Meeting the Needs of the Navajo Nation



NTUA Defunded Projects Update #19 – Status of Utility Projects as of February 1, 2024 Navajo Nation Legislation CJY-41-21

This document reports on the progress of the refunded Defunded Navajo Nation CARES Act Projects which was approved through CJY-41-21. These utility projects were initially funded under the Navajo Nation CARES Act Fund but were later defunded as the Navajo Nation's deadline for the completion of these projects neared, prompting the Navajo Nation to recall the funds and reallocate the unspent funds to the Navajo Nation Hardship Assistance Expenditure Plan.

NTUA NNFRF Defunded Projects Utility Construction Update #19 Data as of February 1, 2024

2.18 – HOUSING SUPPORT: OTHER HOUSING ASSISTANCE

The Navajo Nation approved NNFRF funding for projects that will provide a source of power and when necessary to provide funds to have the house wired for Navajo family homes which reside on the Navajo Nation. There are two sections: NTUA electric connections and off-grid residential solar units.

NTUA Electric Connections:

With the funds designated for NTUA electric connections, NTUA estimates it can fund the extension of NTUA's existing electric distribution lines to 404 Navajo family homes. This plan includes funds, as needed, to complete interior house wiring, pole mounted meter loops, certification and recertification of house wiring, and inspections. As of this Update, 351 Navajo families have been connected to the grid under the Defunded CARES Act (DCA)

*** Please note previous updates included projects under the Defunded CARES Act projects and projects listed in CJN-29-22. A separate report labeled ARPA II Report – highlights those specific projects. In this Update, only projects under the Defunded CARES Act project listing will be reflected in the reporting table below.

Table 1: NTUA Electric Connections: Staging of 404 Homes

	DCA Community Powerline Projects	DCA Short Line Extensions	DCA Total
1. Preliminary	1	0	1
2. Engineering	0	0	0
3. In ROW	0	7	7
4. Rights of Way Approved	2	20	22
5. Release for Construction	0	0	0
6. Construction Complete & In Service	48	303	351
Total	51	330	381

Table 1 above shows the various stages of completed electric service applications. Stages 1 through 4 are completedapplications that are under review, but some may never be constructed for a variety of reasons.

Delegate		Chapter	Count of No. of Families
Honorable Delegate Amber Kanazbah Crotty		Cove	2
Kallazball Clotty		Cudeii (Gadiiahi/To' Koi)	3
		Red Valley	1 3
		Sanostee (Tse Alnaozt'ii)	3
		Two Grey Hills/Toadlena	1
Delegate Crotty	Total		
Honorable Delegate Dr. And	ly Nez		
		Crystal	1
		Fort Defiance	7
		Sawmill	7
Delegate Dr. Nez	Total		15
Honorable Chairperson			
Honorable Chairperson Brenda Jesus		St. Michaels	14
Chairperson Jesus	Total		14
Honorable Vice-Chairman			
Carl R. Slater		Lukachukai	11
		Rock Point	4
		Rough Rock (Tse Ch' Izhi)	4
		Round Rock	6
		Tsaile-Wheatfields	14
Vice-Chair Slater Total			39
Honorable Vice-Chairperson	1	Birdsprings (Tsidii To'ii)	1
Casey Allen Johnson		Coalmine Canyon	1
		Leupp	2
		Tolani Lake	1
Vice-Chairperson Johnson	Total		5
Honorable Delegate			
Cherilyn Yazzie		Dilkon	5
		Greasewood Springs	1
		Indian Wells	2
		Teesto	3
Delegate Vazzie	Total	Whitecone	<u> </u>
Delegate Yazzie	IULdi		12
Honorable Madam Speaker			
Crystalyne Curley		Blue Gap-Tachee	8
		Low Mountain	2
		Many Farms	10
		Nazlini	6
		Tselani-Cottonwood	13
Speaker Curley	Total		39

