Grant Request Number	GRN-001019
Funding Program Name	Middle Mile Broadband Infrastructure Grant Program
Funding Request Name	Development Authority of the North Country - Middle Mile - GRN-001019
Applying Organization	Development Authority of the North Country
Applicant Name	Michelle Capone

Primary Applicant Type

Identify the primary applicant type:

Partnership

———

Primary Entity Type

Type of entity: Primary entity type, (A) a State, political subdivision of a State, Tribal government, technology company, electric utility, utility cooperative, public utility district, telecommunications company, telecommunications cooperative, nonprofit foundation, nonprofit corporation, nonprofit institution, nonprofit association, regional planning council, Native entity, or economic development authority; or (B) a partnership of two (2) or more entities described in (A).

What is the primary applicant's entity type?

Economic Development Authority

———

Partner Entity Type

Identify the other entities in the partnership:

Electric Utility

———

Is parent/owner of applicant a foreign entity?

No

———

Managerial Capability

Applicants shall submit to the Assistant Secretary one-page resumes for (a) all key management personnel and (b) all key personnel of subcontractors or other entities that will play substantial roles in building, managing, or operating the middle mile network built using Middle Mile Grant (MMG)

Program funding.

Key Personnel - Adam Murray; National Grid; Diversity, Equity, and Inclusion; adam.murray@nationalgrid.com
KeyPersonnel_Resume_Adam_Murray
———
Managerial Capability

Applicants shall submit to the Assistant Secretary one-page resumes for (a) all key management personnel and (b) all key personnel of subcontractors or other entities that will play substantial roles in building, managing, or operating the middle mile network built using Middle Mile Grant (MMG) Program funding.

Key Personnel - Adam Sayre; National Grid; Project Manager; adam.sayre@nationalgrid.com
KeyPersonnel_Resume_Adam_Sayre
———
Managerial Capability

Applicants shall submit to the Assistant Secretary one-page resumes for (a) all key management personnel and (b) all key personnel of subcontractors or other entities that will play substantial roles in building, managing, or operating the middle mile network built using Middle Mile Grant (MMG) Program funding.

Key Personnel - Calr Farone Jr.; Development Authority of the North Country; Chief Executive Officer; cfarone@danc.org
KeyPersonnel_Resume_Calr_Farone Jr.
———
Managerial Capability

Applicants shall submit to the Assistant Secretary one-page resumes for (a) all key management personnel and (b) all key personnel of subcontractors or other entities that will play substantial roles in building, managing, or operating the middle mile network built using Middle Mile Grant (MMG) Program funding.

Key Personnel - Carmen Mingolelli; National Grid; Critical National Infrastructure Security Subject Matter Expert; carmen.mingolelli1@nationalgrid.com
KeyPersonnel_Resume_Carmen_Mingolelli
———
Managerial Capability

Applicants shall submit to the Assistant Secretary one-page resumes for (a) all key management personnel and (b) all key personnel of subcontractors or other entities that will play substantial roles

in building, managing, or operating the middle mile network built using Middle Mile Grant (MMG) Program funding.

Key Personnel - Carrie Tuttle; Development Authority of the North Country; Project Officer; ctuttle@danc.org
KeyPersonnel_Resume_Carrie_Tuttle
———
Managerial Capability

Applicants shall submit to the Assistant Secretary one-page resumes for (a) all key management personnel and (b) all key personnel of subcontractors or other entities that will play substantial roles in building, managing, or operating the middle mile network built using Middle Mile Grant (MMG) Program funding.

Key Personnel - David Wolf; Development Authority of the North Country; Project Lead; dwolf@danc.org
KeyPersonnel_Resume_David_Wolf
———
Managerial Capability

Applicants shall submit to the Assistant Secretary one-page resumes for (a) all key management personnel and (b) all key personnel of subcontractors or other entities that will play substantial roles in building, managing, or operating the middle mile network built using Middle Mile Grant (MMG) Program funding.

Key Personnel - Gideon Boakye-Ansah; National Grid; Operational Technology Subject Matter Expert; Gideon.Boakye-Ansah@nationalgrid.com
KeyPersonnel_Resume_Gideon_Boakye-Ansah
———
Managerial Capability

Applicants shall submit to the Assistant Secretary one-page resumes for (a) all key management personnel and (b) all key personnel of subcontractors or other entities that will play substantial roles in building, managing, or operating the middle mile network built using Middle Mile Grant (MMG) Program funding.

Key Personnel - Jennifer Staples; Development Authority of the North Country; Financial; jstaples@danc.org
KeyPersonnel_Resume_Jennifer_Staples
———
Managerial Capability

Applicants shall submit to the Assistant Secretary one-page resumes for (a) all key management personnel and (b) all key personnel of subcontractors or other entities that will play substantial roles in building, managing, or operating the middle mile network built using Middle Mile Grant (MMG) Program funding.

Key Personnel - john dzialo; National Grid; Technical Lead; john.dzialo@nationalgrid.com
KeyPersonnel_Resume_john_dzialo
———
Managerial Capability

Applicants shall submit to the Assistant Secretary one-page resumes for (a) all key management personnel and (b) all key personnel of subcontractors or other entities that will play substantial roles in building, managing, or operating the middle mile network built using Middle Mile Grant (MMG) Program funding.

Key Personnel - Ke Qui; National Grid; New York Telecom Subject Matter Expert; Ke.Qui@nationalgrid.com
KeyPersonnel_Resume_Ke_Qui
———
Managerial Capability

Applicants shall submit to the Assistant Secretary one-page resumes for (a) all key management personnel and (b) all key personnel of subcontractors or other entities that will play substantial roles in building, managing, or operating the middle mile network built using Middle Mile Grant (MMG) Program funding.

Key Personnel - Mark Borte; Development Authority of the North Country; Network Design & Telecom Design; mborte@danc.org
KeyPersonnel_Resume_Mark_Borte
———
Managerial Capability

Applicants shall submit to the Assistant Secretary one-page resumes for (a) all key management personnel and (b) all key personnel of subcontractors or other entities that will play substantial roles in building, managing, or operating the middle mile network built using Middle Mile Grant (MMG) Program funding.

Key Personnel - Mark Thompson; National Grid; Project Lead; mark.thompson2@nationalgrid.com
KeyPersonnel_Resume_Mark_Thompson
———
Managerial Capability

Applicants shall submit to the Assistant Secretary one-page resumes for (a) all key management personnel and (b) all key personnel of subcontractors or other entities that will play substantial roles in building, managing, or operating the middle mile network built using Middle Mile Grant (MMG) Program funding.

Key Personnel - Michelle Capone; Development Authority of the North Country; Project Manager/Grant Administrator; mcapone@danc.org
KeyPersonnel_Resume_Michelle_Capone
———
Managerial Capability

Applicants shall submit to the Assistant Secretary one-page resumes for (a) all key management personnel and (b) all key personnel of subcontractors or other entities that will play substantial roles in building, managing, or operating the middle mile network built using Middle Mile Grant (MMG) Program funding.

Key Personnel - Natasha Deschene; National Grid; Project Officer; natasha.deschene@nationalgrid.com
KeyPersonnel_Resume_Natasha_Deschene
———
Managerial Capability

Applicants shall submit to the Assistant Secretary one-page resumes for (a) all key management personnel and (b) all key personnel of subcontractors or other entities that will play substantial roles in building, managing, or operating the middle mile network built using Middle Mile Grant (MMG) Program funding.

Key Personnel - Patrick Harrison; National Grid; Attachment Subject Matter Expert; Patrick.Harrison@nationalgrid.com
KeyPersonnel_Resume_Patrick_Harrison
———
Managerial Capability

Applicants shall submit to the Assistant Secretary one-page resumes for (a) all key management personnel and (b) all key personnel of subcontractors or other entities that will play substantial roles in building, managing, or operating the middle mile network built using Middle Mile Grant (MMG) Program funding.

Key Personnel - Ricahrd Forgensi; National Grid; Make-Ready Design; richard.forgensi@nationalgrid.com
KeyPersonnel_Resume_Ricahrd_Forgensi
———

Managerial Capability

Applicants shall submit to the Assistant Secretary one-page resumes for (a) all key management personnel and (b) all key personnel of subcontractors or other entities that will play substantial roles in building, managing, or operating the middle mile network built using Middle Mile Grant (MMG) Program funding.

Key Personnel - Robert Durantini; Development Authority of the North Country; Make-Ready; rdurantini@danc.org
KeyPersonnel_Resume_Robert_Durantini
———
Managerial Capability

Applicants shall submit to the Assistant Secretary one-page resumes for (a) all key management personnel and (b) all key personnel of subcontractors or other entities that will play substantial roles in building, managing, or operating the middle mile network built using Middle Mile Grant (MMG) Program funding.

Key Personnel - Stephen Smithers; Development Authority of the North Country; Network Design & Telecom Design; ssmithers@danc.org
KeyPersonnel_Resume_Stephen _Smithers
———
Managerial Capability

Applicants shall submit to the Assistant Secretary one-page resumes for (a) all key management personnel and (b) all key personnel of subcontractors or other entities that will play substantial roles in building, managing, or operating the middle mile network built using Middle Mile Grant (MMG) Program funding.

Key Personnel - Tim Field; Development Authority of the North Country; Operational Technology Cybersecurity; tfield@danc.org
KeyPersonnel_Resume_Tim_Field
———
Managerial Capability

Applicants shall submit to the Assistant Secretary one-page resumes for (a) all key management personnel and (b) all key personnel of subcontractors or other entities that will play substantial roles in building, managing, or operating the middle mile network built using Middle Mile Grant (MMG) Program funding.

Key Personnel - Tracy Miller; National Grid; Make-Ready, Environmental & Permitting; tracy.miller@nationalgrid.com

KeyPersonnel_Resume_Tracy_Miller
———

Managerial Capability

Applicants shall submit to the Assistant Secretary one-page resumes for (a) all key management personnel and (b) all key personnel of subcontractors or other entities that will play substantial roles in building, managing, or operating the middle mile network built using Middle Mile Grant (MMG) Program funding.

Key Personnel - Walter Wojtanowski; National Grid; Director, Make-Ready Construction; Walter.Wojtanowski@nationalgrid.com
KeyPersonnel_Resume_Walter_Wojtanowski
———

Organizational Charts

Each applicant shall submit any necessary organizational chart(s) detailing all of its parent companies, subsidiaries, and affiliates.
This upload section should also be used for any letters of support from the organizations that will be involved in the project as a community stakeholder.

Organizational Charts-09-29-2022 03-56-Development Authority of the North Count-GRN-001019.pdf
———

Organizational Details

Each applicant must also provide a narrative describing the applicant's readiness to manage a middle mile broadband network. This narrative should describe the experience and qualifications of key management set to undertake this project, the applicant's experience undertaking projects of similar size and scope, recent and upcoming organizational changes including mergers and acquisitions, relevant organizational policies, and ownership information consistent with 47 CFR § 1.2112.

This narrative shall denote who will own the assets at the end of award period. This response is limited to 6000 characters as an open field narrative.

Development Authority of the North Country (DANC) is a NYS public authority that owns and operates a carrier class, middle-mile open access telecom network (OATN) that provides transport services only for telecom carriers, with a backbone that stretches 2,000 miles across northern NYS with connections to carrier collocation facilities in Syracuse, Albany and New York City and 32 central offices. The OATN connects many community anchor institutions including two large telemedicine and education networks and over 150 cell tower back haul circuits.

DANC also owns and operates water/sewer lines and a regional landfill. It utilizes its finance, engineering, and regional development staffs across its divisions to effectively and efficiently

administer grants, complete back-office billing and admin activities, and to successfully manage construction projects on time and within budget.

DANC's Telecom Division has been in existence since 2003. The experienced staff runs all facets of the OATN from outside plant to system networks to security. Key management for DANC include:
• David Wolf, Telecom Division Dir.—over 38 years' experience working in telecommunications technology, 14 years with DANC.
• Mark Borte, Telecom Chief Technology Officer—over 26 years of experience working in telecommunications' engineering and operations with a wide variety of equipment including Nortel, Lucent and Cisco SONET and DWDM platforms—certified PMP, 17 years with DANC.
• Robert Durantini, Jr., Dir. of Outside Plant Engineering & Construction—over 40 years of experience with outside plant engineering having worked for Verizon Communications—certified PMP, 19 years with DANC.
• Stephen Smithers, Director of Network Engineering—over 27 years of experience working in systems and network engineering—extensive experience with ATM, Token-Ring, 10/100/1000 Ethernet, Routing, Switching, Wireless Ethernet, and Frame Relay—17 years with DANC.
• Tim Field, Director of Network Management and Security—over 23 years of experience in network engineering and operations, 17 years with DANC.

