



2021 PROJECTS UPDATE #7

NTUA Continues Building, Extending, and Connecting Multi-Utilities

In 2020, the Navajo Tribal Utility Authority (NTUA) completed an unprecedented number of electric connections, water extensions, off-grid residential solar unit placements, and broadband/internet installations work in a mere 4.5 months with Navajo Nation CARES Act funds. NTUA continues to identify utility projects in anticipation of the Navajo Nation providing American Rescue Plan Act (ARPA) funds to NTUA. This high-level report provides an update in eight utility categories concerning the number of identified projects and the current status of those identified projects.

These projects are part of NTUA's ARPA project listing, which has been provided to the Navajo Nation. To ensure the Navajo Nation's ARPA program is a success, NTUA is advancing projects to shovel ready status, identifying, and completing feasibility studies on Navajo family homes, and even constructing certain projects. NTUA is self-funding this initial work in anticipation of receiving ARPA funding from the Navajo Nation. On page of 8 and 9 of this report, there is information for Chapter Officials, Chapter Staff and Council Delegates to share with chapter and community residents. It is information about applying for new utilities, broadband assistance, and home energy assistance.

1. NTUA Residential Electric Connections

As of this update, NTUA electric crews have connected 102 homes with electricity in communities across the Navajo Nation. In the table below, Project Stages #1 titled "Completed Applications" are applications for Light Up Navajo III. When NTUA receives ARPA funds these projects will be automatically converted to ARPA projects.

The numbers in the table do not include the projects identified by neighboring utilities - JMEC, CDEC, SEC, or APS. NTUA's ARPA request includes funding for projects to be built by JMEC, CDEC, SEC, and APS. The ARPA projects will include costs for interior house wiring (if applicable), pole mounted meter loops (if applicable), certification and recertification of house wiring (if applicable), and inspection.



Project Stages		Total No. of Projects
1	Completed Applications	244
2	Projects that are in the Engineering Stage	100
3	Projects that are at the ROW Stage	274
4	Projects with Approved ROW	139
5	Projects that are in Construction	7
6	Projects that are Constructed and In Service	102
Total		866

2. Proposed NTUA Off-Grid Residential ARPA Solar Projects

ARPA projects include off-grid residential solar units for homes where connecting to the electric grid is not feasible because of location, cost, or other determinations.

NTUA began taking new solar unit applications on July 19, 2021. If applicants already applied for a solar unit under CARES Act funding in 2020, they did not have to reapply. In addition, these projects will include interior house wiring (if applicable), certification and re- certification of wiring (if applicable), inspection, generators (if applicable), ATS switch (if applicable), and an energy efficient refrigerator.

Please note that in the table below, there is no double counting. What this means is that the all the projects in row 1 and 2 will be served. Each project is a home.

The homes in rows 1 and 2 need to be reviewed and visited to determine if they are feasible.

Project Stages		Total No. of Projects
1	Completed applications	241
2	Projects that are in the Engineering Stage	28
3	Projects that are found to be Feasible	123
4	Projects that are in Construction	1
5	Projects that are Constructed and In Service	0
Total		393



3. NTUA Residential Water / Wastewater Services

This section describes the two types of residential water/wastewater services that NTUA provides. Section A describes residential connections to existing water lines and wastewater connections to existing sewer lines or an installed septic system. Section B describes residential connections by installed cistern and wastewater connections by septic system.

Please note that NTUA began taking on this work when CARES Act funding became available, and the Indian Health Service (IHS) indicated that it could not construct water projects before the initial CARES Act deadline of December 30, 2020. NTUA understood that families needed this service and assigned crews to construct and extend these services to homes. NTUA and NECA constructed 30 waterlines/septic systems with CARES Act Funding in 2020.

A. NTUA Residential Water/Wastewater System Projects

Field teams are currently visiting homes and conducting assessments to determine feasibility for the Application under Review. Homes that are over ½ mile from a waterline will be referred to the water cistern project for consideration.

ARPA waterline projects include the cost to construct the waterline to the home, plumbing (if necessary), sink (if necessary), hot water heater system (if necessary), bathroom addition (if necessary), energy efficient refrigerator, house wiring (if necessary), inspections, septic system construction or installation or connection to existing wastewater collection system, and any other necessary components to make a complete working system.

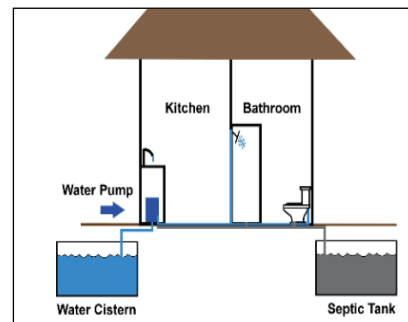
Please note that NTUA is constructing waterlines/septic systems to 6 homes with funding provided by the Centers for Disease Control (CDC). These services are normally provided by IHS, however, because of the time restraint for the CARES Act projects, IHS reported it would not be constructing any projects, and NTUA began such construction or took the lead in the construction process.