Honorable Delegate			
Curtis Yanito		Aneth	
			9
		Mexican Water	5
		Red Mesa	12
		Teecnospos	8
		To'likan (Sweetwater)	1
Delegate Yanito	Total		35
	Total		
Honorable Delegate Danny			_
Simpson		Nahodishgish	2
		Standing Rock (Tse'li'Ahi')	1
Delegate Simpson	Total		3
Honorable Chairperson			
Eugenia Charles-Newton		Shiprock	15
Chaimanan Charles Neuton	Tatal		45
Chairperson Charles-Newton	IOTAI		15
Honorable Vice Chairperson			
Germaine Simonson		Hardrock	1
		Pinon	7
		Whippoorwill	3
Vice-Chairperson Simonson	Total		
vice-chanperson sintenson	Total		
Honorable Delegate			
Helena Nez Begay		Bodaway-Gap	1
		Coppermine	4
		Kaibeto (Kai' Bii To)	2
		LeeChee	1
		Tonalea/Red Lake	12
Delegate Nez Begay	Total		20
Honorable Delegate		Inscription Hse (Ts'ah	
Herman Daniels Jr.		BiiKin)	3
		Navajo Mountain	4
		Oljato	6
		Shonto	23
Delegate Daniels Jr.	Total		36
Honorable Delegate Lomardo Aseret		Houck	2
Lomardo Aseret		Houck	2
		Klagetoh	1
		Lupton (Tse Si Ani)	2
		Nahata Dziil	3
		Wide Ruins	5
Delegate Aseret	Total		13
Honorable Delegate			
Nathan Notah		Coyote Canyon	4
		Mexican Springs	1
		Naschitti	5
		Tohatchi	2
		Twin Lakes (Bahastl' ah')	10
		Twin Lakes (Bahastl' ah')	10

Llonovable Delegate Ot	+ a T a a	Tube City (Tel Nepees'		
Honorable Delegate Ot		Tuba City (To' Nanees'	_	
		Dizi')	5	
Delegate Tso	Total		5	
Honorable Delegate				
Rickie Nez		Burnham (T'iis Toh Sikaad)	1	
		Hogback (Tse'Daa Kaan)	2	
		Upper Fruitland	4	
Delegate Nez	Total		7	
Honorable Chairperson	1			
Shaandiin Parrish		Dennehotso	5	
		Kayenta	8	
Chairperson Parrish	Total		13	
Honorable Delegate				
Shawna Ann Claw		Chinle	21	
Delegate Claw	Total		21	
Honorable Chairperson	1			
Vince R.James		Cornfields	3	
		Ganado	2	
		Jeddito	3	
		Kinlichee (Kin Dah Lichii)	4	
		Steamboat	3	
Chairperson James	Total		15	
Grand Total			351	

The table above shows completed projects only.

Off-Grid Residential Solar Units:

With the funds designated for the off-grid residential solar projects, NTUA estimates it can fund the installation of 150 off-grid solar systems and 425 electric grid connections to Navajo homes. The 150 off-grid residential solar systems comprise of a skid mounted solar unit, battery system, and an energy efficient refrigerator.

This funding also covers, as needed, basic interior house wiring, certification and re-certification of house wiring, inspection, and a generator with an automatic transfer switch (if medically necessary). NTUA has selected Industrial Solar Consulting, out of Gilbert, AZ to manufacture and install these solar units. NTUA has completed the installation of 150 solar units. See table at the end of the document for a Chapter specific table.

Off-	Grid Residential Solar Project Stage	Status
1	Completed Applications	0
2	Projects that are in the Engineering Stage	0
3	Projects that are Found to be Feasible	0
4	Projects that are in Construction	0
5	Projects that are Constructed and In Service	150
	Total	150

Table 2:

Council Delegate		Chapter	Count of Solar Site Commissioned
Hon. Amber K. Crotty		Red Valley	1
		Sanostee	1
		Sheep Springs	1
Hon. Delegate Crotty	Total		3
Hon. Dr. Andy Nez		Sawmill	3
Hon. Delegate Dr. Nez	Total		3
Hon. Chairperson Brenda Jesus		Oak Springs	1
		St. Michaels	4
Hon. Chairperson Jesus	Total		5
Hon. Vice-Chaiperson Carl Slater		Round Rock	1
·····		Tsaile	2
Hon. Chairperson Carl Slater	Total		3
Hon. Vice-Chairperson	Total		
Casey Allen Johnson		Cameron	13
,		Leupp	3
Hon. Vice-Chairperson Johnson	Total		16
Hon. Madam Speaker		Blue Gap	1
Crystalyne Curley		Cottonwood	8
		Low Mountain	5
		Many Farms	1
		Nazlini	2
		Pinon	1
Hon. Speaker Curley	Total		18
Hon. Danny Simpson		Crownpoint	1
		Nageezi	2
Hon. Delegate Simpson	Total		3
Hon. George H. Tolth		Васа	2
		Васа	3
		Casamero Lake	1
		Counselor	1
		Ojo Encino	2
		Pueblo Pintado	1
Hon. Delegate Tolth	Total		10
Hon. Vice-Chairperson Germaine Si	monson	Black Mesa	1
Hon. Vice-Chairperson Simonson	Total		1
Hon. Helena Nez Begay		Bodaway Gap	1
-		Tonalea	5
Hon. Delegate Nez Begay	Total		6
Hon. Herman M. Daniels		Inscription House	1
		Oljato	9
		Shonto	9
Hon. Herman M. Daniels	Total		19
	i o cui		