DANC has partnered with National Grid (NG) for this project. NG is a division of NG UK, one of the largest investor-owned energy companies in the US. The partnership between DANC and NG leverages pre-existing infrastructure including utility poles, easements and rights-of-way, and engages two professional staffs to complete the project in a timely manner.

NG's professional staff will oversee the majority of the make-ready work for this project and brings significant experience in large-scale utility projects. Resumes for additional staff are included.

Key management for NG are:
• Natasha Deschene, PE, VP, Electric Asset Management & Engineering for NYS—responsible for approx. 53,000 circuit miles of transmission and distribution lines and 700 substations.
• Mark Thompson, PE, PMP, Dir.–Grid Modernization—significant experience with operational telecom, advanced distribution technologies, and digitalization of substations.
• Adam Sayre-Project Manager—more than eight years of diverse financial management experience; expert-level knowledge of the planning, programming, budgeting, and execution processes.
• John Dzialo, Principal Engineer-Telecom Engineering—wireless network engineering director with experience in the design, development, and operation of large-scale commercial, government, and critical infrastructure networks.
• Patrick Harrison, Manager of Third-Party Attachments—implemented numerous large-scale broadband deployment and make-ready initiatives resulting in increased operational effectiveness within the engineering and ISP organizations.
• Gideon Boakye-Ansah, Principal Engineer-Grid Modernization—electrical telecom engineer with 13

years of experience in deployments, network design, and electrical service design; extensive work in evaluating, updating, and expanding critical telecom infrastructure.

Both DANC and NG have significant experience in undertaking capital projects of similar size. DANC is a Local Development District for the federal Northern Border Regional Commission. Broadband projects undertaken by DANC in recent years include:
• $8.9 M from FCC/USAC for a telemedicine grant connecting 49 healthcare sites.
• $2.2 M in NYS Public Emergency Grant to link 13 County 911 centers.
• $1.4 M in 2022 through a NYS Pilot Program with the New York Power Authority to build last-mile services with a local ISP.
• $200,000 federal NBRC grant in Tupper Lake to create a local network.

NG has also undertaken projects of similar size facilitating application intake, design review, make ready inspections, license and coordination of 3rd party attachers. Projects include:
• Broadband For All Project in NY that included approx. 80k NG distribution pole attachments.
• Spectrum broadband expansion whereby Spectrum provided broadband access to 145K homes in NG's service territory. NG assisted with ~130K distribution pole attachments.

DANC will own most of the new infrastructure upon completion of the project with the exception of the part that covers Fulton-Montgomery-southern Herkimer Counties (identified as Segment #12) which will be owned by Northland Networks Ltd. (NNL) A signed MOU with Northland is attached.

As a NYS public authority, DANC, the applicant, acknowledges that none of the requirements set forth in 47 CFR §1.2112(a)(1)-(7) apply to it. NNL, which will own Segment #12 only, is 100% owned by Northland Telephone Systems, Ltd (NTS), and indirectly owned by Jeremiah O. McCarthy Irrevocable Trust #5 (Trust) and James P. McCarthy (JPM). NTS is owned 64.52% by the Trust and 35.48% by JPM. NNL is a CLEC providing a variety of services to business customers in Central New York. NTS is an interexchange carrier providing toll telephone for primarily business customers, as well as to other carriers who resell this service. In this application, Northland Communications is a DBA for all Northland companies.
———
Form CD-511 (Certification Regarding Lobbying)

The applicant must upload a completed form that certifies that Federal funds have not and will not be used for lobbying in connection with this request for Federal financial assistance. A fillable Form CD-511 can be found in the MMG ZIP folder.

DANC CD 511 Revised-10-18-2022 12-32-Development Authority of the North Count-GRN-001019.pdf, DANC CD 511-09-30-2022 08-19-Development Authority of the North Count-GRN-001019.pdf
———

Standard Form-LLL (Disclosure of Lobbying Activities)

Standard Form-LLL must be completed and submitted for those applicants that need to disclose lobbying activities that have been secured to influence the outcome of a Federal action. A fillable Form SF-LLL can be found in the MMG ZIP folder.

DANC Standard Form LLL-09-30-2022 08-36-Development Authority of the North Count-GRN-001019.pdf

———

SAM.gov Registration

Applicants are asked to upload a screenshot of their SAM.gov registration.

EntityInformation-20220831-125839-08-31-2022 01-00-Development Authority of the North Count-GRN-001019.pdf

———

Executive Summary

Please describe how the applicant's proposal will advance the objectives of the MMG Program, as well as the specific objectives of outlined in the Notice of Funding Opportunity (NOFO);

An overview of the proposed route or service area(s), including information regarding rurality and socio-economic indicators in the area to be served by the proposed project.
This response is limited to 12000 characters as an open field narrative.

The Development Authority of the North Country (DANC) and National Grid (NG) are pleased to present this proposal for their public-private partnership project that extends middle-mile fiber optic infrastructure to bring broadband access to under- and un-served communities in Upstate New York. While the focus of this project is on bringing broadband access to communities lacking such access, the project brings many other benefits, including bolstering reliability and resilience for electricity service, increasing reach of emergency and health services, increasing grid cybersecurity, and improving connectivity for U.S. defense assets.

Much of the area to be served by this project is classified as deep poverty. While no area in Upstate NY had "persistent Deep Poverty," as defined by USDA, 6 counties in the proposed area had poverty rates above the NYS average in 2019. In addition, four of the service area counties qualify as USDA-defined ERS Deep Poverty for 2015–2019, with only one other county statewide also qualifying. As often happens, pervasive poverty is attended by under service or lack of service in technological infrastructure. According to the Sept 2021 report released by the Office of the New York State (NYS) Comptroller (used here rather than the data suggested by NTIA because the NYS data is both more granular and more recent), more than 64.2% of the population living in the North Country is considered rural, while 47.2% in the Mohawk Valley is considered rural. This report noted that the

nearly 20% of households in the North Country lack broadband access, the highest rate in the state. The report substantiates that the project area is rural, under/unserved, and of comparatively great need in contrast to other areas of NYS. In addition, these data were calculated based on 25/3 Mbps standard, so likely underrepresent the proportion lacking this NOFO's 100/100 Mbps standard.

DANC was created in 1985 by the New York State Legislature as a revenue-based public benefit corporation, independent of state operational funding, to develop and manage the infrastructure needed to support the reactivation of the 10th Mountain Division at Fort Drum, and to serve the common interests of Jefferson, Lewis and St. Lawrence counties. DANC has already worked with stakeholders in four project area counties and has collaborated with parties in multiple others. Through these interactions, DANC has seen the need for middle-mile infrastructure firsthand, and the hardships caused by its absence. DANC has used New York State data on broadband access to identify the under- and un-served communities in greatest need for broadband infrastructure.

For this project, DANC proposes 344 miles of middle-mile infrastructure, which has the potential to assist approximately 272 underserved and 10,335 unserved households within a 5-mile radius of the project. DANC has MOUs with local internet service providers SLIC Network Solutions, Mohawk Networks, and Northland Communications, to provide last-mile residential services. SLIC and Mohawk participate in the FCC's Affordable Connectivity Program allowing eligible households to receive a discount on their services. While the focus of this project is on bringing broadband access to communities lacking such access, the project brings many other benefits, including bolstering reliability and resilience of the electricity grid, increasing reach of emergency and health services, increasing grid cybersecurity, and improving connectivity for U.S. defense assets.

The proposed project will also ensure broadband access to 250 anchor Institutions within 1000', more than 500 anchor Institutions within 1 mile, and about 1500 Anchor Institutions within 5 miles of the project. The latter figures are included, which are beyond the scope of the NOFO, because they are within the range of interest of the ISPs with whom DANC collaborates, and those data illustrate the explosive increase in potential impact. These anchor institutions include substations, airports, county buildings, community centers, and schools. These primarily rural communities lack the resources necessary to attract for-profit providers, and development is unlikely to proceed without significant funding to offset the formidable expenses.

Partnership with National Grid

To overcome the financial and logistical challenges presented by a need of this magnitude, DANC has partnered with National Grid (NG), one of the largest investor-owned utilities in the United States and whose service areas comprise the project area. NG will deliver the make-ready support on its existing distribution infrastructure as a foundation for this project, which greatly increases the efficiency of the planned build-out and reduces make-ready costs. With the necessary funding, the team projects a two-year schedule for completion. In exchange for supporting the project, the middle-mile infrastructure will also support electric grid operational sites as community anchor institutions and critical national

infrastructure (CNI). The communication infrastructure will increase deployment of renewable energy resources, and improve grid modernization efforts, power system reliability, and the security of CNI communication.
The partnership with NG addresses middle-mile needs for the broadband users in rural communities and supports the future of the energy system which relies on robust and secure communication systems. Grid modernization, the energy transition to lower carbon sources, and increased risk of cyber threats are increasing the need for private fiber infrastructure as provided by this middle-mile proposal. Co-locating and building new communication infrastructure for both broadband use and NG's power system will deliver the most cost-effective solution in these rural areas. Additionally, as the pole owner, NG is uniquely positioned as partner to support the make-ready and attachment licenses, which mitigates one of the largest risks to this project.

DANC is also collaborating with the Saint Regis Mohawk Tribe and has attached letters of support from county governments included in this project. In coordination with these tribal and local governments, DANC is providing GIS mapping and communications and technical support to bring broadband connectivity to unserved and underserved communities.

Project Benefits and Sustainability
DANC's senior staff collaborated with network specialists and engineers at NG to define and refine the network plan. After defining an initial "dream" design, the team rigorously reviewed each portion and calculated relative cost versus value of resulting benefits and sought to streamline the design to achieve the greatest value for investment while touching a significant portion of the communities in need. The proposed project includes 572 anchor institutions within a one-mile radius, including schools, emergency response centers, and medical centers.

This project will extend DANC's Open Access Telecom Network (OATN), which affords access to any service provider wishing to contract with DANC to provide services to area communities. OATN also affords access to DANC's dark fiber for community anchor institutions and businesses. The project will increase telecommunications resilience for Fort Drum, a critical installation for national defense that serves multiple branches of the armed forces, by adding redundant broadband connections to the two circuits DANC currently provides. Redundant and resilient telecommunications are essential for military installations, and particularly those like Fort Drum that are charged with rapid deployment responsibilities. The largest single-site employer in northern New York State, Fort Drum trains almost 80,000 troops annually and houses 15,000 soldiers and family members along with the Northeast Regional Network Enterprise Center (NEC).

DANC is well-prepared for operation and maintenance of the middle-mile network once the project is complete. DANC already oversees and maintains its OATN network, with 2,000 miles of lines across northern New York State and connections to carrier collocation facilities in Syracuse, Albany, and New York City as well as 32 central offices. DANC will own most of the new infrastructure upon completion of the project. One of the 12 proposed routes will be owned by Northland Communications, and a

MOU for this arrangement is attached to the application.

Project Financial Analysis
DANC's final design for the project will cost $24,450,000. Of this, DANC proposes NTIA fund $14,547,750 and DANC and NG will contribute $9,902,250 (40.5% of total). This plan maximizes leveraging of existing infrastructure from both DANC and NG, such that no land, structures, or rights-of-way need to be acquired. The project adds 9 new interconnection points placed in existing municipal locations to keep the cost of new interconnects down. Approximately 83% of this grant will be applied directly to the construction of 344 miles of middle-mile fiber cable in northern New York State. Additional details of the financial calculations and cost breakdown can be found in the financial materials and narrative.

Conclusion
This project addresses critical needs in an underserved region. Using existing electrical distribution infrastructure, DANC and NG present a plan by which a public-private partnership can leverage the best strengths of each organization and reach communities with state-of-the-art telecommunications services that would otherwise be unlikely to be built, bolster service to a prominent national defense installation, and increase cybersecurity of critical infrastructure while also improving its reliability and resilience. The ratepayers in these regions benefit twice from the proposed project: they will be reached with broadband service, bridging the "digital divide" and improving their ability to enjoy the benefits of advanced telecommunication upon which America increasingly depends, and these same citizens will receive improved electric service with no change in rate.

