## Meeting the Needs of the Navajo Nation



NTUA Update of Navajo Nation Fiscal Recovery Funds (NNFRF) American Rescue Plan Act 2021 & Refunded Defunded CARES Act Projects

NTUA Defunded Projects Update #17 - Status of Utility Projects as of October 12, 2023

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 Project Utility Construction Update #17 Data as of October 12, 2023

#### 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. <u>As of this Update, 337 Navajo families have been connected to the grid under the Defunded CARES Act (DCA)</u>

\*\*\* 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	DCA Short Line	DCA
	<b>Powerline Projects</b>	Extensions	Total
1. Preliminary	1	0	1
2. Engineering	0	0	0
3. In ROW	0	11	11
4. ROWS Approved	2	30	32
5. Release for Construction	0	1	1
6. Construction Complete & In Service	48	289	337
Total	51	331	382

**Table 1** above shows the various stages of completed electric service applications. Stages 1 through 4 are completed applications 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	3
	Cudeii (Gadii ahi/To' Koi)	1
	Red Valley	3
	Sanostee (Tse Alnaozt'ii)	3
	Two Grey Hills/Toadlena	1
Delegate Crotty Total		11
Honorable Delegate Dr. Andy		
Nez	Crystal	1
	Fort Defiance	3
	Sawmill	7
Delegate Dr. Nez Total		11
2 20 22		
Honorable Delegate Brenda		
Jesus	St. Michaels	12
Delegate Jesus Total		12
Honorable Delegate		44
Carl Roessel Slater	Lukachukai	11
	Rock Point	4
	Rough Rock (Tse Ch' Izhi)	4
	Round Rock	6
Balanca Class Tatal	Tsaile-Wheatfields	14
Delegate Slater Total		39
Honorable Delegate		
Casey Allen Johnson	Birdsprings (Tsidii To'ii)	1
•	Coalmine Canyon	1
	Leupp	2
	Tolani Lake	1
Delegate Johnson Total		5
_		
Honorable Delegate Cherilyn		
Yazzie	Dilkon	5
	Greasewood Springs	1
	Indian Wells	2
	Teesto	3
Delegate Yazzie Total		11
Hanarahla Madam Speeker		
Honorable Madam Speaker Crystalyne Curley	Blue Gap-Tachee	8
o. youry ne curicy	Low Mountain	2
	Many Farms	9
	Nazlini	6
	Tselani-Cottonwood	13
Speaker Curley Total		38

Honorable Delegate Curtis		
Yanito	Aneth	9
	Mexican Water	5
	Red Mesa	12
	Teecnospos	7
	To'likan (Sweetwater)	1
Delegate Yanito Total		34
Honorable Delegate Danny		
Simpson	Nahodishgish	2
	Standing Dook (Tsalii Ahil)	1
Delegate Cineman Tatal	Standing Rock (Tse'li'Ahi')	1
Delegate Simpson Total		3
Honorable Delegate		
Eugenia Charles-Newton	Shiprock	14
<b>Delegate Charles-Newton Total</b>		14
Honorable Delegate		
Germaine Simonson	Hardrock	1
	Pinon	7
	Whippoorwill	3
Delegate Simonson Total		11
Honorable Delegate		
Helena Nez Begay	Bodaway-Gap	1
	Coppermine	4
	Kaibeto (Kai' Bii To)	2
	LeChee	1
	Tonalea/Red Lake	12
Delegate Nez Begay Total		20
Honorable Delegate	Inscription Hse (Ts'ah Bii	
Herman Daniels Jr.	Kin)	3
	, Navajo Mountain	4
	Oljato	5
	Shonto	23
Delegate Daniels Jr. Total		35
Honorable Delegate Lomardo Aseret	Houck	2
Lomaido Aseret		1
	Klagetoh	2
	Lupton (Tse Si Ani) Nahata Dziil	3
		5
Dologato Accret Total	Wide Ruins	
Delegate Aseret Total		13
Honorable Delegate		
Nathan Notah	Coyote Canyon	4
	Mexican Springs	1
	Naschitti	4
	Tohatchi	2
	Twin Lakes (Bahastl' ah')	9
Dologata Notah Tatal		20
Delegate Notah Total		20

	Tuba City (To' Nanees'	
Honorable Delegate Otto Tso	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 Delegate		
Shaandiin Parrish	Dennehotso	5
	Kayenta	8
Delegate Parrish Total		13
Honorable Delegate		
Shawna Ann Claw	Chinle	21
Delegate Claw Total		21
Honorable Delegate Vince R.		
James	Cornfields	3
	Ganado	2
	Jeddito	2
	Kinlichee (Kin Dah Lichii)	4
	Steamboat	3
Delegate James Total		14
<b>Grand Total</b>		337

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 the 150 solar units. See table at the end of the document for a Chapter specific table.