Project Stage		Total No. of Projects
1	Applications under Review	1,069
2	Projects that are in the Engineering Stage	223
3	Projects at the Right of Way Stage	47
4	Projects with Approved ROW*	36
5	Projects that are in Construction	3
6	Projects that are Constructed and in Service	0
Total		1,378

* NTUA has secured grant funding from CDC to construct 6 projects.

B. NTUA Residential Cistern/Septic System Projects

ARP projects will include cistern water systems where there is no water available for household water use and the home is located beyond feasible extension of the existing water distribution system. The image shows how a cistern/septic system is designed.



These services are normally provided by IHS, however NTUA decided to engage in cistern work when IHS reported it would not be constructing any projects with CARES Act funds. NTUA and NECA were able to complete 105 cistern/septic systems in 2020 with CARES Act funds.

These projects not only include the cistern/septic system, but also include a drain field and either an electric, solar, or generator service to operate. The ARPA cistern/ septic home projects include the cost to construct, plumbing (if necessary), sink (if necessary), hot water heater system (if necessary), bathroom addition (if necessary), an energy efficient refrigerator, house wiring (if necessary), inspection, installation of the septic system, and any other necessary components to make a complete working system. ARPA funding is required in order for NTUA to advance these projects.

Project Stages		Total No. of Projects
1	IHS or NN Referrals	157
2	Projects that are in the Engineering Stage	205
3	Projects that were Found to be Infeasible	109
4	Projects pending a NN EPA Permit	66
5	Projects that are in Construction	0
6	Projects that are Constructed and In Service	0
Total		537



4. NTUAW Residential Broadband/Internet to Home Projects

Residential and Small Business Broadband services will be delivered through two primary technology approaches: Fixed Wireless Broadband and Fiber to the Home. Broadband coverage will be delivered through a commercial grade fixed wireless broadband system for delivering broadband service to homes and businesses at download speeds of up to 25Mbps to 100Mbps.

Customer connections to this fixed commercial grade wireless broadband system are accomplished by installing an outdoor antenna as well as an indoor router for Wi-Fi connectivity.

For denser housing areas, a Fiber to the Home (FTTH) system will be deployed, which will deliver a fiber connection to customers. Customers connected to this FTTH system will be capable of receiving download speeds of up to 100Mbps to 1Gbps.

With the ARPA funding, NTUA anticipates 11,000 new or upgraded fixed wireless broadband connections and 5,000 new fiber connections to homes. NTUAW installed approximately 1,300 new and 700 upgraded fixed wireless broadband services funded by the 2020 CARES Act.

Project Stages		Total No. of Projects
1	Awaiting Applications	9,081
2	Projects that are in the Engineering Stage	4,493
3	Projects that are at the ROW Stage	22
4	Projects with Approved ROW	0
5	Projects that are in Construction	1,465
6	Projects that are Constructed and In Service	939
Total		16,000



5. NTUA Electric Capacity Proposed ARPA Projects

Capacity projects are required to strengthen the electric system's reliability and increase the electric system's capacity to handle the increased number of electric connections, especially when new connections result under ARPA funded projects. Capacity is the engine of the electric infrastructure, and it must be well-maintained and upgraded when necessary. Enhancing and expanding the electric capacity provides a multitude of benefits to the community members. In addition to serving hundreds of additional homes that have been connected and will be connected to the electric grid, strengthening the electric capacity is necessary for water, wastewater, and broadband connections. These will help further combat the pandemic. The numbers are projects that are ARPA prepared projects. Additionally, these numbers will change as JMEC, CDEC, SEC, and APS provide project information.

Project Stages		Total No. of Projects
1	Projects in Pre-Engineering Stage	33
2	Projects that are in the Engineering Stage	26
3	Projects that are at the ROW Stage	23
4	Projects with Approved ROW	11
5	Projects that are in Construction	6
6	Projects that are Constructed and In Service	25
Proposed ARPA Electric Capacity Projects (05/28/2021)		Total
		124

6. NTUA Water Capacity Proposed ARPA Projects

Just like electric capacity, it is necessary to strengthen the water system's capacity for reliability to make sure the water continues flowing to homes and businesses. As additional water services are extended to homes, the water distribution systems require more capacity. The numbers are for projects that are ARPA prepared projects. Park Estates phase III (see footnote below table) is a carry-over project from CARES Act projects that NTUA secured funding to complete from the Wend Foundation.

Project Stages		Total No. of Projects
1	Projects in Pre-Engineering Stage	35
2	Projects that are in the Engineering Stage	146
3	Projects that are at the ROW Stage	4
4	Projects with Approved ROW	13
5	Projects that are in Construction*	3
6	Projects that are Constructed and in Service	43
Proposed ARPA Water Capacity Projects (5/25/2021)		Total
		244

*Park Estates

7. NTUA Wastewater Capacity Proposed ARPA Projects

Wastewater capacity projects are necessary to strengthen and handle the increase in volume and improve the reliability of the wastewater collection system and treatment plants. The wastewater systems need the ability handle the additional projects that have been and will be constructed and connected to the existing wastewater systems.