Finally, these benefits will continue to be enjoyed for years. The system is designed to be both far-reaching and durable. Leaning on NG's existing infrastructure and applying DANC's middle-mile expertise affords assurance in the long-term operation of the network. NG monitors and maintains its millions of poles, proactively scanning for and diagnosing weaknesses to address them before they present a problem. This new network will be under that close supervision. Money dedicated to this grant will be applied directly to the deployment of this infrastructure, and the benefits from those grant dollars will be felt for decades to come. The assurance of the wisdom of the investment in this project is clear, and DANC and NG look forward to any points of clarification NTIA wishes to pursue, and to enjoy collaboration with NTIA in the years to come.
———

Level of Need

A description of the level of need in the proposed service area(s), including but not limited to communities considered unserved and/or underserved in the proposed service area(s), discussion of the competitive landscape in the area, variations among service areas if there are any, or the general economic conditions in the proposed funded service area.

This response is limited to 12000 characters as an open field narrative.

There is a need for high quality broadband in under- and unserved areas of the project area. In Sept 2021, the Office of the New York State (NYS) Comptroller issued a report on broadband availability, access and affordability. Broadband availability was based on 25/3 Mbps standard relied on by the FCC. The current standard is 100/100 Mbps. The report identified over 20,000 people without broadband in the North Country (ie Jefferson, Lewis, St. Lawrence, Essex, Franklin and Hamilton Counties) and another 18,500 without broadband in the Mohawk Valley (ie Oneida, Herkimer, Fulton and Montgomery Counties). Over 64.2% of the population living in the North Country is considered rural, while 47.2% in the Mohawk Valley is considered rural. This report also noted that the North Country had the highest share of households without broadband access in the state-19.3%-compared to a low of 9.2% in Long Island. The report substantiates that the project area is rural, under/unserved, and of comparatively great need in contrast to other areas of NYS. Considering that the basis for the data was a 25/3 Mbps standard it is likely these figures are higher when considering a 100/100 Mbps standard.

In addition to being rural and under/unserved, the project-area counties have higher than state average poverty rates. While no area in Upstate NY had persistent Deep Poverty, several counties had poverty rates above the NYS rate in 2019 of 14.1%. Montgomery (19.77%), St. Lawrence (17.87%), Franklin (17.78%), Oswego (17%), Oneida (15.47%), and Onondaga (14.11%) Counties all exceeded the state's rate. Based on USDA's ERS Deep Poverty for 2015-2019, Montgomery (9.3%), St. Lawrence (8.51%) Franklin (8.79%), and Oswego (8.36%) Counties had the highest percentages for Deep Poverty in the state outside of Tompkins County (12.2%). Due to the high poverty rates, competitive, open access broadband is necessary in order to encourage accessible, affordable and high-speed broadband for a significant portion of the low-income population.

DANC provides multiple services in these communities: dark fiber both on a leased and IRU basis; wavelength services from 1Gbps to 100 Gbps; ethernet service from 10 Mbps to 100 Gbps; SONET service from DS-1 to OC-192; and colocation services. DANC's interconnection facilities are carrier-neutral. DANC practices fiscally sustainable middle mile strategies and offers non-discriminatory interconnection to terrestrial and wireless last mile broadband providers and any other party making a bona fide request. The model has been successful in connecting many community anchor institutions including two large telemedicine networks, education networks, libraries, an Army installation, and over 150 cell tower back haul circuits, as well as stimulating last-mile residential builds. By opening up competition in the middle-mile broadband market, it has allowed for regional internet service providers like SLIC, Mohawk Networks, and others to provide cost-competitive, quality services that would not otherwise be available due to lack of competition.

DANC's Open Access Telecommunications Network (OATN) was developed in 2004 as a competitive middle-mile, open-access alternative to the private-carrier model. DANC's OATN backbone stretches 2,000 miles across northern NYS with 32 central offices and connections to carrier collocation facilities in Syracuse, Albany and New York City. The OATN allows for any service provider to enter into an agreement with DANC to provide internet services. In addition, it allows for any community anchor

institution or business to access dark fiber from DANC directly for secure, direct access to the internet and for operational security. DANC operates a transport-only network resulting in very low latency end -to-end. Since DANC does not connect to multiple routers, the latency is considerably lower than other providers in the area.

In order to spur last-mile builds and to lower costs, DANC has offered several options: Revenue-Share allows ISPs to use DANC cable for a percentage of the revenues as opposed to a fixed cost; Low-Cost Start-Up allows companies to begin services for $100/month for 500 Mbps to get started, increasing the price over a few years to allow the ISP to gain customers. This structure is typically used by wireless internet service providers and small start-ups. DANC will have MOUs to deliver residential last mile services if the grant is awarded with Northland Communications, SLIC Network Solutions, and Mohawk Network. In the MOUs, the ISPs commit to providing 1/1 GBPS to anchor institutions located within 1,000 feet of the middle mile infrastructure.

Spectrum is the major competitor in region while Frontier and Verizon are also present. The following is a brief overview of competition in the region. Note that information for Spectrum is harder to determine since the Charter/Time Warner merger resulted in the formation of Spectrum.

- Dark Fiber: DANC-leased and IRU; Frontier-unsure; Spectrum-not typically; Verizon-unsure.
- Wavelength: DANC-up to 100 GBPS; Frontier-up to 10 GBPS; Spectrum-yes; Verizon-yes.
- Ethernet: DANC-low cost; Frontier-expensive; Spectrum-yes; Verizon-expensive.
- SONET: DANC-yes; Frontier-yes; Spectrum-unsure; Verizon-$2,000/mo.
- Colocation: DANC-$500/mo for a rack; Frontier-$2,000/mo; Spectrum-no; Verizon-$2,000/mo.
- Revenue Share: DANC-yes; Frontier-no; Spectrum-no; Verizon-no, and limited in FIOS in the area.

DANC is partnering with National Grid (NG) for this NTIA Middle Mile Grant Program project. The partnership between DANC and NG allows for the efficient use of existing infrastructure, including utility poles, easements, and rights-of-way. This reduces overall make-ready and development costs. In addition, the partnership leverages two professional staffs to complete the project in a timely manner. We expect that the project will be completed within a two year window. The proposed project:

- Will provide approx. 344 miles of new middle-mile fiber in 12 counties across northern NYS including parts of Onondaga, Oswego, Oneida, Fulton, Montgomery, Herkimer, Hamilton, Jefferson, Lewis, St. Lawrence, Franklin, and Essex counties.
- Is identified by 12 areas on the map attached with the application. Section 1 in Essex County currently has approx. 422 unserved and will eventually connect with Section 5 in a future initiative not included in this application to provide significant and much needed redundancy for this area especially for the Action telemedicine network. Section 2 is an extension of the OATN with about 1,819 unserved in a 5-mile radius of the project in Lewis Co. Section 3 has about 2,288 unserved in this area of Oneida and Herkimer Counties. Section 4 will provide diversity for the St. Regis Mohawk Tribe and has 640 unserved in Franklin Co. Section 5 has 422 unserved in Essex County. Section 6 provides a diverse route from western NYS to major carriers in Syracuse and has 574 unserved in Oswego and Onondaga

Counties. Sections 7, 9, and 11 are builds in St. Lawrence County and assist about 1,701 unserved. Section 8 is in a remote area of Jefferson County and will assist about 454 unserved. Section 10 provides redundancy for Fort Drum, a US Army installation, and several anchor institutions including a regional hospital. Section 12 will be owned and operated by Northland Communications.

- Adds 9 new mini Central Offices/Access Points with core Ethernet gear pre-positioned for last-mile connections.
- Has 250 anchor institutions within 1,000 ft and 572 within 1-mile of the project. Most of these are electric substations (45), fire stations (35), places of worship (32), pharmacies (29), and schools (25). In addition, Section 4 of the project includes a diverse route for the St. Regis Mohawk Tribe, and Sections 6 and 10 provide much needed redundancy for Fort Drum, an Army installation.

In total, the proposed 344 miles of middle-mile infrastructure has the potential to assist approx. 272 underserved and 10,335 unserved households within a 5-mile radius of the project. DANC has MOUs with local internet service providers SLIC Network Solutions, Mohawk Networks, and Northland Communications, to provide last mile residential services. SLIC and Mohawk participate in the FCC's Affordable Connectivity Program allowing eligible households to receive a discount on their services.

In addition to addressing middle-mile needs for the broadband users in our communities, the partnership with NG addresses four pressing communications needs for the electric grid.

1. Lack of communication infrastructure to substation and aging/disconnection of existing communication from carrier networks. Throughout rural areas such as NNY, lack of broadband infrastructure for the community also means lack of communication systems for the utility. Real-time communication with a central control center is required to ensure a reliable, via monitoring alarms and maintenance parameters, and resilient power grid, enabling remote switching during disruptions caused by storms or other events. Without this communication infrastructure, technicians and operators need to travel great distances to these rural sites, which can drastically increase the amount of time to respond to power outages. To increase the challenge, over the last ten years, carriers around the world have been in a long-term transition from circuit-switched networks to packet IP-based technology. These legacy circuit-switched networks to the substations are being disconnected and alternative communication paths must be found.
2. The energy transition to lower carbon sources is causing an increased need for communication infrastructure. Conventional power system protection, which did not require communication, will not work when there is a high penetration of inverter-based sources such as solar, wind, and battery storage. Instead, communication-assisted protection systems are required so that devices can communicate in real-time to ensure safe and reliable operation of the power grid. A real-world example that will be addressed by this project is a battery energy storage system (BESS) that is being installed in Old Forge, NY. This BESS is being deployed to mitigate the need for an expansive and large system upgrade in the Adirondack Park. The BESS is inverter-based and provides very little fault current onto the power system, as such conventional protection systems will not work. The dark fiber provided under this grant will help this project by supporting communication-assisted protection relays on remote ends of the distribution circuit to communicate with each other.

3. Advancing grid modernization systems are enabling a more efficient, reliable, and resilient distribution grid. Some of these systems actively balance power factor to increase system efficiency and reduce the need for generation. Other grid modernization systems operate in a coordinated manner to automatically detect faults on the system, isolate these interruptions to a small portion of a feeder, and then restore power to remaining customers in less than 5 minutes. These distribution automation systems can have a major impact on reducing the impact of a distribution fault but require secure and reliable communication systems to ensure proper operation.
4. There is an increasing threat of cybersecurity attacks on critical national infrastructure such as the power grid. Private utility-owned communication networks, as is enabled with the dark fiber provided by this project, help to mitigate security risks.

No specific community benefit agreements have been signed, however, we anticipate locating 9 new interconnection points in municipal locations to deliver services for these new routes. DANC will work with each community to provide some local benefit (ie free services, new generators, etc.) however, this has not been finalized at the time of application.

———

State Collaboration Acknowledgement

NTIA strongly encourages prospective non-state applicants to coordinate and consult with the State Broadband Office or other coordinating body located in the jurisdiction in which the eligible entity proposes to deploy middle mile infrastructure to ensure that the proposal is consistent with the state's broadband plan and priorities. Please confirm collaboration and consultation.

Do you confirm collaboration and consultation with the appropriate organization?

Yes

———

State and Local Collaboration Narrative

Please provide information on the applicant's coordination with applicable State, Territory, Tribal, and local governments, including their awareness of the proposed project and any potential impact to respective service areas; and

Information regarding the applicant's involvement and coordination with community organizations or other relevant partners in the proposed service area.

This response is limited to 6000 characters as an open field narrative.

DANC and NG have coordinated effectively with federal, state and local officials; St. Regis Mohawk Reservation; Fort Drum; the NYS Broadband Office; and communities with anchor institutions. DANC/NG have briefed the NYS Broadband Office (ConnectAll Office) on the proposed project. A support letter from the ConnectAll office is included with the application as well as support letters

from NYS elected representatives Senator Joseph Griffo, 47th District; Senator Patty Ritchie, 48th District; Senator Dan Stec, 45th District; Assemblyman Mark Walczyk, 116th District; and Assemblyman Billy Jones, 115th District. The federal elected officials Senators Charles Schumer and Kirsten Gillibrand, and Congresswoman Elise Stefanik, NY-21, have been briefed about the proposed project and provided support letters. DANC briefed the St. Regis Mohawk Tribe and Fort Drum Garrison, and received support letters from both. DANC has support letters from a majority of the counties where the new network will be constructed including Jefferson, Franklin, St. Lawrence and Lewis.

