feedback and updating its logic, leading to more accurate BSL identification.	*Example:* Improved logic identifies the correct structure on a parcel as the BSL.
Manual Review: Low-confidence locations undergo manual visual reviews, potentially altering or removing BSLs.	*Example:* A visual review confirms a previously uncertain BSL is invalid and removes it.
Challenges: External challenges can add or remove locations, change BSL identifications, or adjust unit counts and other data.	*Example:* A submitted challenge corrects the unit count for a BSL.

NDIT is steadfast in its goal to provide service to all unserved and underserved locations as quickly as possible...

ND

state	v4 National Broadband Map							Difference from previous release					
	Total Locations	Served	Underserved	Unserved	Served	Unserved+Underserved Percent		Total Locations	Served	Underserved	Unserved	Unserved percent change	Locations percent change
AK	281,358	180,556	27,686	73,116	64%	35.83%		740	8,191	4,842	-12,293	-14%	0%
AL	2,172,222	1,847,220	79,084	245,918	85%	14.96%		-54,407	-17,092	2,354	-39,669	-14%	-2%
AR	1,350,501	1,163,803	52,808	133,890	86%	13.82%		-8,810	49,571	-16,509	-41,872	-24%	-1%
AZ	2,700,753	2,443,949	105,568	151,236	90%	9.51%		4,113	-948	-3,864	8,925	6%	0%
CA	10,242,318	9,842,456	162,226	237,636	96%	3.90%		18,018	63,000	13,975	-58,957	-20%	0%
CO	1,978,234	1,802,995	76,250	98,989	91%	8.86%		9,348	57,978	-12,390	-36,240	-27%	0%
CT	1,091,459	1,084,230	1,122	6,107	99%	0.66%		264	993	-167	-562	-8%	0%
DC	122,883	122,790	5	88	100%	0.08%		-325	-267	0	-58	-40%	0%
DE	402,483	393,298	7,306	1,879	98%	2.28%		960	2,521	-1,901	340	22%	0%
FL	7,420,412	7,073,603	114,545	232,264	95%	4.67%		-6,443	28,190	-8,369	-26,264	-10%	0%
GA	3,803,290	3,501,361	97,528	204,401	92%	7.94%		6,642	59,781	-204	-52,935	-21%	0%
HI	320,439	308,515	948	10,976	96%	3.72%		11,472	10,116	111	1,245	13%	4%
IA	1,368,376	1,249,720	56,055	62,601	91%	8.67%		-4,443	7,933	-7,775	-4,601	-7%	0%
ID	744,730	622,353	43,726	78,651	84%	16.43%		6,698	40,510	-19,997	-13,815	-15%	1%
IL	4,155,987	3,901,463	89,861	164,663	94%	6.12%		-10,683	12,387	-503	-22,567	-12%	0%
IN	2,725,897	2,551,260	45,503	129,134	94%	6.41%		12,537	62,268	-13,449	-36,282	-22%	0%
KS	1,201,044	1,105,042	40,063	55,939	92%	7.99%		-3,185	16,829	-7,044	-12,970	-19%	0%
KY	1,860,429	1,633,127	62,602	164,700	88%	12.22%		9,424	49,352	-1,418	-38,510	-19%	1%
LA	1,873,678	1,581,142	67,645	224,891	84%	15.61%		-2,192	40,493	-3,750	-38,935	-15%	0%
MA	1,960,600	1,946,472	3,360	10,768	99%	0.72%		5,929	6,780	-780	-71	-1%	0%
MD	1,848,205	1,799,081	17,838	31,286	97%	2.66%		-8,987	-2,169	-1,699	-5,119	-14%	0%