Project Stages		Total No. of Projects
1	Projects in Pre-Engineering Stage	61
2	Projects that are in the Engineering Stage	285
3	Projects that are at the ROW Stage	3
4	Projects with Approved ROW	9
5	Projects that are in Construction	0
6	Projects that are Constructed and In Service	0
Proposed ARPA Wastewater Projects (05/25/21)		358

8. NTUA Broadband Capacity Proposed ARPA Projects

Broadband capacity projects are necessary to provide service to unserved and underserved communities and to handle the increased usage of existing and new customers. This additional capacity will allow NTUAW to increase the speed of existing customers' broadband service. NTUAW's existing Broadband plans offer speeds of up to 6Mbps and of up to 9Mbps. Future plans will offer speeds of up to 25Mbps to 100Mbps. NTUAW will also be offering a new Fiber to the Home service where customers will be able to enjoy speeds of up to 100Mbps to 1Gbps. As internet usage continues to grow, additional capacity will be critical for a stable network and as discussed previously in the residential broadband section, NTUAW anticipates a dramatic increase in internet usage. NTUA has planned for 16,000 new or upgraded Broadband customers. NTUA must be prepared to handle the additional capacity needs for all the internet and mobile service providers including NTUAW, AT&T, Cellular One, Verizon, and others.

Capacity Project Stage		Total No. of Projects
1	Projects in Pre-Engineering Stage	0
2	Projects that are in the Engineering Stage	168
3	Projects that are at the ROW Stage	26
4	Projects with Approved ROW	142
5	Projects that are in Construction	0
6	Projects that are Constructed and In Service	1
Proposed ARPA Broadband Projects (05/27/21)		337

Information for Navajo Nation Leaders to Share with Chapters and Community Residents Seeking New Utility Services

1. **Chapter Powerline Projects**: If a Chapter is interested in seeking funding from the American Rescue Plan Act (ARPA) for a chapter powerline project, please refer to NTUA's website under "ARPA Projects" to see if the Chapter's powerline project is already on NTUA's ARPA list. If the proposed project is not on the list or if your chapter needs further assistance, please contact Arash Moalemi at arashm@ntua.com, or you can call 928-729-6221 (NTUA public affairs dept.)

2. **Seeking Residential Electric Connection**:

If community members need residential electric service and believe they might be within two miles of an NTUA Electric distribution line, please encourage those community members to visit their local NTUA District Office and apply for Light Up Navajo III (LUN III). Please understand there is no guarantee that the applicant will qualify or receive electric connection through LUN III; however, if and when NTUA receives ARPA funding, LUN III applications will automatically convert to ARPA funded projects.



3. **Off-Grid Residential Solar**: If community members need residential electric service and cannot be connected to a powerline, they may qualify for an off grid solar unit. Please encourage those community members to visit their local NTUA District Office any time after July 19, 2021, to submit an application for an off grid solar unit. The off grid solar program is available in all 110 chapters.

4. **Residential Waterline Extensions**: If Community members need water service to their homes and they might be within ½ mile from an NTUA water line, please encourage those community members to visit their local NTUA District Office and apply for the ARPA Water Service Project. There is no guarantee that the applicant will qualify or receive water service, but an assessment will be undertaken for consideration.

5. **Broadband Service**: If a Chapter is seeking additional or expanded Broadband service for their communities, please contact Monroe Keedo at monroek@ntua.com. Mr. Keedo will provide information on existing and proposed new service locations, including new towers and fiber optic buildouts. Community members and small businesses seeking broadband services can contact NTUA/NTUAW for information on new residential and small business services. NTUA/NTUAW also offers Wireless Hotspots free of charge in key locations to assist with combatting challenges cause by the pandemic. For more information, please visit www.choice-wireless.com

6. Emergency Broadband Benefit Program:

NTUA Wireless launched the Emergency Broadband Benefit (EBB) program on May 17, 2021, for customers struggling to afford internet services during the COVID-19 pandemic. EBB is a Federal Communications Commission program that provides up to \$50 per month towards broadband services for eligible households and up to \$75 per month for households on qualifying tribal lands.

Households can utilize the EBB if they have an income that is at or below 135 percent of the federal poverty guidelines or participate in certain assistance programs such as SNAP, Medicaid or Lifeline; if they are approved to receive benefits under the free and reduced-price school lunch program or the school breakfast program, including the USDA Community Eligibility Provision in the 2019-2020 or 2020- 2021 school year; and other need based criteria.

Qualifying customers for the EBB benefit will receive true broadband service, as opposed to only EBB hotspot services offered by other wireless service providers on the Navajo Nation. NTUA Wireless has also waived the installation fee and qualifying customers will receive free service for a minimum of six months and longer possibly if the federal funding allows.

Customers will have the opportunity to sign a contract with NTUA Wireless to continue services at the end of the six months free period or terminate the service without penalty. Please encourage families to inquire about this program. The EBB benefit is temporary and will expire when funding is depleted or six months after the U.S. Department of Health and Human Services declares an end to the COVID-19 emergency. In the first month of the EBB program, 398 families are already receiving the benefits of this program.

Interested parties may visit www.choice-wireless.com, call 928-730-2273, or visit their local Choice NTUA Wireless store to find out more information and apply for this program.