DANC has received support letters from several communities with anchor institutions that will benefit by this grant. The Town of Morristown Supervisor provided a letter in support of the project as there are 5 anchor institutions in the town that may benefit by this project including a fire station. The Town of Colton Supervisor provided a support letter as there are 7 anchor institutions in the Town that may benefit by the project. These include fire stations, the municipal building, a library and a museum.

DANC has Memoranda of Understanding from ISPs SLIC Network Solutions, Mohawk Networks, and Northland Communications. They will provide last-mile services within the project area. Without this middle-mile infrastructure, it is cost-prohibitive for the ISPs to build last-mile fiber to the home. These agreements ensure that there are ISPs that will build last-mile if the project is funded.

DANC has a Partnership Agreement with NG. NG's substations are anchor institutions and many are classified as critical national infrastructure; several of these locations will benefit from the middle-mile project. The partnership with NG supports the future of the energy system. Robust and secure communication systems are essential for grid modernization and the transition to lower-carbon energy sources, and for mitigating the increasing risk of cyber threats. Increasing the resilience, efficiency, and security of the electric grid are essential pursuits and real products of this deployment of middle-mile broadband. Co-locating and building new communication infrastructure for both broadband use and the electric grid delivers the most cost-effective solution in these rural areas.

DANC has been working with committees comprising stakeholders in Jefferson, Lewis, St. Lawrence, Franklin, Hamilton and Essex Counties. Overwhelmingly, these groups are taking the NYS broadband data compiled by the NYS Broadband Office in 2022 to identify unserved and underserved areas. They are then using the data to identify strategies to fund middle-mile and last mile connections. DANC staff provides GIS mapping, grant writing, planning and technical services to assist the Counties in identifying telecom projects to meet their broadband needs. In addition, DANC received a grant from the Northern Border Regional Commission to assist with broadband planning in Franklin, Jefferson, Lewis and St. Lawrence Counties.

———

Will the project connect middle mile infrastructure to last mile networks that provide or plan to provide broadband service to households in unserved areas?

Yes

———

Is the project connecting non-contiguous trust lands?

No

———

Do you commit to offering wholesale broadband service at reasonable rates on a carrier-neutral basis?

Yes

———

The eligible entity adopts fiscally sustainable middle mile strategies. This strategy should be described in the Budget Narrative.

Do you attest to this?

Yes

———

The eligible entity commits to offering non-discriminatory interconnect to terrestrial and wireless last mile broadband providers and any other party making a bona fide request. This policy will be described in the Interconnect Policy.

Do you attest to this?

Yes

———

The eligible entity identifies specific terrestrial and wireless last mile broadband providers that have(i) expressed written interest in interconnecting with middle mile infrastructure planned to be deployed by the eligible entity; and ii) demonstrated sustainable business plans or adequate funding sources with respect to such interconnection. This may be demonstrated in the Level of Need narrative of the Exec Summary.

Do you attest to this?

Yes

———

The eligible entity has identified supplemental investments or in-kind support (such as waived franchise or permitting fees) that will accelerate the completion of the planned project. Such acceleration may be described in the Project Timeline narrative.

Do you attest to this?

Yes

———

The eligible entity has demonstrated that the middle mile infrastructure will benefit national security interests of the United States and the Department of Defense. The benefits may be explained in the Benefitting National Security Interests Narrative.

Do you attest to this?

Yes

———

Please describe:

This middle-mile project will increase redundancy and resiliency for several critical locations of national security interest including Fort Drum, the Eastern Air Defense Sector (EADS), Hancock Air Base, and the electric grid.

Fort Drum is home to the Army's 10th Mountain Division (Light Infantry) as well as other tenants including Air Force. Fort Drum is the only power projection platform in the Northeast U.S. and supports the Army's Rapid Expeditionary Deployment Initiative. It is home to the Northeast Regional Network Enterprise Center (NEC) which supports the northeast U.S. Fort Drum is the largest single-site employer in northern NYS. Hancock Field Air National Guard Base is home to the 174th Attack Wing that primarily performs the Remotely Piloted Aircraft mission. EADS is an Air Combat Command (ACC), Rome, unit permanently assigned to the North American Aerospace Defense Command. Fort Drum and Hancock Field ANG provide support to EADS.

DANC currently has two diverse fiber routes onto Fort Drum and connects Fort Drum to EADS and Hancock Air Base. This project will provide a third alternate route out of Fort Drum and a direct connection via diverse routes to Hancock Air Base.

An additional key tenant of this middle-mile project is to provide private, secure communication systems for the electric transmission and distribution system which are critical national infrastructure. This critical national infrastructure provides power and natural gas to the above-mentioned defense facilities as well as other essential services throughout NNY. The project will enable National Grid to transition communication from public carrier networks to a private telecom network utilizing dark fiber. Private telecom networks fully owned by the electric utility are physically isolated from potential cyber threats present on public carrier networks which also host outward facing networks connected to the internet.

———

Project Duration

Number of Years

Project Timeline Narrative

The narrative requires the Applicant to describe a project with critical path, including key milestones for implementation of the project, preparations, and risk factors; and a capital investment schedule evidencing that the applicant will complete build-out and the initiation of service within five years of the date on which the entity receives the grant and will meet interim buildout requirements set forth herein and in any other binding document.
If the project is able to be accelerated with supplemental investments or in-kind support to meet a statutory purpose, this should be explained.

This response is limited to 6000 characters as an open field narrative.

DANC and NG propose to complete the project within 2 years of award. While this timeline is ambitious, there are several factors that will enable the completion of the project in the 2 year timeframe.

The typical critical path items that must be considered when implementing a fiber construction project include: access to capital in a timely manner, network design and engineering, securing all relevant licenses and agreements, site preparation, inside plant deployment, outside plant deployment, deployment of business and operational support systems, network testing, and an operational network. Delay in any of these critical path items will result in project completion delays. DANC and NG have internal and external resources and plans in place to reduce the impact of any critical path items. It should be noted that the submitted project timeline reflects business days for completion of project objectives.

An important piece for this project to move forward in a timely manner is access to capital. NG has committed to provide the matching capital. DANC will provide sufficient cash to commence the project immediately using a combination of grant draws and NG match to assure there are no delays in the project due to lack of funds. (see attached letter of financial support.)

1. Network Design and Engineering: DANC has internal engineers that have evaluated the routes and completed preliminary design work. Final route design and engineering will be accomplished using our team of 5 outside plant engineers. GIS will be utilized for both the pole licensing and design process. DANC internal engineers will be supported by its GIS Staff to assure all data is collected timely. Estimate 14 wks to complete.

2. Securing All Relevant Licenses and Agreements/Environmental Review and Permitting: Both DANC and NG have internal engineers that are familiar with the environmental review and permitting process. These tasks will be completed with internal personnel supplemented by external engineering

firms. Estimate 18 wks to complete.

3. Site Preparation: There will be no new building sites as existing poles are being utilized. There is, however, make-ready which is required to secure the space on the poles. One of the longer term items in the construction of fiber cable is the pole licensing and make-ready process. NG is the sole or joint pole owner for the majority of the fiber construction. NG has agreed to deliver all electric make-ready work in coordination with OSP schedule to allow parallel construction. Having NG focus on make-ready saves significant engineering time for DANC. DANC will focus on the design, construction and RFP development. The project schedule shows 365 days for pole licensing, however it is anticipated this will be reduced significantly by having NG manage the process. Estimate 48 wks to complete. Project will be at 40% completion.

An important part of the timeline is the procurement process. Typically, the procurement process is not a significant lead time for a project of this size. However, procuring equipment, fiber, and construction materials will be a significant critical path item due to supply chain issues and increased demand due to federal and state grants. The strategy for this project is to begin procurement immediately upon grant award. DANC will develop a bill of materials for construction with Tilson that will be ready to go within weeks of grant issuance. DANC will utilize its dedicated procurement officer and its administrative team to assist with the procurement, allowing its engineers and GIS teams to begin the design, engineering, and licensing immediately. The goal is to RFP the materials within 8 wks of grant award. Upon completion of procuring contractors to complete the outside plant deployment/construction the project will be at 60% completion.

4. Inside Plant Deployment: The inside plant deployment includes the build out of 9 new locations with power, fire suppression, HVAC, relay racks, and generators. This work will be outsourced to several vendors that have expertise in each area. The inside plant work also includes installing the new Ethernet and DWDM electronics. This work will be completed by DANC staff and will be completed in 4 weeks. Estimate 10 wks total to complete all tasks.

5. Outside Plant Deployment/Construction: DANC will break the build into 8 distinct projects which will allow multiple construction teams to be working at one time and reduce the total construction timeframe. Over the past several years, DANC has worked with many large construction forces and anticipates 5 to 6 vendors that will bid on these projects. In addition, DANC will be partnering with 2 ISP's- Northland Communications and SLIC Network Solutions-who have their own construction forces. The plan is to work with them on several routes to allow for additional construction forces. DANC staff will manage the project. Estimate 40 wks to complete. Construction at 80% completion.

6. Deployment of Business and Operational Support Systems: DANC does not anticipate acquiring any new business or operational support systems for this project. However, DANC's staff does have to integrate the new network with its existing operational support system including its fiber assignment database, network route schematics, network monitoring system, trouble procedures, and billing and

provisioning systems. Estimate 4 wks to complete.

7. Network Testing: This phase of the project will be performed by DANC staff and includes: final inspection of all new routes, as-built review, and updating all systems to reflect as-builts, performing characterization testing on all new fiber and inputting data into the fiber management system, and testing the new Ethernet and DWDM gear. Estimate 4 wks to complete.

8. Network Operational-Propose 2 years to complete the project. Project 100% Complete.

———

Project Timeline File

Applicants are asked to upload a timeline which will denote key milestones for implementation of the project, including but not limited to field survey, network design, equipment/material procurement, environmental assessment, permitting, construction, network testing, network activation and completion.

Timeline-09-28-2022 01-06-Development Authority of the North Count-GRN-001019.pdf

———

Is an extension being requested?

No

———

Special Rules for Tribal Governments and Native Entities

The Infrastructure Investment and Jobs Act permits the Assistant Secretary, in consultation with Tribal governments and Native entities, to waive, or specify alternative requirements, in connection with most directives governing the MMG Program if the Assistant Secretary finds that waiver or modification of the requirement is necessary for (a) the effective delivery and administration of middle mile grants to Tribal governments or (b) the construction, improvement, or acquisition of middle mile infrastructure on trust land.

Is a waiver or alternative requirements requested?

No

———

Fair Labor Practices

Applicants must have a demonstrated record of and plans to be in compliance with federal labor and employment laws as described in III.H in the NOFO. This will help ensure that projects are carried out in accordance with the law, assist NTIA in ensuring that a prospective awardee is capable of carrying out activities funded by an award in a competent manner in compliance with all applicable federal, state, and local laws; and promote the effective and efficient completion of high-quality middle mile

broadband infrastructure projects by ensuring a reliable supply of skilled workers and minimizing disruptive and costly delays.

This response is limited to 6000 characters as an open field narrative.

DANC, as lead applicant, is partnering with National Grid (NG) for this MMG project. In reference to Fair Labor Practices in this application, documentation and certifications are provided by DANC, NG as partner and contractor, and Northland Communications as the only other known contractor. All other contractors are not known at this time. In entering into agreements with DANC all contractors, including NG and Northland, will adhere to DANC's contract requirements that include fair labor.

As a public utility, DANC manages many public works projects not only in telecom, but water, wastewater, and solid waste management. It is familiar with all federal and state regulations relating to Fair Labor, safety, and prevailing wages and/or Davis Bacon Act requirements.

DANC will use its internal staff for grant management, engineering, design, make-ready, project management, test and turn-up. DANC has a robust finance department that handles all back-office operations including billing, vendor payments, and financial/audit oversight for grants. Staff being used on this project are properly trained and skilled professionals in the field of telecom as demonstrated by their resumes. DANC has a comprehensive Personnel Policy that can be found at https://www.danc.org/GovernanceRelatedDocuments.

DANC will be responsible for fiber construction which will be competitively bid. The majority of work for a project such as this is done by unionized electrical workers or CWA represented telecommunication contractors. Northland Communications will be a contractor to DANC to construct, own and operate Segment 12.