Hon. Nathan Notah		Mexican Springs	2
		Naschitti	2
		Twin Lakes	4
Hon. Delegate Notah	Total		8
Hon. Norman M. Begay		Ramah	1
Hon. Delegate Begay	Total		1
Hon. Otto Tso		Tuba City	4
Hon. Delegate Tso	Total		4
Hon. Seth Damon		Bread Springs	2
		Chilchiltah	2
		Red Rock	3
		Rock Springs	4
		Tseyatoh	1
Hon. Delegate Damon	Total		12
Hon. Chairperson		Chilchinbeto	4
Shaandiin Parrish		Dennehotso	2
		Kayenta	11
Hon. Chairperson Parrish	Total		17
Hon. Shawna Ann Claw		Chinle	6
Hon. Delegate Claw	Total		6
Hon. Steven R. Arviso		Church Rock	1
		Pinedale	4
		Smith Lake	1
		Thoreau	1
Hon. Delegate Arviso	Total		7
Hon. Chairperson		Ganado	1
Vince R. James		Kinlichee	4
		Steamboat	2
Hon. Delegate James	Total		7
Grand Total			150

The table above shows completed projects only.

Off-Grid Residential Solar Units: Staging of 425 Homes Connected to Electric Grid

The off-grid solar plan also includes funding to extend power from the existing distribution system to connect 425 Navajo family homes. This plan also includes funding, as needed, to complete the interior house wiring, pole mounted meter loops, certification and recertification of house wiring, and inspections.

Usually, these costs are the responsibility of the homeowner, but now that these costs are covered the residents no longer worry about this. Depending on the location of the homes to existing power lines, electric grid connections may be provided by NTUA or neighboring non-NTUA electric providers such as: Arizona Public Service (APS), Continental Divide Electric Cooperative (CDEC), the City of Farmington, the City of Gallup, Jemez Mountains Electric Cooperative (JMEC), or Socorro Electric.

Table 3: Off-Grid Residential Solar Units: Staging of 425 Homes Connected to Electric Grid Defunded CARES Act (DCA) – Neighboring Utilities Connection Staging

	Electric Connections Stage (425)	Status
1	Preliminary	4
2	Completed Applications	0
2	Projects that are in the Engineering Stage	4
3	Projects that are at the Right-of-Way Stage	8
4	Projects with Approved Right of Way	2
5	Projects that are in Construction	10
6	Projects that are Constructed and In Service	123
Propos	ed DCA Neighboring Utility Projects Total	151

NTUA is working with APS, CDEC, and JMEC on several projects in each of their service territories to connect customers to the electric grid. See tables below. To date, 117 homes have been connected to the Grid by neighboring utilities.

Arizona Public Service Customers (APS)

	Project Stages	Total No. of Projects
1	Completed Applications	0
2	Projects that are in the Engineering Stage	0
3	Projects that are at the ROW Stage	3
4	Projects with Approved ROW	1
5	Projects that are in Construction	0
6	Projects that are Constructed and In Service	6
Propo	osed DCA Neighboring Utility (APS) Projects Total	10

Continental Divide Electric Cooperative (CDEC) – New Mexico

		Total No. of Projects
1	Preliminary	4
2	Completed Applications	0
2	Projects that are in the Engineering Stage	0
3	Projects that are at the ROW Stage	5
4	Projects with Approved ROW	1
5	Projects that are in Construction	7
6	Projects that are Constructed and In Service	81
Propo	sed DCA Neighboring Utility (CDEC) Projects Total	98

Jemez Mountains Electric Cooperative (JMEC) – New Mexico

		Total No. of Projects
1	Completed Applications	0
2	Projects that are in the Engineering Stage	4
3	Projects that are at the ROW Stage	0
4	Projects with Approved ROW	0
5	Projects that are in Construction	3
6	Projects that are Constructed and In Service	36
Propo	osed DCA Neighboring Utility (JMEC) Projects Total	43

Council Delegate Region	Utility Provider	Chapter	Completed
Hon. Otto Tso	APS	Tuba City	6
Hon. George H. Tolth	CDEC	Baca/Prewitt	4
Hon. Danny Simpson	CDEC	Becenti	1
Hon. Seth Damon	CDEC	Breadsprings	4
Hon. Seth Damon	CDEC	Chichiltah	8
Hon. Steven R. Arviso	CDEC	Churchrock	7
Hon. Danny Simpson	CDEC	Crownpoint	3
Hon. Steven R. Arviso	CDEC	Iyanbito	5
Hon. Seth Damon	CDEC	Manuelito	11
Hon. George Tolth	CDEC	Little Water	1
Hon. Steven R. Arviso	CDEC	Mariano Lake	3
Hon. Steven R. Arviso	CDEC	Pinedale	2
Hon. Norman M. Begay	CDEC	Ramah	5
Hon. Seth Damon	CDEC	Red Rock	4
Hon. Seth Damon	CDEC	Rock Springs	9
Hon. Steven R. Arviso	CDEC	Smith Lake	5
Hon. Steven R. Arviso	CDEC	Thoreau	2
Hon. Seth Damon	CDEC	Tsayatoh	6
Hon. George H. Tolth	CDEC	Whitehorse Lake	1
Hon. George H. Tolth	JEMEZ MTN	Counselor	7
Hon. Danny Simpson	JEMEZ MTN	Huerfano	2
Hon. Danny Simpson	JEMEZ MTN	Lake Valley	2
Hon. Danny Simpson	JEMEZ MTN	Nageezi	9
Hon. George H. Tolth	JEMEZ MTN	Ojo Encino	4
Hon. George H. Tolth	JEMEZ MTN	Pueblo Pintado	4
Hon. George H. Tolth	JEMEZ MTN	Torreon/Star Lake	8
		Total	123