Table 2: Off-Grid Residential Solar Units: Staging of 150 Solar Projects

Off-0	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	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
Holl. Alliber K. Crotty	Sanostee	1
		_
Hara Araba at Carta Tatal	Sheep Springs	1
Hon. Amber K. Crotty Total		3
Hon. Andy Nez	Sawmill	3
Hon. Andy Nez Total		3
Hon. Brenda Jesus	Oak Springs	1
	St. Michaels	4
Hon. Brenda Jesus Total		5
Hon. Carl Slater	Round Rock	1
	Tsaile	2
Hon. Carl Slater Total		3
Hon. Casey Allen Johnson	Cameron	13
	Leupp	3
Hon. Casey Allen Johnson Total		16
Hon. Crystalyne Curley	Blue Gap	1
	Cottonwood	8
	Low Mountain	5
	Many Farms	1
	Nazlini	2
	Pinon	1
Hon. Crystalyne Curley Total		18
Hon. Danny Simpson	Crownpoint	1
, .	Nageezi	2
Hon. Danny Simpson Total		
Hon. George H. Tolth	Baca	2
The second of the second	Baca	3
	Casamero Lake	1
	Counselor	1
	Ojo Encino	2
	Pueblo Pintado	1
Hon. George H. Tolth Total	i acbio i ilitado	10
Hon. Germaine Simonson	Black Mesa	1
Hon. Germaine Simonson Total	חומרע ועובטמ	1
	Podaway Car	<del>_</del>
Hon. Helena Nez Begay	Bodaway Gap	1
	Tonalea	5
Hon. Helena Nez Begay Total		6
Hon. Herman M. Daniels	Inscription House	1
	Oljato	9
	Shonto	9
Hon. Herman M. Daniels Total		19
Hon. Lomardo Aseret	Houck	1
Hon. Lomardo Aseret Total		1
Hon. Nathan Notah	Mexican Springs	2

	Naschitti	2
	Twin Lakes	4
Hon. Nathan Notah Total		8
Hon. Norman M. Begay	Ramah	1
Hon. Norman M. Begay Total	I	1
Hon. Otto Tso	Tuba City	4
Hon. Otto Tso Total		4
Hon. Seth Damon	Bread Springs	2
	Chichiltah	2
	Red Rock	3
	Rock Springs	4
	Tseyatoh	1
Hon. Seth Damon Total		12
Hon. Shaandiin Parrish	Chilchinbeto	4
	Dennehotso	2
	Kayenta	11
Hon. Shaandiin Parrish Total		17
Hon. Shawna Ann Claw	Chinle	6
Hon. Shawna Ann Claw Total		6
Hon. Steven R. Arviso	Church Rock	1
	Pinedale	4
	Smith Lake	1
	Thoreau	1
Hon. Steven R. Arviso Total		7
Hon. Vince R. James	Ganado	1
	Kinlichee	4
	Steamboat	2
Hon. Vince R. James Total		7
<b>Grand Total</b>		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 connect425 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 have to 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 GridDefunded CARES Act (DCA) – Neighboring Utilities Connection Staging

	Electric Connections Stage (425)	Status
1	Completed Applications	0
2	Projects that are in the Engineering Stage	3
3	Projects that are at the Right-of-Way Stage	3
4	Projects with Approved Right of Way	4
5	Projects that are in Construction	4
6	6 Projects that are Constructed and In Service 110	
Propos	ed DCA Neighboring Utility Projects Total	124

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, 95 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	Proposed DCA Neighboring Utility (APS) Projects Total 10		

### Continental Divide Electric Cooperative (CDEC) - New Mexico

		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	0
4	Projects with Approved ROW	4
5	Projects that are in Construction	1
6	Projects that are Constructed and In Service	67
Propo	sed DCA Neighboring Utility (CDEC) Projects Total	72

Jemez Mountains Electric Cooperative (JMEC) – New Mexico

		Total No. of Projects
1	Completed Applications	0
2	Projects that are in the Engineering Stage	3
3	Projects that are at the ROW Stage	0
4	Projects with Approved ROW	0
5	Projects that are in Construction	6
6	Projects that are Constructed and In Service	33
Propo	sed DCA Neighboring Utility (JMEC) Projects Total	42

Council Delegate Region	Utility Provider	Chapter	Completed
Hon. Otto Tso	APS	Tuba City	6
Hon. George H. Tolth	CDEC	Baca/Prewitt	3
Hon. Danny Simpson	CDEC	Becenti	1
Hon. Seth Damon	CDEC	Breadsprings	2
Hon. Seth Damon	CDEC	Chichiltah	7
Hon. Steven R. Arviso	CDEC	Churchrock	6
Hon. Danny Simpson	CDEC	Crownpoint	2
Hon. Steven R. Arviso	CDEC	Iyanbito	4
Hon. Seth Damon	CDEC	Manuelito	9
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	7
Hon. Steven R. Arviso	CDEC	Smithlake	4
Hon. Steven R. Arviso	CDEC	Thoreau	2
Hon. Seth Damon	CDEC	Tsayatoh	6
Hon. George H. Tolth	CDEC	Whitehorse	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	110

#### 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 9projects. 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.