NG will deliver most of the make-ready work including distribution design, construction, environmental, and project management. NG staff are experienced in supporting electric distribution infrastructure replacing thousands of poles annually. Distribution design and in-house construction are represented by IBEW Local 97. Any make-ready construction work which is outsourced will be competitively bid to contractors who are represented by IBEW Local 1249. NG has a history of supporting fair labor regulations at both state and federal government levels. NG also has several mechanisms for compliance with OSHA requirements including: employee safety handbook; Annual Expert Training & Annual Regulatory Training; safety compliance training; Safety Policies & Programs; and OSHA 300 & 300 A logs.

DANC, NG and Northland are in compliance with federal labor and employment laws as evidenced by the certifications attached to the application. Neither DANC, NG nor Northland are aware of any instances in which it, its contractors or subcontractors working on its telecommunications projects have been found to have violations with regulations such as OSHA, the Fair Labor Standards Act, or any

other applicable labor and employment laws for the preceding three years.

DANC has significant experience in managing projects of similar size utilizing its own workforce, contractors and subcontractors. Projects include a recent Northern Border Regional Commission grant in Tupper Lake; a dark fiber build with Avangrid; and a fiber overlash with Syracuse Utilities. NG received 178 third party applications between Oct. 2016 and March 2022 with the MBI LastMile project and is in the process of completing work associated with the Rural Digital Opportunity Fund. In the process of managing these projects: payroll information is compiled and verified to confirm proper wages are being paid; OSHA 10 cards are verified; safety teams are established and safety protocol followed per contractor requirements.

DANC has comprehensive fair labor and employment language in its procurement process. The template IFB is attached to the application. For this award, Davis-Bacon wages will be paid. Contractors will submit within 30 days after issuance of its first payroll and every 30 days thereafter, a transcript of the original payroll record, as provided by Davis Bacon Act. Contractors and subcontractors for work completed on this job will provide DANC a classification of work schedule. Such laborers and mechanics shall be paid the appropriate wage rate and fringe benefits on the wage determination for the classification of work actually performed, without regard to skill. Laborers or mechanics performing work in more than one classification may be compensated at the rate specified for each classification for the time actually worked therein provided that the employer's payroll records accurately set forth the time spent in each classification in which work is performed. The wage determination (including any additional classification and wage rates), Davis–Bacon poster, EEO, DOL, and Worker's Compensation materials shall be posted at all times by the Contractor and its subcontractors at the site of the work clearly visible to the workers. The contracting officer shall require that any class of laborers or mechanics, including helpers, which is not listed in the wage determination and which is to be employed under the Contract shall be classified in conformance with the wage determination. DANC receives staffing plans from vendors on construction projects, and as a standard practice, registers all bids with the NYS DOL.

The Contractor agrees to non-discrimination and labor practices in accordance with Section 220-e of Article 8 of the State Labor Law; legal day's work in accordance with Section 220 (2) of the State Labor Law; verification of amounts due for wages and supplements; Equal Employment Opportunity requirements; health and safety requirements in compliance with the US Dept of Labor Safety and Health Regs for construction under OSHA and under Section 107 of the Contract Work Hours and Safety Standard Act; OSHA 10 certification; and safety and first aid. DANC requires that all contractors provide copies of their OSHA 10 certificates prior to working on the job. These criteria are all incorporated into final contract docs.

———

Officer Certification

In order for NTIA to evaluate an applicant's demonstrated record of and plans to be in compliance

with federal labor and employment laws, each applicant must provide examples of items described in III.H in the NOFO. Applicants are asked to upload a Certification from an Officer/Director-level employee (or equivalent) of the applicant evidencing consistent past compliance with federal labor and employment laws by the applicant, as well as contractors and subcontractors.

Northland Fair Labor Certfication-09-30-2022 08-40-Development Authority of the North Count-GRN-001019.pdf, Fair Labor Upload Additional Info-09-30-2022 08-45-Development Authority of the North Count-GRN-001019.pdf, NG Fair Labor_Cert-09-30-2022 08-38-Development Authority of the North Count-GRN-001019.pdf, DANC Fair Labor Certfication-09-30-2022 08-39-Development Authority of the North Count-GRN-001019.pdf

———

Highly Skilled Workforce

To ensure that applicants have the technical and operational capacity to carry out the project, applicants must submit a plan for ensuring that the project workforce will be an appropriately skilled and credentialed workforce (including by the applicant and each of its contractors and subcontractors). The plan for a highly skilled workforce should include the information described in III.I in the NOFO.

This response is limited to 6
000 characters as an open field narrative.

As a NYS public benefit corporation and public utility, DANC manages many public works projects not only in telecom, but water, wastewater, and solid waste management. It is familiar with all federal and state regulations relating to Fair Labor, safety, and prevailing wages and/or Davis Bacon Act requirements. DANC requires safety meetings, and will collect OSHA 10-hour certificates from all contractors.

DANC will use its internal staff for grant management, and all engineering, design, project management, test and turn-up. Staff being used on this project are properly trained and skilled professionals in the field of telecom as demonstrated by their resumes. DANC's Director of Network Facilities is its certifying officer for this grant.

DANC is responsible for bidding and managing fiber construction. All fiber construction work will be competitively bid. The majority of work for a project such as this is by unionized electrical workers or CWA represented telecom contractors. Davis-Bacon wages will be paid on this contract and DANC will collect payroll to verify. Contractors and subcontractors for work completed on this job will provide DANC a classification of work schedule. Such laborers and mechanics shall be paid the appropriate wage rate and fringe benefits on the wage determination for the classification of work actually performed, without regard to skill, except as provided in 29 CFR § 5.5(a)(4). The wage determination (including any additional classification and wage rates) and the Davis–Bacon poster (WH–1321) shall be

posted at all times by the Contractor and its Subcontractors at the site of the work in a prominent and accessible place where it can be easily seen by the workers. DANC's certifying officer shall require that any class of laborers or mechanics, including helpers, which is not listed in the wage determination and which is to be employed under the Contract shall be classified in conformance with the wage determination.

DANC will require that Contractors shall comply with the U.S. Department of Labor Safety and Health Regulations for construction promulgated under the Occupational Safety and Health Act of 1970 (PL 91 -596) and under Section 107 of the Contract Work Hours and Safety Standard Act (PL 91-54), latest revisions.

In order to protect the general public and the lives and health of Contractor's employees under the Contract, the Contractor shall comply with all pertinent provisions of the latest issues of the Federal Register, Bureau of Labor Standards, Safety and Health Regulations; New York State Industrial Code Rule 30 pertaining to Tunneling Operations; New York State Industrial Code Rule 23 pertaining to Trenching Operations; and the "Manual of Accident Prevention in Construction" issued by the Associated General Contractors of America, Inc., and shall maintain an accurate record of all cases of death, occupational disease, and injury requiring medical attention or causing loss of time from work, arising out of and in the course of employment on Work under this Contract. In case of a conflict between the above noted authorities, the most stringent shall prevail.

Contractors shall have on the project site at all times, while work is in progress, at least one person skilled in safety and health procedures and familiar with state and federal safety and health regulations whose responsibility shall be to observe methods and procedures. Contractor shall have the duty and authority to stop and/or correct all unsafe and unhealthy conditions.

DANC will contract with Northland Communications to construct, own and operate Segment 12 (MOU attached). Northland will be a contractor to DANC and will follow DANC's contract requirements. Northland will use its own workforce to complete the project. It has a very robust training program to ensure worker skills.

NG is responsible for delivery of the make-ready work for this project. NG staff will be responsible for the distribution system design, construction, environmental compliance, and project management of the make-ready work. NG crews replace thousands of distribution poles each year, and all poles on the distribution system are inspected and maintained over a given 5-year period. Due to this diligent maintenance program, NG has met State reliability targets for the last 14 years, despite several years with large storms.

NG has a deep staff of licensed PE's, certified PMPs, Certified Safety Professionals, Certified Environmental Professionals, and others. NG staff is properly trained and are skilled professionals in the field of project management as demonstrated by their resumes.

Construction of the make-ready work will be executed by either skilled internal overhead line crews (IBEW Local 97) or experienced contractors (IBEW Local 1249). NG works with 26 IBEW represented contractors, of which 9 contractors are involved in active bids, and 5 are in the contractor of choice program (COC). The COC program offers an expedited and streamlined approach to access contractors with a specific expertise for contracts under $2.5M. The COC will supplement, and be an extension of, NG's immediate work force. Applicants to the COC program go through a rigorous approval process. NG ensures that applicants have the technical and operational capacity to carry out the project. Applicants must submit a plan for ensuring that the project workforce will be appropriately skilled and credentialed (including by the applicant and each of its contractors and subcontractors).

Similar to DANC, NG has comprehensive construction contract specifications that include safety, environmental, personnel, subcontractor, and compensation requirements, among others. They also have a supplier code of conduct.

———

Advancing Workforce Development

A skilled workforce is critical to meeting infrastructure buildout timelines under the Infrastructure Act and connecting households across the country to reliable, affordable, high-speed broadband. A well-trained workforce will also allow for the safe deployment of sustainable networks. To meet the workforce needs of the MMG Program, applicants must make appropriate investments to develop a skilled, diverse workforce. Each applicant must provide as part of its application examples of items described in III.J in the NOFO.

This response is limited to 6000 characters as an open field narrative.

DANC is committed to engaging the most effective, efficient, experienced and trained workforce to complete this project in a timely manner. This will be accomplished through several approaches.

DANC is responsible for grant management and all engineering, design, project management, test and turn-up. DANC has an extremely qualified staff of telecom professionals certified in their areas of expertise. DANC's project team includes licensed Professional Engineers (PEs), certified PMPs, and a Certified Safety Professional. All have completed the OSHA 10-hour training. DANC also has a very robust Environment, Health and Safety Compliance Plan available on its website www.danc.org. Staff receive training based upon the types of activities they perform within their work duties as they relate to OSHA, DOL, and other state and federal regulatory requirements.

DANC is also responsible for all fiber construction work. This will be competitively bid. Typically, CWA represented telecom construction contractors bid on this work. As part of the scoring, DANC looks at vendor qualifications including: they have a satisfactory record of past performance; they have the expertise and experience of staff along with experience with projects of similar scope and size; they

provide documentation confirming all employees working on this project have successfully completed OSHA 10 hour construction certification training; and they submit a health and safety plan for approval. DANC requires project safety meetings as well.

In its bid process, DANC will prioritize the hiring of local workers, where possible. It will also require that solicitations include language encouraging participation by Section 3, SBA Disadvantaged Businesses, and minority- and woman-owned businesses. Through these efforts, DANC hopes to recruit historically underrepresented populations facing labor market barriers, and ensure that they have reasonable access to the job opportunities that may be created.

DANC will contract with Northland Communications to construct, own and operate Segment 12 (MOU attached). Northland will be a contractor to DANC and will follow DANC's contract requirements. Northland will use its own workforce to complete the project. It has a very robust training program to ensure worker skills.

NG is responsible for delivery of the make-ready work for this project. NG staff will be responsible for the distribution system design, construction, environmental compliance, and project management of the make-ready work. NG crews replace thousands of distribution poles annually. Due to a diligent maintenance program, NG has met state reliability targets for the last 14 years, despite large storms.

NG has a deep staff of licensed PEs, certified PMPs, Certified Safety Professionals, Certified Environmental Professionals, and others. Construction of the make-ready work will be executed by either skilled internal overhead line crews (IBEW Local 97) or experienced contractors (IBEW Local 1249) participating in their Contractor of Choice program. Letters of support for the project have been provided by NG IBEW represented contractors-D&D Power LLC, Asplundh Construction, D&D Power LLC, and Northline Utilities.

Enabling an equitable workforce is a key objective at NG. NG's Diversity, Equity, and Inclusion (DEI) program has organized several training programs for employees. There is a strong focus on supporting people leaders to create a diverse, equitable, and inclusive workforce, for example, all hiring managers receive training on equitable hiring practices. There are over 20 employee resource groups at NG which provide safe and inclusive spaces for employees of all background, and in fiscal year 2022, NG is planning to spend over $1M in targeted workforce development activities meant to create equitable on-ramps to various jobs.

NG has been recognized as being one of 418 companies across 45 countries and regions to be included in the 2022 Bloomberg Gender-Equality Index (GEI) which tracks the performance of public companies committed to transparency in gender-data reporting. NG is also 1 of the 173 companies who took part in the 2021 Workforce Disclosure Initiative, which aims to improve transparency and accountability on workforce composition across operations and supply chains.

