Grant Request Number	GRN-001212
Funding Program Name	Middle Mile Broadband Infrastructure Grant Program
Funding Request Name	Horizon Telcom Inc - Middle Mile - GRN-001212
Applying Organization	HORIZON TELCOM, INC.
Applicant Name	Meredith Irwin

Primary Applicant Type

Identify the primary applicant type:

Single Entity

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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?

Technology Company

———

Is parent/owner of applicant a foreign entity?

Yes

———

Please identify country.

Canada

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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 - Brian Riley; Horizon Telcom Inc; Senior VP for FTTH; Brian.Riley@horizonconnects.com
KeyPersonnel_Resume_Brian_Riley

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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 - Jim Capuano; Horizon Telcom Inc; CEO; James.Capuano@horizonconnects.com
KeyPersonnel_Resume_Jim_Capuano

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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 - Meredith Irwin; Horizon Telcom Inc; VP of Finance;
Meredith.Irwin@Horizonconnects.com
KeyPersonnel_Resume_Meredith_Irwin

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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 - Michael Snyder; Horizon Telcom Inc; VP for Marketing;
Michael.Snyder@horizonconnects.com
KeyPersonnel_Resume_Michael_Snyder

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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 - Pete Holland; Horizon Telcom Inc; CFO; Pete.Holland@horizontel.com
KeyPersonnel_Resume_Pete_Holland

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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 - Tom Reid; Reid Consulting Group LLC; Consultant; tom@reidconsultinggroup.com
KeyPersonnel_Resume_Tom_Reid

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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.

Horizon Org Chart 9-09-20-2022 04-14-Horizon Telcom Inc-GRN-001212.15.2022.pdf, BHRC Horizon Letter of Support - signed-09-27-2022 03-59-Horizon Telcom Inc-GRN-001212.pdf, BHF BroadbandOhio Horizon LoS 2022-09-20 - si-09-27-2022 03-59-Horizon Telcom Inc-GRN-001212.pdf, Horizon Sunday Creek Letter of Support-09-27-2022 03-59-Horizon Telcom Inc-GRN-001212.pdf, Perry County - Horizon letter of support-09-27-2022 03-59-Horizon Telcom Inc-GRN-001212.pdf, Horizon Support Letter - OME -RESA-09-27-2022 03-59-Horizon Telcom Inc-GRN-001212.pdf, META letter of support - Horizon NTIA middle -09-27-2022 03-59-Horizon Telcom Inc-GRN-001212.pdf, OMEGA Horizon Middle Mile 09-23-22 -09-27-2022 03-59-Horizon Telcom Inc-GRN-001212.pdf, OVRDC Horizon Middle Mile Fiber support lette-09-28-2022 05-51-Horizon Telcom Inc-GRN-001212.pdf, Coshocton County - Horizon Middle Mile Suppor-09-30-2022 12-35-Horizon Telcom Inc-GRN-001212.pdf

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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.

Horizon has been providing telecom services in Ohio for over 125 years. We offer Enterprise/Middle Mile and Residential/Small Business FTTP. We have completed $400 million in middle mile expansion across much of OH and portions of 4 other states. We maintain 1,100 enterprise-class ringed fiber connections along with 450 fiber backhaul circuits for Tier 1 mobile carriers' towers. We have existing dark fiber IRUs with OARnet, the Southern Ohio Health Care Network (SOHCN), Verizon, Windstream, and others.

Our executive team has a proven track record of successful, federally funded, open middle mile deployments, including the 600-mile, 13 county SOHCN that serves more than 120 healthcare CAIs, and the 2000-mile Connecting Appalachia OH Middle Mile Consortium (OMMC) network that spans 35 southern and eastern OH counties. These projects were facilitated by collaboration with Local Development Districts, the K-12 community, and the Governor's Ohio Middle Mile Consortium. Horizon's considerable investment was augmented with public funding from the NTIA BTOP program, the FCC Rural Health Care Pilot program, and the USDA Community Connect program. Our proposal is a natural extension of these existing resources. As such, we are perfectly positioned to execute a successful, sustainable deployment.

With 190 employees in OH, Horizon delivers the experience, size, and access to capital required to build and operate the proposed network while remaining nimble enough to negotiate unique partnerships. Horizon has well established relationships with fiber and electronics suppliers, excavation and construction contractors, aerial and underground cable technicians, and regional electric utilities. We also have in-house teams with experience designing, deploying, and maintaining fiber networks. Horizon currently maintains two NOCs, the primary in Columbus and a secondary in Chillicothe with 24/7/365 customer support based in Columbus.