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

	Projects Stage	Status
4		0
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** provides a status update of the nine projects. NTUA will move forward with project development in design and engineering. 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	· ·	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	Red Lake 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	lyanbito	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 acentralized 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), bathroomaddition (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 which provides 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 thefunds in expenditure category 5.3, all remaining unfinished projects will be eligible to be moved to a futurefunding 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	1
Hon. Cherilyn Yazzie	GreasewoodSprings	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
Totals		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 existing electric distributionlines to provide power to 3 water transmission line projects.

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

St	tage of NTUA Drinking Water: Transmission and Distribution Projects	Status
1	Design and Engineering	0
2	Right-of-Way	0
3	In Procurement Process	5
4	Release Construction	0
5	Construction Complete and In-Service	11
	Total	16

**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(Completed)	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)	1
Hon. Rickie Nez	Tse Daa K'aan (Hogback)	SR EAST HOGBACK TO PUMPING STATION, 3-PH ENERGIZED WORK (Completed)	1
		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 storagetanks 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.

## 5.14 Drinking Water: Storage completed projects

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 (Completed)	1
		TOTAL	4

#### **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 of 41 student/teacher Wi-Fi hotspots that are located throughout the Navajo Nation to support equitable andremote 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	Dine' College Wi-Fi Student Hotspots	1
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 also leverage and overlay 600 MHz licensed spectrum on the sites to provide additional reach to homesbeyond 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.

Table 8:

	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

Delegate Region	Chapter	Project Description	Total Projects
Hon. Cherilyn Yazzie	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. Shaandiin Parrish	Oljato	Monument Valley Campground - WISP Overlay (completed)	1
Hon. Herman. M.			
Daniels	Oljato	View Hotel - WISP Overlay	1
Hon. Lomardo Aseret	Nageezi	Nageezi - WISP Overlay	1
Hon. Helena Nez	_		
Begay	Huerfano	Huerfano Mountain - WISP Overlay	1
Hon. Otto Tso	Tohatchi	Dezza Bluff - WISP Overlay on TBC Sites	1
Hon. Otto Tso	Counselor	Counselor - WISP Overlay	1
Hon. Curtis Yanito	Aneth	Aneth - WISP Overlay on TCB Sites (completed)	1
Hon. Vince James	Tuba City	Tuba City - WISP Overlay	1
Hon. Casey Allen			
Johnson	Cameron	Gray Mountain - WISP Overlay	1
Hon. Vince James	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
		Prorated OPEX for new WISP Buildouts/Overlays (Listed	
Navajo Nation	Navajo Nation	Above)	LOT
		TOTAL	20

#### 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 10 middle mile projects, which include 2 towers, 2 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 gigabitspeeds 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 cannotwork. NTUA's 6 fiber line make-ready projects will upgrade the electrical infrastructure to enable fiber lineattachments which provides broadband services. Of these 10 projects, NTUA has completed the construction of 6 projects.

There are 4 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	4
3	Procurement Stage	0
4	Released for Construction Stage	0
5	Testing and Commissioning Stage	0
6	Constructed and In-Service Stage	6
	Total	10

Delegate Region	Chapter	Project Description	Total
Hon. Crystalyne Curley	Low Mountain	Low Mountain South - New	1
		Communications Tower (In Progress)	
Hon. Crystalyne Curley	Low Mountain	Jeedeez'ah - New Communications	1
		Tower*(In Progress)	
Hon. Helena Nez Begay	Lechee	Internet Distribution - Fiber Build Lechee	1
		Meet Point to Lechee Tower (In Progress)	
Hon. Herman Daniels	Kayenta/Shonto/Tsah Bii	Fiber Build to Black Mesa NTUA Tower and	1
Jr./Hon. Shaandiin Parrish	Kin	Zelnez Mesa NTUA Tower (In Progress)	
		TOTAL	4
	Othe	r Projects	
	Cor	mpleted	
Hon Crystalyne Curley	Nazlini	NAZLINI COMM. SCHOOL MAKE-READY	1
		(Completed)	
Hon. Shaandiin Parrish	Kayenta	KAYENTA NORTH FIBER MAKE-READY	1
		SEGMENT 2 (Completed)	
Hon. Shaandiin Parrish	Kayenta	KY TOWNSITE SUB TO JUNCT. 3PH UPG	1
		(Completed)	
Hon. Amber Kanazbah	Gadii'ahi/To'Koi (Cudeii)	CUDEI TO TEECNOSPOS MAKE-READY SEG. 2	1
Crotty		(Completed)	
Hon. Herman Daniels	Shonto	SHONTO TO NAATSISAAN SCHOOL MAKE-	1
		READY SEGMENT 1, 2, AND 3 (Completed)	
Hon. Carl Slater	Rough Rock	ROUGH ROCK COMM. SCHOOL MAKE-	1
		READY SEG2 (Completed)	
		TOTAL	6
* This tower will be replaced because NTUA was able to secure other funding for this tower build. As			
a result, another tower will replace it providing services to an unserved community.			