DANC strongly supports workforce development initiatives regionally. DANC utilizes its OATN to help connect schools across northern NYS in order to increase educational offerings to students. DANC provided financial assistance to SUNY Jefferson Community College for technology to provide adult training programs and skill specific training. DANC works closely with CITEC, the regional manufacturing extension program, to provide skilled training and certification programs for the workforce.

DANC and NG partner with the three county economic development offices in a regional marketing initiative to attract workers and businesses to the region called Drum Country NY (www.drumcountryny.com). This initiative is staffed by DANC and partially funded by NG. It promotes all of the areas workforce training programs including BOCES, colleges, and trade unions in promoting job skills training.

DANC also partners with the local workforce boards to promote and advertise for broadband related positions within the organization. It recently completed a wage study analysis to confirm that its workforce is paid competitively to maintain job quality for new and incumbent workers in the sector.

DANC and NG offer quality jobs. These jobs pay at or above local prevailing wages in order to attract workers. Both provide education and training programs to advance workers in their respective areas of expertise within the telecom and broadband industry. These jobs are consistent with EDA's Good Jobs Challenge to promote high-quality, locally-led workforce system's in America's communities.

———

Climate Resiliency

Please demonstrate that the applicant has sufficiently accounted for current and future weather- and climate-related risks to new MMG Program infrastructure projects. In particular, each applicant should clearly demonstrate how it is conducting the items listed in III.K in the NOFO.

This response is limited to 6000 characters as an open field narrative.

The 2018 National Climate Assessment cited the primary weather and climate hazards in the Northeast as storm, drought, heat waves, and flooding. Constructing a climate resilient network is critical to the Development Authority of the North Country (DANC). DANC designs all fiber to Telecordia standards, and uses 6M EHS (Extra High Strength) strand on all construction projects and double lash all aerial cable to address wind and ice/snow loading—the primary concerns in our service areas. DANC installs aerial wind dampers to reduce issues caused by cable oscillation in high-wind areas. In addition to an annual maintenance budget for tree trimming, lashing problems, and new wind dampers, DANC has a reserve fund for large disaster. DANC outside plant engineers perform weekly field inspections and visually inspect the entire network at least twice annually.

National Grid (NG) infrastructure connects 1.6 million customers in more than 450 cities and towns across 24,000 square miles. NG has been recognized 14 years in a row for meeting/exceeding New York

State Department of Public Service reliability targets. NG electric infrastructure is designed to endure current and future climate hazards. Resiliency and reliability are at the core of the NG's mission, with a focus on infrastructure that can be flexible, adaptable, and quickly recoverable. NG's award-winning emergency recovery and response teams focus on prompt service restoration after wind, ice, and snow events.

NG is a leader in climate resilience, prioritizing organizational change and cultivating external partnerships to build infrastructure that will withstand future climate scenarios. NG collaborates with federal and state governments and academia on climate change, and partnered with the Massachusetts Institute of Technology (MIT) to study the impact of climate change on infrastructure. This led to the development of a prediction tool, climate change resiliency forecasting, and impelled development of a new way to gauge/regulate utility performance and root cause analysis of performance evaluation.

NG spends nearly $1 billion annually across upstate NY and New England to ensure reliable and resilient electric infrastructure. NG developed the Climate Change Risk Tool (CCRT), which provides relevant and consistent projections on key climate factors to steer asset planning, resilience programing, and infrastructure investment. This tool estimates physical risk levels considering exposure and vulnerability to climate hazards over different climate scenarios and periods of time. CCRT evaluates 9 criteria: coastal flooding, river flooding, high temperatures, low temperatures, heatwaves, high winds, compound events (summer and winter), freeze/thaw cycles, and lightning.

NG monitors and manages vegetation on 55,000 miles of line. The NG team uses Vegetation Management Optimization (VMO), a data driven platform containing three modules: Cycle Prune Manager (CPM), Hazard Tree Manager (HTM), and Business Performance Dashboard (BPD) CPM uses satellite images and artificial intelligence to optimize scheduling of pruning while maintaining or improving reliability. HTM pinpoints and prioritizes danger areas for inspection and maintenance, enabling real-time adjustments to hazard removal dollars to target the biggest impacts on system reliability. BPD helps monitor key system metrics like reliability performance, work progress, and spend in one place, generating 8 to 12 million run rate OPEX efficiency while also improving reliability. VMO is expandable to facilitate employee collaboration, improve contractor management, streamline post-trim audit and inspection, and plug directly into customer systems for robust hazard reporting.

NG also applies a rigorous Network Asset Management approach to the 1.2 million poles within the distribution system. NG's Inspection & Maintenance program requires that each pole be inspected every 5 years, and pole conditions are catalogued and prioritized based on need. These inspections enable targeted maintenance and contribute to the overall reliability of the power grid. The same techniques will apply to the middle mile infrastructure, because DANC is using NG poles for the backbone of the network.

NY Public Service Law (PSL) 66(29) requires NG to complete a Climate Change Vulnerability Study by

September of 2023. This study will advance NG's efforts to evaluate infrastructure, design specifications, and procedures to identify vulnerabilities. A formal resilience plan will be developed by November of 2023, 2 months after the study is complete. This resilience plan proposes storm hardening measures for the next 10 and 20 years, details how climate change is addressed in planning, design, operations, & emergency response, and addresses impacts on costs and outage times. NG will establish a climate resilience working group by March of 2023 to inform the resilience plan with input from municipalities, customer advocacy groups, and energy/environmental advocates.

Since 2018, NG has responded to 18+ storms per year and has received numerous Edison Electric Institute (EEI) Response and Recovery awards including Hurricane IDA, Tropical Storm Henri, and the 2021 October Nor'easter. NG collaborates with companies nationwide to respond to storms and restore power as soon as possible. NG also employs a classification index that anticipates restoration times based on storm types and is exploring artificial intelligence to improve damage and interruption prediction.

NG and DANC are strategically positioned to build out the proposed Middle Mile Broadband infrastructure and ensure its resilience and reliability in the face of future climate challenges. NG's front-line storm response team is ready, trained, and able quickly answer the call to support and restore the Middle Mile infrastructure.

———

Civil Rights and Nondiscrimination Law Compliance

Prior to distributing any MMG Program funding to a prospective awardee, NTIA will require the prospective awardee to agree, by contract or other binding commitment, to abide by the non-discrimination requirements set forth in III.J in the NOFO.

Do you agree to abide by the non-discrimination requirements?

Yes

———

Certification of Technical Capability

Each applicant must supply a certification attesting that it is technically qualified to complete and operate the proposed project.

DANC Certificate of Technical Capability-09-30-2022 08-50-Development Authority of the North Count-GRN-001019.pdf

———

Interconnect Policy

The Applicant must describe in detail the nondiscrimination, interconnection, and network management practices that would be adopted for the project facilities. The Applicant should

describe how it will comply with nondiscrimination and interconnection obligations, particularly with connectivity to the public Internet and physical interconnection for the exchange of traffic. In addition to describing network management practices, the Applicant should disclose any practices in place to block access to illegal or harmful content.

This response is limited to 6000 characters as an open field narrative.

The Development Authority of the North Country (DANC) has had an interconnection policy since 2011 stating that it will not discriminate. DANC's Open-Access Telecommunications Network (OATN) was created in 2004 to provide equal access to all Internet Service Providers (ISPs or SPs). DANC's role is to provide transport for ISPs, currently connecting to 22 different service providers (SPs) to deliver services to customers. DANC does not prioritize the traffic of one SP over the traffic from another SP: all SPs are treated equally.

From a technical perspective there are very few opportunities to rate-limit or block traffic. DANC does not sell internet or voice services, so has no reason or ability to limit or block those services. Dark fiber, SONET, and wavelength services have no ability to be rate-limited or prioritized. Ethernet services are all dedicated point-to-point services from the customer to the nearest central office (CO). The only possible place for prioritization or rate limiting would be within the core Ethernet network. As DANC's policy is to monitor all core links and upgrade any link that gets to 80% of capacity, there has never been a reason to limit traffic flow.

From a financial and policy perspective, DANC is required by its board of directors to provide the same price to all SPs. DANC is unable to provide preference to any particular SP.

The Authority's existing interconnect policy for the NTIA Middle Mile Broadband Grant can be found at https://www.danc.org/GovernanceRelatedDocuments. Click on interconnection for telecommunications. The policy will be updated to reflect the new interconnect points if the grant is awarded.

———

Technical Overview

Please describe targeted last mile service objectives, including last mile service provider letters of commitment, agreements, or contracts; and a description of the proposed service offerings, including the pricing of the services to be offered over the proposed facility.

This response is limited to 6000 characters as an open field narrative.

The Development Authority of the North Country (DANC) is a New York State Public Benefit Corporation that operates a regional middle-mile network. DANC provides transport-only services to critical anchor institutions and other service providers. The network was built with both transport and distribution fiber so we have significant experience designing both middle- and last-mile networks.

DANC's mission is to provide infrastructure and economic development in the northern part of NY State and its Open Access Telecommunications Network (OATN) was developed as an economic development project for NNY. It was evident that major carriers were not investing in critical middle-mile fiber infrastructure due to the rural nature and sparse population of the region. It was cost prohibitive for internet service providers (ISPs) to build last-mile in order to provide widespread, high-speed, affordable internet access. The OATN was developed as a competitive middle-mile, open-access alternative to the private-carrier model. It recognized the need to enable last-mile residential services by local ISPs. DANC developed several last-mile solutions such as dark fiber leases, providing fiber on a revenue-share basis, and constructing fiber to the premise networks and allowing ISP's to deliver service over the network.

For this grant DANC is working with 3 different last-mile providers, SLIC Network Solutions (SLIC), Northland Communications, and Mohawk Networks, which is part of the St. Regis Mohawk Tribe. All three companies have provided letters of commitment and MOU's noting their desire to provide last-mile services on this network. DANC has worked with SLIC on several last-mile gigabit passive optical networks (GPONs) offerings over the past several years.

- SLIC Network Solutions currently services over 10,000 residential customers in Northern NY with fiber to the home solutions using GPON technology. Sample monthly pricing is provided for the following service (in MGPS): 50/50=$62.95; 100/100 = $82.95; and 200/200 = $99.95.
- Mohawk Networks currently provides fiber to the home service to all homes on the Akwesasne Reservation and in areas of Lewis and Franklin Counties. Sample monthly pricing is provided for the following service (in MBPS): 100/100=$74.99; 200/200=$84.99; 300/300=$104.99.
- Northland Communications currently provides residential services to customers in central NY under their parent company, Oneida County Rural Telephone, using fiber to the premise technology. Sample monthly pricing is provided for the following service (in MBPS): 100/25=$49.99; 100/100=$60.

SLIC and Mohawk Networks participate in the FCC's Affordable Connectivity Program allowing eligible households to receive a discount on their services.

DANC is contributing 40 miles of existing infrastructure to the grant areas to help serve last-mile customers in the new routes.

———

Applicants are encouraged to upload supplemental documentation.

Letters of Support-09-30-2022 10-49-Development Authority of the North Count-GRN-001019.pdf, ISP MOUs-09-29-2022 03-40-Development Authority of the North Count-GRN-001019.pdf

———

Competitive Landscape

The Applicant should describe existing middle mile offerings in the area, if any, including competitor

data if applicable. This should include a description of the proposed service offerings, including the pricing and technology of the services to be offered over the proposed facility. Where possible, Applicant's project should be able to demonstrate a decline in middle mile costs that are likely to flow through to consumer broadband prices.

This response is limited to 6000 characters as an open field narrative.

The Development Authority of the North Country (DANC) has been operating a regional middle-mile network throughout northern NY for 18 years. DANC's Open Access Telecommunications Network (OATN) was developed as a competitive middle-mile, open-access alternative to the private-carrier model. DANC's OATN backbone stretches 2,000 miles across northern NYS with 32 central offices and connections to carrier collocation facilities in Syracuse, Albany and New York City. NNY is a relatively rural and sparsely populated area. Therefore, there are very few competitors for middle-mile services.

As a Public Authority our role is to provide infrastructure and economic development in the North Country. We are a transport only company that does not sell internet or voice services. Therefore, we typically work more cooperatively with other providers rather than compete with them.