5.2 – CLEAN WATER: CENTRALIZED WASTEWATER COLLECTION & CONVEYANCE

The Navajo Nation authorized NNFRF for NTUA's refunded Defunded Navajo Nation CARES Act Projects related to wastewater collection systems. With this funding NTUA estimates it can complete 9 projects. The projects will include rehabilitation and/or upgrades for lift stations.

A lift station pumps wastewater from a lower elevation to a higher elevation and allows the wastewater to flow into a lagoon or other wastewater treatment plants. NTUA has identified 6 lift stations in Arizona and 3 in New Mexico that may be funded from this expenditure category. The Shonto, AZ Lift Station was completed and is in service as of October 19, 2023.

	ProjectsStage	
1	Design and Engineering	8
2	Right of Way	0
3	In Procurement Process	0
4	Release Construction	0
5	Construction Complete and In Service	1
	Total	9

Table 4: NTUA Centralized W/W Collection and Conveyance System Projects Stage

Table 4 provides a status update of the nine projects. NTUA will move forward with project development in design andengineering. To advance these projects to the construction phase, NTUA will need to receive funds from the NNFRF.

5.2 Clean Water: Centralized Wastewater Collection and Conveyance

Delegate/Region	Chapter	Project Description	Total Projects
Hon. Crystalyne Curley	Many Farms	Many Farms Lift Station Rehab (In Progress)	1
Hon. Helena Nez Begay	Lechee	Lechee Lift Station Rehab (In Progress)	1
Hon. Herman Daniels Jr.	Shonto	Shonto Lift Station Rehab (Completed)	1
Hon. Nathan Notah	Coyote Canyon	Coyote Canyon Lift Station Rehab (In Progress)	1
Hon. Andy Nez	Sawmill	Sawmill Lift Station Rehab (In Progress)	1
Hon. Andy Nez	Navajo	Navajo Lift Station Rehab (In Progress)	1
Hon. Shawna Ann Claw	Chinle	Chinle Lift Station Rehab (In Progress)	1
Hon. Casey Allen Johnson	Coalmine Canyon	Coalmine Canyon Mesa Lift Station Rehab (In Progress)	1
Hon. Steven Arviso	Iyanbito	Iyanbito Lift Station Rehab (In Progress)	1
		Total	9

5.3 CLEAN WATER: DECENTRALIZED WASTEWATER and 5.15–DRINKING WATER: OTHER WATER INFRASTRUCTURE

The Navajo Nation authorized NNFRF for NTUA's Defunded Navajo Nation CARES Act decentralized wastewater projects. With this funding, project projections indicate NTUA can complete (78) septic disposal system projects connected to homes located on the Navajo Nation that are located too far from a centralized wastewater collection system for economical connection. These projects include the cost to construct a fully functioning septic system which includes a septic tank, a drain field, plumbing (if necessary), sink (if necessary), hot water heater system (if necessary), bathroom addition (if necessary), an energy efficient refrigerator,

house wiring (if necessary), all required inspections, and the installation of any other necessary components for a functional system. For each septic system to properly operate, a power source is required. Each project includes funding for either a solar system, connection to the electric grid or a small gas- powered electric generator. It should be noted that each project in this category has a companion project under expenditure category 5.15 whichprovides a water cistern system connection to the home.

NTUA will move forward with project engineering development. To advance these projects to the construction phase, NTUA will need to receive funds from the NNFRF. Once NTUA has exhausted all the funds in expenditure category 5.3, all remaining unfinished projects will be eligible to be moved to a future funding source. This chart shows the projects which have been completed and the Chapter where they were installed.