ME	627,751	560,622	32,006	35,123	89%	10.69%		-4,133	3,827	-7,572	-388	-1%	-1%
MI	4,056,449	3,714,280	82,505	259,664	92%	8.44%		-20,184	46,794	-7,594	-59,384	-19%	0%
MN	2,096,415	1,924,609	72,442	99,364	92%	8.20%		88,408	91,322	1,681	-4,595	-4%	4%
MO	2,507,716	2,183,401	106,515	217,800	87%	12.93%		-2,177	61,577	-4,178	-59,576	-21%	0%
MS	1,316,282	1,076,738	45,077	194,467	82%	18.20%		-3,694	18,985	4,472	-27,151	-12%	0%
MT	486,753	362,611	43,423	80,719	74%	25.50%		-1,166	16,740	-3,665	-14,241	-15%	0%
NC	4,329,009	3,945,786	146,760	236,463	91%	8.85%		55,110	94,206	7,857	-46,953	-17%	1%
ND	339,068	335,096	1,030	2,942	99%	1.17%		-9,587	-7,216	-398	-1,973	-40%	-3%
NE	798,448	722,501	31,722	44,225	90%	9.51%		488	4,899	1,766	-6,177	-12%	0%
NH	517,671	486,224	9,649	21,798	94%	6.07%		-719	1,551	-1,254	-1,016	-4%	0%
NJ	2,588,614	2,570,267	3,075	15,272	99%	0.71%		9,681	10,122	247	-688	-4%	0%
NM	860,014	730,585	41,171	88,258	85%	15.05%		-755	30,859	-18,824	-12,790	-13%	0%
NV	994,958	966,116	6,324	22,518	97%	2.90%		11,113	35,779	-4,923	-19,743	-47%	1%
NY	4,706,782	4,588,425	14,909	103,448	97%	2.51%		-8,967	-9,351	1,876	-1,492	-1%	0%
OH	4,512,429	4,285,339	82,353	144,737	95%	5.03%		-3,554	31,700	-4,765	-30,489	-17%	0%
OK	1,699,020	1,509,266	83,006	106,748	89%	11.17%		740	62,395	-22,812	-38,843	-27%	0%
OR	1,519,674	1,355,506	52,347	111,821	89%	10.80%		15,178	24,361	193	-9,376	0%	1%
PA	4,899,710	4,612,015	62,679	225,016	94%	5.87%		51,495	51,427	10,906	-10,838	-5%	1%
RI	339,313	336,931	338	2,044	99%	0.70%		283	401	-44	-74	-3%	0%
SC	2,159,224	2,042,928	51,983	64,313	95%	5.39%		6,008	31,625	-3,837	-21,780	-25%	0%
SD	398,185	370,029	9,648	18,508	93%	7.07%		-986	5,608	-2,356	-4,238	-19%	0%
TN	2,737,790	2,563,674	44,786	129,330	94%	6.36%		6,809	29,081	259	-22,531	-15%	0%
TX	10,065,870	9,375,662	205,249	484,959	93%	6.86%		221,079	392,053	-27,305	-143,669	-23%	2%
UT	1,022,072	961,912	19,805	40,355	94%	5.89%		3,320	6,833	-633	-2,880	-7%	0%
VA	2,907,830	2,552,392	75,248	280,190	88%	12.22%		-12,367	30,592	7,993	-50,952	-15%	0%
VT	278,518	229,484	24,629	24,405	82%	17.61%		-6,815	5,443	-5,869	-6,389	-21%	-2%
WA	2,552,283	2,265,658	85,436	201,189	89%	11.23%		11,330	17,783	10,280	-16,733	-8%	0%
WI	2,312,848	1,936,863	195,448	180,537	84%	16.26%		-575	45,196	-2,653	-43,118	-19%	0%
WV	901,354	676,099	31,048	194,207	75%	24.99%		-5,518	8,463	2,245	-16,226	-8%	-1%
WY	264,705	207,590	20,821	36,294	78%	21.58%		1,707	5,284	-119	-3,458	-9%	1%
TOTAL (states only)	**114,422,053**	**105,603,045**	**2,833,161**	**5,985,847**	**92.29%**	**7.71%**		**388,222**	**1,644,756**	**-157,132**	**-1,099,402**	**-16%**	

Source: BDC Update May 2024, data as of Nov 2023, Mike Conlow