The service provider landscape includes a variety of companies including ILEC's like Verizon and Frontier, Cable companies (Spectrum), small WISP's (Wireless Internet Now, Ridgeview Communications, ADK Techs, IHM Eagle, and Hudson Valley Wireless), and smaller regional SP's like SLIC Network Solutions and Westelcom. Every company on the list either buys our services or works cooperatively with us on fiber swaps, overlash, and builds.

When DANC does compete for services, Spectrum is DANC's primary middle-mile competitor. There are several incumbent local exchange carriers's (ILECs) like Frontier and Verizon that provide services in the area but typically don't bid on competitive middle-mile projects such as telemedicine networks, schools, and others. The reasons that they don't bid are: cost or poor return-on-investment, level of service, and coverage area. DANC and Spectrum are the only middle-mile service providers with coverage throughout the entire region.

Services offered by the Development Authority include:

1) Dark Fiber both on a leased and Indefeasible Right of Use (IRU) basis
2) Wavelength services from 1Gbps to 100 Gbps
3) Ethernet Service from 10 Mbps to 100 Gbps
4) SONET service from DS-1 to OC-192
5) Colocation services

As a public authority, DANC assists smaller CLECs like SLIC and Mohawk Networks provide last-mile residential services in the region. In order to spur last-mile builds and to lower costs, DANC has offered several options: Revenue-Share allows ISPs to use DANC cable for a percentage of the revenues as

opposed to a fixed cost; Low-Cost Start-Up allows companies to begin services for $100/month for 500 Mbps to get started, increasing the price over a few years to allow the ISP to gain customers. This structure is typically used by wireless internet service providers and small start-ups.

DANC has MOUs to deliver residential last mile services if the grant is awarded with Northland Communications, SLIC Network Solutions, and Mohawk Networks. In the MOUs, the ISPs commit to providing 1/1 GBPS to anchor institutions located within 1,000 feet of the middle mile infrastructure.

The following is a brief overview of competition in the region. Note that information for Spectrum is harder to determine since the Charter/Time Warner merger resulted in the formation of Spectrum.

- Dark Fiber: DANC-leased and IRU; Frontier-unsure; Spectrum-not typically; Verizon-unsure.
- Wavelength: DANC-up to 100 GBPS; Frontier-up to 10 GBPS; Spectrum-yes; Verizon-yes.
- Ethernet: DANC-low cost; Frontier-expensive; Spectrum-yes; Verizon-expensive.
- Colocation: DANC-$500/mo for a rack; Frontier-$2,000/mo; Spectrum-no; Verizon-$2,000/mo.
- Revenue Share: DANC-yes; Frontier-no; Spectrum-no; Verizon-no, and limited in FIOS in the area.

DANC's pricing is attached to the application. DANC is able to be very cost competitive because, as a public authority, it is not driven by Return On Investment, but public benefit. DANC does not pay taxes on its fiber network, and has additional efficiencies by sharing back-office staff with its landfill, water/wastewater, regional development, and engineering divisions.

The OATN has been successful in connecting many community anchor institutions including two large telemedicine networks, education networks, libraries, an Army installation, and over 150 cell tower back haul circuits, as well as stimulating last-mile residential builds. By opening up competition in the middle-mile broadband market, DANC has allowed for regional internet service providers like SLIC, Mohawk Networks, and others to provide cost-competitive, quality services that would not otherwise be available due to lack of competition. DANC’s market penetration for critical industries demonstrates market demand for its services and pricing.

DANC is partnering with National Grid (NG) for this NTIA Middle Mile Grant Program project. The partnership between DANC and NG allows for the efficient use of existing infrastructure, including utility poles, easements, and rights-of-way. The proposed project facilitates the expansion of broadband services to underserved and unserved communities while providing allowing NG to extend a reliable communication infrastructure to more than 40% of electrical substations across upstate New York. The lack of a robust communication network hinders response to outages, especially during storms. This project will benefit broadband users as well as electric and gas ratepayers of NG.

———

Applicants are encouraged to upload supplemental documentation.

DANC Standard On-Net Pricing-09-30-2022 01-53-Development Authority of the North Count-GRN-001019.xlsx

———

Type of technology to be used in proposal:

Fiber Optic Technology

———

Each applicant of an award to build middle mile infrastructure using fiber optic technology shall certify that the proposed project, upon completion, will include direct interconnection facilities that will facilitate the provision of lit broadband service, at speeds not less than 1 Gigabit per second for downloads and 1 Gigabit per second for uploads to anchor institutions located within 1,000 feet of the middle mile infrastructure, as detailed in the Template CAI below.

Do you agree to certify to the above?

Yes

———

Upload Template CAI. Required for Fiber Optic Technology, optional for Wireless or Other.

Anchor Institutions (09-22-22) - DANC 1000 fe-09-29-2022 02-35-Development Authority of the North Count-GRN-001019.xlsx

———

An eligible entity applying for a middle mile grant may seek, and the Assistant Secretary may grant, a waiver of the requirements set out in the previous paragraph, in full or in part, to the extent the eligible entity demonstrates that the requirement is not technically or economically feasible.

Do you plan to apply for a waiver? If yes, please attach the waiver application in the Application Workspace, the Application Information section, Required Documents under Required Document Question 4 "Additional Waiver Upload".

No

———

Network Route Maps

Applicants should provide a physical network map that includes the following (if applicable):

The Project Area and those unserved and underserved areas which it will enable.
Applicant‘s pre-existing service area that demonstrates current service levels.
The physical path of the network‘s transmission medium (e.g., backbone and lateral cable routes, microwave links), transmission type, technology, operating bandwidth, capacity (e.g., dark vs. lit strand count), and cable placement (e.g., aerial, burial) should be displayed.
Points of interconnection (purely passive and non-environmentally controlled nodes, e.g., splice

points are optional):Provider Facilities
Collocation Facilities
Private Interconnection Points with partnering service provider/private network

Wireless towers and associated coverage areas.
Anchor institutions within 1,000 feet, if desired.
Additionally, the maps should delineate between network and facilities that are:Part of the Applicant's/key partners' existing network;
Proposed as part of this project;
Leased from a third party;
Utilized under some alternative arrangement; or
Relevant to interconnection with either Last Mile or Middle Mile service providers.

PLEASE NOTE: Only ESRI Shapefiles will be accepted and uploaded.

DANC Shapefiles-Zip-09-30-2022 09-40-Development Authority of the North Count-GRN-001019.zip
———
Data Submission Specification

There is a template "Upload Template Data Submission Specification" which shall be uploaded. Applicants must complete the table with information for all interconnection points proposed for the network. This table has three required fields: Point Name, Latitude and Longitude. This should accommodate all of the points of interconnection (passive, non-environmentally controlled points of interconnection, e.g., splice points, may be excluded), collocation facilities, central offices, head ends, and other centralized facilities, network access points to Last Mile service providers, Internet peering points, and towers.

New interconnect points 9-26-22-09-30-2022 09-44-Development Authority of the North Count-GRN-001019.xlsx
———
Network Diagram

The Applicant must provide a high-level network diagram to be uploaded for the project that is a representation of the network, capacities, and facilities. The diagram must clearly denote which of the network elements already exist. The diagram should show:

The links between the network nodes. The types of facilities used in connecting the network elements (fiber, wireless microwave, etc.).

The points of interconnection and collocation facilities, including Internet peering points, access to local exchange carriers, central offices, or cable head ends.

The proposed aggregation node facilities that will provide the egress point(s) from the broadband backbone to the networks of the selected service provider(s), named Last Mile service providers, and the selected named Internet Service Provider(s) in the new infrastructure.

The Applicant should show which technologies are used and include bandwidth capacity constraints.

DANC-National Grid IIJA MM Maps-09-30-2022 10-33-Development Authority of the North Count-GRN-001019.pdf, DANC Ethernet and DWDM Core Network-09-29-2022 03-32-Development Authority of the North Count-GRN-001019.pdf

———

Environmental Narrative

Any project-related activity that may adversely affect the environment must not be undertaken prior to the completion of the environmental review process prescribed by NTIA. Doing so may jeopardize consideration of the application.

All Applicants for MMG projects must comply with the National Environmental Policy Act, the National Historic Preservation Act, and the Endangered Species Act, and other applicable environmental regulations.

Please provide a service-area environmental description that describes the physical project area and its surroundings (e.g., disturbed or developed land vs. open space; adjacent natural resources, such as rivers, wetlands, or forestlands; and any protected lands or resources in or near the project area), including site photographs and aerial photographs (e.g., Google Earth or Google Maps images), if the project includes construction and/or ground disturbing activities.

This response is limited to 12000 characters as an open field narrative with image files to be uploaded.

Since inception in 1970, The National Environmental Policy Act (NEPA) establishes a broad national framework for protecting our environment. NEPA's policy assures that all branches of government consider the environment prior to undertaking any major federal action that significantly affects the environment. The Development Authority of the North Country's (DANC's) partnership with National Grid (NG) will ensure compliance with NEPA, NHPA, and other relevant federal and state laws.

NG is one of the largest investor-owned energy companies in the U.S., serving more than 20 million

people throughout New York and Massachusetts. NG currently manages a network of approximately 1.2 million distribution poles across NYS. As a result, NG has a long history of compliance with NYS Environmental Conservation Law (ECL) and the National Environmental Policy Act, the National Historic Preservation Act, and the Endangered Species Act, and all other applicable environmental regulations. NG currently works frequently with the Department of Environmental Conservation (DEC) to analyze and mitigate potential environmental impacts resulting from projects containing construction and/or ground-disturbing activities. All projects are reviewed for potential environmental impacts and obtain the necessary permits. Every pole touched and every fiber installed is reviewed in accordance with NG's proven and rigorous standard environmental procedures designed to meet or exceed all state and federal regulations.

DANC and NG have robust environmental resources, policies, procedures, and trainings in place to meet and/or exceed all attendant environmental regulations. These teams have designated personnel to actively monitor and ensure compliance with Federal and State regulations including: the National Environmental Policy Act (NEPA) (42 U.S.C. § 4321 et seq.), the National Historic Preservation Act (NHPA) (54 U.S.C. § 300101 et seq.), Endangered Species Act, and other applicable environmental regulations. Environmental teams have access to various tools including an Environmental Management System (EMS) which is used to track potential environmental impacts of planned and ongoing projects and provides users with relevant regulatory guidance and training material. These tools help identify, track, and mitigate any environmental concerns. The proposed project area spans approximately 344 miles and more than 7,700 poles. DANC's Sustainability Plan and approach to environmental stewardship, overlayed with NG's proven track record of environmental compliance as one of the largest utility providers in the Northeast ensure that this partnership will work as responsible environmental stewards while bringing essential services to communities in New York State.

DANC also has extensive experience complying with environmental regulations. As a multi operations public utility that manages a landfill and several water and wastewater systems, it complies with environmental regulations for both federal and state projects. Many of its projects require submission of a State Environmental Quality Review (SEQR) process that is very similar to NEPA requirements. DANC will engage our engineering division, who regularly manages projects that require environmental compliance, to assist with the environmental review process.

NG invests significant time and resources in developing and maintaining environmental documentation (i.e., guidance, informational, and procedural) that ensures protection of the environment and compliance with all applicable federal and state regulations. NG's expansive library of more than 120 environmental guidance (EG) documents guide all manner of NG projects and address myriad environmental considerations and practices. NG also maintains more than 300 environmental information (EIs) documents for reference for employees, staff, and contractors. Topics include but not limited to protecting natural resources; rare, threatened, and endangered species in New York State; migratory bird patterns and protection in NG's service areas; spoils management; and spill prevention

and cleanup. All of these are designed and regularly updated to maintain associated environmental regulatory compliance in the maintenance of NG's 22,000 square mile service area.

To ensure this store of information translates into responsible and informed practice, NG has implemented more than 38 environmental procedure documents (EPs) coupled with environmental training programs to ensure awareness of and adherence to both regulated and responsible environmental practices as established by the NG Environmental Management System (EMS). The training ensures the practical competence of all personnel engaged in activities that may have an environmental impact. Contractors are held to the same standards as NG personnel. NG's environmental documentation and training requires awareness of the importance of conforming with environmental policies, meeting applicable requirements of the NG EMS and applicable procedures, familiarity with information and guidance documents, and adherence to regulatory requirements (compliance obligations) associated with any possible activities. This significant investment in training and documentation provides a strong foundation for the MMG program and will ensure the compliance with applicable environmental and national historical preservation requirements.