Delegate	Chapter	Completed
Hon. Brenda Jesus	St. Michaels	1
Hon. Carl R. Slater	Rock Point	1
Hon. Carl R. Slater	Round Rock	2
Hon. Carl R. Slater	Tsaile	1
Hon. Casey Allen Johnson	Bird Springs	5
Hon. Casey Allen Johnson	Leupp	2
Hon. Cherilyn Yazzie	Dilkon	2
Hon. Cherilyn Yazzie	Greasewood Springs	2
Hon. Cherilyn Yazzie	Indian Wells	1
Hon. Cherilyn Yazzie	White Cone	0
Hon. Germaine Simonson	Black Mesa	0
Hon. Germaine Simonson	Forest Lake	2
Hon. Herman M. Daniels	Oljato	2
Hon. Herman M. Daniels	Shonto	0
Hon. Lomardo Aseret	Klagetoh	2
Hon. Lomardo Aseret	Houck	1
Hon. Lomardo Aseret	Wide Ruins	4
Hon. Nathan Notah	Naschitti	1
Hon. Otto Tso	Tuba City	1
Hon. Seth Damon	Chilchiltah	1
Hon. Shaandiin Parrish	Chilchinbeto	2
Hon. Shaandiin Parrish	Kayenta	2
Hon. Steven R. Arviso	lyanbito	0
Hon. Vince R. James	Ganado	2
Hon. Vince R. James	Kinlichee	2
Total		39

Table 5: Septic Systems Referral Stage: The table shows more projects being processed than the 78 that were funded. NTUA continues to leverage other funding sources to complete more projects.

5.11 – DRINKING WATER: TRANSMISSION AND DISTRIBUTION

The Navajo Nation approved NTUA's refunded Defunded Navajo Nation CARES Act drinking water transmission and distribution projects. With this funding NTUA estimates it can complete 16 transmission and distribution projects.

This funding category provides funds to replace 7 compromised water distribution lines and 6 compromised Pressure Reducing Valves (PRV) and provides funding to upgrade 3 existing electric distribution lines to provide power to 3 water transmission line projects.

Sta	ge of NTUA Drinking Water: Transmission and Distribution Projects	Status
1	Design and Engineering	0
2	Right-of-Way	0
3	In Procurement Process	6
4	Release Construction	0
5	Construction Complete and In-Service	10
	Total	16

Table 6: Stage of NTUA Drinking Water: Transmission and Distribution Projects

Table 6: Of these 16 projects, NTUA has completed the construction of 11 projects.

Delegate/Region	Chapter	Project Description	Total Projects
Hon. Crystalyne Curley	Low Mountain	Smoke signal – Bore (Completed)	1
Hon. Cherilyn Yazzie	Teesto	Seba Dalkai – Bore (Completed)	1
Hon. Rickie Nez	Upper Fruitland	Upper Fruitland – Bore (Completed)	1
Hon. Lomardo Aseret	Sanders (Nahatahdzil)	Park Estates Phase IV(Completed)	1
Hon. Curtis Yanito	Teec Nos Pos	Teecnospos - PRV Replacements (Completed)	1
Hon. Curtis Yanito	Aneth	Aneth- PRV Replacements (Completed)	1
Hon. Curtis Yanito	Red Mesa	Red Mesa - Bore 1	
Hon. Brenda Jesus	St. Michael	St. Michael - Bore 1	
Hon. Germaine Simonson	Hardrock	Hardrock - Four (4) PRV Replacements 4	
Hon. Germaine Simonson	Black Mesa	Kitsillie – Bore (Completed)	1
		Total	13
Hon. Amber Kanazbah Crotty	Sheepsprings	NGWP PP#4, 0.21 MILES 3PHASE LINE (Completed)	1
Hon. Nathan Notah	Coyote Canyon	NGWP PP#7, NEW 3-PHASE LINE (Completed)	
Hon. Rickie Nez	Tse Daa K'aan (Hogback)	SR EAST HOGBACK TO PUMPING STATION, 3-PH ENERGIZED WORK (Completed)	
		Total	3

5.14 DRINKING WATER STORAGE COMPLETED PROJECTS

The Navajo Nation approved funds from the NNFRF for NTUA's drinking water storage projects. Water storage tanks serve as the main water supply for Navajo communities. It is important to keep water storage tanks maintained to provide safe and reliable drinking water for community members. The original legislation funded the rehabilitation of 2 existing NTUA water storage tanks, located in Gap/Bodaway and Dennehotso AZ communities. However, NTUA was able to complete the two projects significantly under budget.

NTUA received approval by the Navajo Nation to use the savings from the two completed projects to fund the rehabilitation of two additional water tanks. NTUA is moving forward to rehabilitate the two water storage tanks in Casamero Lake and Smith Lake, both are in New Mexico.