NG project teams can conduct a detailed analysis assessing the environmental impact along with alternatives for projects. These statements are commonly referred to as environmental impact statements (EIS) and environmental assessments (EA). Make-ready work and pole replacements are two of the areas where sediment-disturbing activities could occur. By involving environmental teams early and often, NG ensures that any potential sedimentation that could be disturbed is identified and removed right away so does not leach out into environment.

Another effective tool NG teams use is drone technology. This can provide a more granular look into the local terrain while being efficient and cost effective to deploy. We have attached a clip for reference and in the clip, the drone starts out pointing down the line opposite the direction of flight, does a 180 and then flies as far as possible based off terrain and line of sight. The objective is to provide the project team with a view of as much of the line and terrain as possible. NG's experience with various environmental tools is a huge asset to this project and will help to proactively identify higher risk areas.

For this project, dark fiber will be installed in Northern New York covering approximately 344 miles. Approximately 343.5 miles or 99.85% of this routing will be on existing distribution poles in existing rights of way, and there will be very limited ground-disturbing activity. The remaining half mile will use existing conduit, so no new buried fiber is being proposed for this project. This project does require the construction of aerial fiber in the NY State Adirondack Park which is regulated by the Adirondack Park Agency (APA). DANC will file a jurisdictional inquiry with the APA as required. DANC has many miles of existing fiber in the Adirondack Park area and, based on past experience, believes this project will be considered non-jurisdictional for the APA. Regardless of the project size and scope the same NG standard will be applied to each mile and each pole. Each project segment will be screened by the NG electric designers and the NG environmental staff using GIS resources to determine the potential need

for environmental permits and/or the implementation of best management practices. While most of its distribution system is located along public roadways, there are sections where access may be required that is not on a public road. These situations will also be assessed for disturbance and any potential wetland or stormwater impacts which would need to be mitigated through implementation of best management practices or applicable wetland or stormwater permitting. NG's review process ensures that NG obtains all necessary federal, state, and local governmental permits and approvals for the proposed Middle Mile Grant work to be conducted.

All installation attending this project will receive the same rigor and assurance of compliance with environmental regulations. Where possible, the route design leverages existing poles to reduce ground -disturbing activities and follows routes built along roads to keep vehicles and activities on paved surfaces and off more sensitive or protected land. All required environmental assessment(s) will be provided to NTIA prior to commencement of any activities. Time for these assessments has been built into the project plan and timeline. Included in our environmental attachments are maps and photos along the proposed 344-mile route included in our MMG program application. These are meant to provide insight into some of the prescreening tools that NG teams use daily and would be done well in advance of a project getting underway.

DANC and NG's proposed MMG schedule allows for 6 months to complete an Environmental assessment to be conducted in parallel with other activities. This assessment will include analyzing impacts of the project against the New York State Environmental Conservation Law (ECL) and the National Environmental Policy Act, the National Historic Preservation Act, and the Endangered Species Act, and all other applicable environmental regulations. During this time the project territory will be farther analyzed.

This project area consists of diverse landscape of which 100% of the project's ROW or easement is already owned for the path of the fiber, while recognizing that just because we are in an existing right-of-way this does not guarantee a lack of environmental concern. NG is tentatively planning for around 15% pole replacements, and the team will also be considerate of access to the work locations where heavy trucks may need to come in to and support work in sensitive areas. NG's well-trained team has extensive knowledge and experience with these exact scenarios. Other project path environmental considerations may include wilderness, wetlands, flood plains, preserves, tribal sites, historical sites, and endangered species habitat, all of which the NG team has extensive experience with and has processes in place to address. The integrated project team will create concise project description that will ensure the environmental assessment comprehensive.

NG is committed to being an innovative leader in energy management and to safeguarding the global environment for future generations. It is at the very core of what we do every day. NG is committed to the protection and enhancement of the environment, always seeking new ways to minimize the environmental impact of our past, present, and future activities. One of NG's five responsible business pillars is The Environment. NG's long-standing commitment to the environment will allow NG and

DANC to clearly comply with the various Environmental and National Historical Preservation components of the MMG Grant.

DANC and NG are the ideal partnership to support the MMG program for numerous reasons including environmental. DANC's experience with engineering, building, and maintaining a Middle Mile Network, supplemented by NG's proven track record with environmental compliance in the utility space will most certainly transfer over a successful build in support of the MMG Program. NGs expansive environmental documentation and training, approach to design and project management, experience with various screening tools, and longstanding environmental methods and best practices will make this project successful.

———

Upload Map Images:

DANC Environmental (Wetlands Parkland) Google-09-30-2022 02-08-Development Authority of the North Count-GRN-001019.pdf, DANC environmental (wetlands parklands)-09-30-2022 02-08-Development Authority of the North Count-GRN-001019.pdf, DANC Environmental Analysis of Pole Placement-09-30-2022 02-10-Development Authority of the North Count-GRN-001019.kmz, DANC Environmental Analysis of Pole Placement-09-30-2022 02-09-Development Authority of the North Count-GRN-001019.xlsx

———

Negotiated Indirect Cost Rate Agreement

This is a document published to reflect an estimate of indirect cost rate negotiated between the Federal Government and a Grantee's organization which reflects the indirect costs (facilities and administrative costs) and fringe benefit expenses incurred by the organization. This must be completed, if applicable.

Indirect Costs-09-30-2022 11-43-Development Authority of the North Count-GRN-001019.docx

———

Template Table of Funded Partners and Unfunded Collaborators

List all funded and unfunded project collaborators, including partners, subrecipients, match providers, major contractors/supplies, details on role/scope of work for project. A fillable Template of Funded Partners and Unfunded Collaborators can be found in found in the MMG ZIP folder.

MMG Template Table of Funded Part-09-30-2022 11-33-Development Authority of the North Count-GRN-001019. and Unfunded Collaborators Final.xlsx

———

Certificate of Operational Capability

Each applicant must supply a certification from an officer-level employee (or individual of

comparable rank) attesting to the applicant's operational capability to complete and operate the proposed project.

If the applicant has provided a voice and/or broadband internet access service, it must supply a certification from an officer-level employee (or individual of comparable rank) attesting that it has filed FCC Form 477s and the Broadband DATA Act submission, if applicable, to the extent required during this time period and otherwise complied with the Commission's rules and regulations. Alternatively, the applicant must explain any pending or completed enforcement action, civil litigation, or other matter in which it was alleged to have failed to comply with Commission rules or regulations.

If the applicant has operated only an electric transmission or distribution service, it must submit qualified operating or financial reports that it has filed with the relevant financial institution for the relevant time period along with a certification that the submission is a true and accurate copy of the reports that were provided to the relevant financial institution.

If applicable, the applicant must submit a certification from an officer-level employee (or individual of comparable rank) that is has operated a middle mile broadband network for at least two years or that it is a wholly owned subsidiary of such an entity and must specify the number of years the applicant or its parent company has been operating.

DANC Certificate of Operational Capability-09-30-2022 08-51-Development Authority of the North Count-GRN-001019.pdf

———

Certification of Financial Capability

Each applicant must supply a certification from an officer-level employee (or individual of comparable rank) attesting that it is financially qualified to meet the obligations associated with a project, that they will have available funds for all project costs that exceed the amount of the grant, and that they will comply with all MMG Program requirements, including service milestones.

DANC Certificate of Financial Capability-09-30-2022 08-11-Development Authority of the North Count-GRN-001019.pdf

———

Letter of Credit

During the application process, each applicant must submit a letter from a bank meeting eligibility requirements consistent with those set forth in 47 C.F.R. § 54.804(c)(2) committing to issue an irrevocable stand-by letter of credit, in the required form, to the applicant. The letter shall at a minimum provide the dollar amount of credit offered and the issuing bank's agreement to follow the terms and conditions of NTIA's model letter of credit. NTIA shall publish on its website a model letter

of credit substantially similar to the model letter of credit established by the Federal Communications Commission in connection with the Rural Digital Opportunity Fund (RDOF - Rural Digital Opportunity Fund Order, 35 FCC Rcd at 773-77, Appx. C.).

NTIA will ensure, prior to issuing a middle mile grant award, that each eligible entity obtains an acceptable, irrevocable standby letter of credit in a value of no less than 25 percent of the award amount.

Each eligible entity shall provide with its letter of credit an opinion letter from its legal counsel clearly stating, subject only to customary assumptions, limitations, and qualifications, that in a proceeding under Title 11 of the United States Code, 11 U.S.C. § 101 et seq. (the "Bankruptcy Code"), the bankruptcy court would not treat the letter of credit or proceeds of the letter of credit as property of the winning bidder's bankruptcy estate under Section 541 of the Bankruptcy Code.

NG_DANC Pre Letter of Credit-09-30-2022 08-16-Development Authority of the North Count-GRN-001019.pdf, DANC Pre Letter of Credit and Opinion of Coun-09-30-2022 08-15-Development Authority of the North Count-GRN-001019.pdf

———

Audited Financial Statement (Previous 3 Years)

Each applicant shall submit financial statements from the most recent fiscal year that are audited by an independent certified public accountant. If the applicant is not audited in the ordinary course of business, in lieu of submitting audited financial statements it must submit unaudited financial statements from the three prior fiscal years and certify that it will provide financial statements from the three prior fiscal years that are audited by an independent certified public accountant by an NTIA specified deadline.

***You must provide 3 years of audited financial statements.**

Audit of Financial Statements 2021-09-01-2022 10-53-Development Authority of the North Count-GRN-001019.pdf, National Grid Financials March 2022 FINAL L-09-30-2022 10-37-Development Authority of the North Count-GRN-001019.pdf, Audit of Financial Statements 2022-09-01-2022 10-53-Development Authority of the North Count-GRN-001019.pdf, Audit of Financial Statements 2020-09-01-2022 10-53-Development Authority of the North Count-GRN-001019.pdf

———

Historical Financial Statements (Previous 3 Years)

Each applicant shall submit financial statements from the three prior fiscal years that are audited by an independent certified public accountant. If the applicant is not audited in the ordinary course of business, in lieu of submitting audited financial statements it must submit unaudited financial statements from the three prior fiscal years and certify that it will provide financial statements from

the three prior fiscal years that are audited by an independent certified public accountant by an NTIA specified deadline.

***You must provide 3 years of historical financial statements.**

National Grid Financials March 2022 FINAL L-09-30-2022 10-39-Development Authority of the North Count-GRN-001019.pdf, Audit of Financial Statements 2021-09-30-2022 08-17-Development Authority of the North Count-GRN-001019.pdf, Audit of Financial Statements 2020-09-30-2022 08-17-Development Authority of the North Count-GRN-001019.pdf, Audit of Financial Statements 2022-09-30-2022 08-17-Development Authority of the North Count-GRN-001019.pdf

———

Budget Narrative

Applicants will create and submit a budget narrative that adequately describes all proposed activities and costs for their grant-funded project. Applicants must complete the file template, fill in all required information, and upload the file
. The file must be uploaded as a Word file, and not converted to a PDF. You can find additional guidance in the MMG Application Guidance.

MMG Template Detailed Budget Narrative-Final-09-29-2022 03-27-Development Authority of the North Count-GRN-001019.docx, MMG Template Detailed Budget Narrative-Final-10-18-2022 12-37-Development Authority of the North Count-GRN-001019.pdf

———

Template Detailed Budget Justification

The Detailed Budget Justification spreadsheet must reflect the cost categories that appear on the SF-424 and SF-424C and include itemized calculations for each cost placed under those categories. A fillable Template Detailed Budget Justification can be found in found in the MMG ZIP folder.

MMG Template Detailed Budget Justification Fi-09-28-2022 02-01-Development Authority of the North Count-GRN-001019.xlsx

———

Any other funding provided for this project?

No

———

Template Pro Forma

Pro forma financial projection and analysis related to the project's sustainability, inclusive of subscriber (e.g., last mile network connections, other wholesale services), across an eight-year forecast period. A fillable Template Pro Forms can be found in the MMG ZIP folder.

MMG Template Pro Forma Final-09-30-2022 01-41-Development Authority of the North Count-GRN-001019.xlsx, Copy of Copy of MMG Template Pro Forma Final -04-05-2023 12-45-Development Authority of the North Count-GRN-001019.xlsx

———