Delegate/Region	Chapter	Project Description	Total Projects
Hon. Helena Nez Begay	Gap/Bodaway	Cedar Ridge Storage Tank Renovation #2 (Completed)	1
Hon. Shaandiin Parrish	Dennehotso	Dennehotso Storage Tank Renovations #3 (Completed) 1	
Hon. George Tolth	Casamero Lake	Casamero Lake Storage Tank Renovation (Completed) 1	
Hon. Steven Arviso	Smith Lake	Smith Lake Storage Tank Renovation (Spring 2024) 1	
		TOTAL	4

5.14 Drinking Water: Storage Completed Projects

5.19 BROADBAND – LAST MILE PROJECTS

The Navajo Nation approved NNFRF for NTUA's refunded Defunded Navajo Nation CARES Act Projects related to last mile broadband projects. With this funding NTUA estimates it can complete 20 broadcast station uplifts that will provide wireless broadband services to unserved and underserved Navajo communities and will provide operation and maintenance expenses to continue the operation of41 student/teacher Wi-Fi hotspots that are located throughout the Navajo Nation to support equitable and remote learning. This funding provided ongoing operating expenses necessary to keep the sites running from March 2021 through May 2022.

Project Description	Chapter	Delegate Region	Total Projects
Hon. Cherilyn Yazzie	Dilkon	Dilkon NTUA D.O. Wi-Fi Student Hotspots	1
Hon. Crystalyne Curley	Many Farms	Many Farms Elementary School Wi-Fi Student Hotspots	1
Hon. Helena Nez Begay	Lechee	Lechee Chapter House Wi-Fi Student Hotspots	1
Hon. Helena Nez Begay	Tonalea/Red Lake	Tonalea Chapter House Wi-Fi Student Hotspots	1
Hon. Helena Nez Begay	Coppermine	Coppermine Chapter House Wi-Fi Student Hotspots	1
Hon. Helena Nez Begay	Kaibeto	Kaibeto Chapter House Wi-Fi Student Hotspots	1
Hon. Helena Nez Begay	Bodaway Gap	Bodaway Gap Wi-Fi Student Hotspots	1
Hon. Shaandiin Parrish	Kayenta	Kayenta High School Wi-Fi Student Hotspots	1
Hon. Shaandiin Parrish	Kayenta	Kayenta Elementary School Wi-Fi Student Hotspots	1
Hon. Shaandiin Parrish	Dennehotso	Dennehotso Market Wi-Fi Student Hotspots	1
Hon. Eugenia Charles- Newton	Shiprock	Shiprock Fairgrounds Wi-Fi Student Hotspots	1
Hon. Amber Kanazbah Crotty	Sheep Springs	Sheep Springs Chapter House Wi-Fi Student Hotspots	1
Hon. Amber Kanazbah Crotty	Red Valley	Red Valley Chapter House Wi-Fi Student Hotspots 1	
Hon. Danny Simpson	Crownpoint	Navajo Technical University Wi-Fi Student Hotspots	1
Hon. Nathan Notah	Tohatchi	Tohatchi Chapter House Wi-Fi Student Hotspots 1	
Hon. Vince James	Ganado	Ganado Middle School Wi-Fi Student Hotspots 1	
Hon. Vince James	Ganado	Ganado High School Wi-Fi Student Hotspots 1	
Hon. Vince James	Kindalichii	Kin Dah Lichii Wi-Fi Student Hotspots	1
Hon. Crystalyne Curley	Low Mountain	Low Mountain Chapter House Wi-Fi Student Hotspots	1
Hon. Crystalyne Curley	Tachee/Blue Gap	Blue Gap Chapter House Wi-Fi Student Hotspots	1
Hon. Carl Slater	Tsaile/Wheatfields	Tsaile Elementary School Wi-Fi Student Hotspots	1
Hon. Carl Slater	Rock Point	Rock Point Community School Wi-Fi Student Hotspots	1
Hon. Carl Slater	Tsaile/Wheatfields		
Hon. Lomardo Aseret	Houck	Houck Chapter House Wi-Fi Student Hotspots	1
Hon. Andy Nez	Red Lake	DEAP School Wi-Fi Student Hotspots	1
Hon. Andy Nez	Ft. Defiance	Ft. Defiance NTUA HQ Wi-Fi Student Hotspots	1
Hon. Curtis Yanito	Mexican Water	Mexican Water Chapter House Wi-Fi Student Hotspots 1	
Hon. Curtis Yanito	Aneth	Aneth Chapter House Wi-Fi Student Hotspots 1	

Hon. Shawna Ann Claw	Chinle	Chinle NTUA D.O. Wi-Fi Student Hotspots 1	
Hon. Otto Tso	Tuba City	Tuba City Fairgrounds Wi-Fi Student Hotspots	1
Hon. Otto Tso	Tuba City	Tuba City Pavilion Wi-Fi Student Hotspots	1
Hon. Casey Allen Johnson	Cameron	Cameron Elementary School Wi-Fi Student Hotspots	1
Hon. Casey Allen Johnson	Birdsprings	Birdsprings Chapter House Wi-Fi Student Hotspots	1
Hon. Casey Allen Johnson	Coalmine Canyon	Coalmine Canyon Chapter House Wi-Fi Student Hotspots	1
Hon. Casey Allen Johnson	Birdsprings	Little Singer Community School Wi-Fi Student Hotspots 1	
Hon. Casey Allen Johnson	Leupp	Leupp Chapter House Wi-Fi Student Hotspots 1	
Hon. Brenda Jesus	St. Michaels	Window Rock Fairgrounds Wi-Fi Student Hotspots 1	
Hon. Brenda Jesus	Oak Springs	Oak Springs Wi-Fi Student Hotspots 1	
Hon. Germaine Simonson	Pinon	Pinon Chapter House Wi-Fi Student Hotspots 1	
Hon. Germaine Simonson	Forest Lake	Forest Lake Chapter House Wi-Fi Student Hotspots 1	
Hon. Germaine Simonson	Hard Rock	Hard Rock Chapter House Wi-Fi Student Hotspots 1	
		Total	41

The 20 broadband broadcast stations will include the cost of equipment, installation, operation, and maintenance to deliver broadband internet services to 20 Navajo communities. To provide broadband services to these Navajo communities, NTUA Wireless will deploy the following technologies:600 MHz and Fixed Wireless Broadband (EBS/2.5GHz).

The projects are designed to deliver 100 Mbps download and 20 Mbps upload speeds (scalable to 100Mbps download/upload) for users that are within a 3-mile radius of the EBS and CBRS sites assuming no interference with topography.

For users within 9 miles with line of site to the tower with CBRS and EBS mid-band spectrum, the projects are alsoleverage and overlay 600 MHz licensed spectrum on the sites to provide additional reach to homes beyond 9 miles(up to approximately 15 miles with speeds of 10 Mbps/1Mbps or higher). All three technologies, EBS, CBRS, and 600 MHz licensed spectrum, work in conjunction to maximize the range and speed for customers.

NTUA has submitted a request to modify the deployment of fixed wireless equipment for 8 tower sites. However, the request has not been approved. 1) Oljato is the substitution/replacement for Page/Lechee 2) Sanders is the substation/replacement for Huerfano Mountain, 3) Preston Mesa is the substitution/replacement for Nageezi, 4) Tuba City North is the substitution/replacement for Tuba City, 5) Tuba City East is the substitution/ replacement for View Hotel 6) Cornfields is a substation/replacement for Low Mountain South 7) Na Ah Tee Mesa is the substitution/replacement for Counselor 8) Steamboat East is the substitution/replacement for Dezza Bluff.

NTUA Wireless has completed installations at Hard Rock, Monument Valley Campground, Aneth, Tolani Lake, Hard Rock, Steamboat, and Teesto. Three towers that are slated for installation are Navajo Mountain, Crownpoint, and Grey Mountain.

	NTUA Broadband Last Mile Projects Stage	Status
1	Engineering Design Stage	8
2	Right-of-Way Stage	2
3	Procurement Stage	0
4	Released for Construction Stage	0
5	Testing and Commissioning Stage	3
6	Constructed and In Service Stage	7
	Total	20

Table 8:

Delegate Region	Chapter	Project Description	Total Projects
Hon. Helena Nez-			
Begay	Lechee	Page - WISP Overlay	1
Hon. Shaandiin Parrish	Kayenta	Marsh Pass - WISP Overlay on TBC Sites	1
Hon. Herman. M.			
Daniels	Navajo Mountain	Navajo Mountain - WISP Overlay on TBC Sites	1
Hon. Carl. R. Slater	Rough Rock	Rough Rock - WISP Overlay (completed)	1
Hon. Herman M. Daniels	Oljato	Monument Valley Campground - WISP Overlay(completed)	1
Hon. Herman. M. Daniels	Oljato	View Hotel - WISP Overlay	1
Hon. Danny Simpson	Nageezi	Nageezi - WISP Overlay	1
Hon. Danny Simpson	Huerfano	Huerfano Mountain - WISP Overlay	1
Hon. Nathan Notah	Tohatchi	Dezza Bluff - WISP Overlay on TBC Sites	1
Hon. George Tolth	Counselor	Counselor - WISP Overlay	1
Hon. Curtis Yanito	Aneth	Aneth - WISP Overlay on TCB Sites (completed)	1
Hon. Otto Tso	Tuba City	Tuba City - WISP Overlay	1
Hon. Casey Allen Johnson	Cameron	Gray Mountain - WISP Overlay	1
Hon. Crystalyne Curley	Low Mountain	Low Mountain South - WISP Overlay	1
Hon. Crystalyne Curley	Low Mountain	Jeedeez'ah - WISP Overlay	1
Hon. Casey Allen Johnson	Tolani Lake	Tolani Lake - WISP Overlay (completed)	1
Hon. Germaine Simonson	Hard Rock	Hard Rock - WISP Overlay (completed)	1
Hon. Vince James	Steamboat	Steamboat - WISP Overlay (completed)	1
Hon. Danny Simpson	Crownpoint	Crownpoint - WISP Overlay	1
Hon. Cherilyn Yazzie	Teesto	Teesto WISP – Overlay (completed)	1
Navajo Nation	Navajo Nation	Prorated OPEX for new WISPBuildouts/Overlays(ListedAbove)	
		ΤΟΤΑ	L 41

5.20 BROADBAND: OTHER PROJECTS

The Navajo Nation approved NNFRF for NTUA's refunded Defunded Navajo Nation CARES Act middle mile projects completing mid-section infrastructure to enable internet connectivity in communities. With this funding NTUA estimates it can complete 9 middle mile projects, which include 2 towers, 7 fiber lines, and 6 fiber line make-ready projects. The fiber lines provide transport for the NTUA Wireless broadcast stations, enabling them to provide wireless broadband services.

The towers and associated microwave links as well as the fiber optic lines will provide transport at gigabit speeds which meet and exceed the 100 Mbps download and 100 Mbps upload speeds that are required by the U.S. Department of Treasury. Without the middle mile projects, the last mile projects for users cannot work. NTUA's 5 fiber line make-ready projects will upgrade the electrical infrastructure to enable fiber line attachments which provides broadband services. Of these 10 projects, NTUA has completed the construction of 6 projects.

There are 9 projects in the right-of-way stage. NTUA is currently in the process of obtaining leases from the Navajo Land Department. Once the leases are finalized, NTUA can begin construction of the towers. Furthermore, NTUA anticipates cost savings from the make ready construction projects and shall construct additional fiber projects as requested.

NTUA has submitted a request to modify the scope of work to add 6 additional fiber optic line projects. In addition, the tower built in Low Mountain will be removed because NTUA has received federal grant funds for that project from National Telecommunications and Information Administration.

Table 9: Broadband

	NTUA Broadband Middle Mile Projects Stage	Status
1	Engineering Design Stage	0
2	Right-of-Way Stage	9
3	Procurement Stage	0
4	Released for Construction Stage	0
5	Testing and Commissioning Stage	0
6	Constructed and In-Service Stage	6
	Total	15

Delegate Region	Chapter	Project Description	Total
Hon. Crystalyne Curley	Low Mountain	Low Mountain South - New	1
		Communications Tower	
Hon. Crystalyne Curley	Low Mountain	*Jeedeez'ah - New Communications	1
		Tower	
Hon. Helena Nez Begay	Lechee	Internet Distribution - Fiber Build LeChee	1
		Meet Point to LecCee Tower	
Hon. Herman Daniels Jr.	Kayenta/Shonto/Tsah Bii	Fiber Build to Black Mesa NTUA Tower	1
Hon. Shaandiin Parrish	Kin	and Zelnez Mesa NTUA Tower	
Hon. Dr. Andy Nez	Sawmill	**Fiber build to Piney Hill NTUA Tower	1
Hon. Carl Slater	Rough Rock	**Fiber build to Rough Rock community	1
Hon. Cherilyn Yazzie	Whitecone	**Fiber build to Na Ha Tee Mesa Tower	1
Hon. Casey Allen Johnson	Tolani Lake	**Fiber build to Tolani Lake Tower	1
Hon. Otto Tso	Tuba City	**Fiber to Tuba City North Tower	1
		TOTAL	9

* This tower will be replaced because NTUA was able to secure other funding for this tower build.

Other Projects Completed

-			
Hon Crystalyne Curley	Nazlini	NAZLINI COMM. SCHOOL MAKE-READY (Completed)	1
Hon. Shaandiin Parrish	Kayenta	KAYENTA NORTH FIBER MAKE-READY SEGMENT 2 (Completed)	1
Hon. Shaandiin Parrish	Kayenta	KY TOWNSITE SUB TO JUNCT. 3PH UPG (Completed)	1
Hon. Amber Kanazbah Crotty	Gadii'ahi/To'Koi (Cudeii)	CUDEI TO TEECNOSPOS MAKE-READY SEG. 2 (Completed)	1
Hon. Herman Daniels	Shonto	SHONTO TO NAATSISAAN SCHOOL MAKE-READY SEGMENT 1, 2, AND 3 (Completed)	1
Hon. Carl Slater	Rough Rock	ROUGH ROCK COMM. SCHOOL MAKE- READY SEG2 (Completed)	1
		TOTAL	6