Horizon has engaged Reid Consulting Group (RCG) to assist with planning and design. RCG brings 40+ years experience planning, designing, and managing broadband network implementations, including the SOHCN and the OMMC networks.

Construction will be coordinated by Horizon and RCG using existing technical staff augmented by contractors as needed. All management, operations, and customer support will be handled exclusively in-house by Horizon staff.

At the end of the award period, Horizon Telcom will own all assets associated with this proposal.

Horizon Telcom, Inc. is a holding company that does not directly provide domestic telecommunications services. Rather, it is the parent company and sole stockholder of the:

Chillicothe Telephone Company (CTC)
Horizon Technology, Inc. (HTI)
Horizon Services, Inc. (HS)

Within CTC, Urbansystems, LLC and Infinity, LLC subsidiaries are included from acquisitions in 2019 and 2021, respectively.

Horizon Telcom, Inc., CTC and HTI are separate corporations, each organized under the laws of the State of Ohio.

CTC is an ILEC that provides interstate exchange access and interstate interexchange services to customers in ten exchanges within portions of Ross, Pike, Pickaway, Jackson, Hocking, and Vinton counties in Ohio. It also provides custom calling, Internet access, and video services to customers in this service area. In 2021-2022, CTC expanded its services to include Fiber-to-the-Home to nearly half of the ILEC passings across the service area.

CTC has constructed, owns, and operates an advanced fiber optic network that offers tcom and information services to businesses, institutions, and wireless tower sites throughout central, southern, and eastern OH and northwestern WV, and stretches into PA, KY, and IN. This network includes more than 5,000 route miles and 825k fiber miles primarily in OH and WV, and includes areas connecting the cities of Columbus, Cincinnati, Dayton, Youngstown, Indianapolis and Chicago. CTC also leases some fiber facilities from third parties and uses these to extend its services further into areas of Northwest OH, PA, MI and IN. CTC has acquired the ownership of UrbanSystems, LLC and Infinity, LLC in Indiana, and the fiber assets of Consolidated Electric Coop in central OH. CTC serves multiple communities with dense Fiber-to-the-Home (FTTH) networks. In 2021, CTC constructed a FTTH network in Circleville, OH. As of October 2022, CTC has begun construction to serve several additional communities with FTTH in Central OH and plans to continue expansion in 2023.

HTI is currently inactive but has previously provided resold long-distance toll services and non-regulated communications services. HS is also currently inactive but previously sold managed services.

In January 2018, Novacap, a Canadian private equity firm, entered into an agreement to purchase Horizon Telcom. On 26 January 2018, Horizon submitted a Section 214 Application with the FCC for review. The FCC approved the transaction and it subsequently closed in June 2018. In October 2021, the company welcomed a new investor, GCM Grovesnor, through a purchase of 40% of the shares, with Novacap and the existing partners retaining 60% ownership.

Ownership tree:

Horizon Acquisition Parent LLC is sole (100%) shareholder of Horizon Telcom, Inc. and therefore has 100% direct ownership of Horizon Telcom, Inc.

Novacap TMT V, L.P. holds 21.5942% of indirect interest in Horizon Telcom, Inc.
Novacap International TMT V, L.P. holds 15.6427% indirect interest in Horizon Telcom, Inc.
Novacap Horizon Co-Investor Holdings, L.P. holds 20.8384% indirect interest in Horizon Telcom, Inc.

LIF Vista LLC (a GCM Grosvenor fund) holds 40.2492% indirect interest in Horizon Telcom, Inc. Novacap holds an additional 1.6754% indirect interest of Horizon Telcom, Inc. through multiple other funds.

Owner addresses:

Novacap
3400, rue de l'Éclipse
Bureau 700
Brossard, Québec
CANADA J4Z 0P3

LIF Vista LLC
900 North Michigan Avenue
Suite 1100
Chicago, IL 60611

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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.

CD511 Completed-09-28-2022 05-54-Horizon Telcom Inc-GRN-001212.pdf, CD511 Fillable - Irwin-10-15-2022 10-51-HORIZON TELCOM, INC.-GRN-001212.pdf, CD511 Signed - Irwin-10-27-2022 03-00-HORIZON TELCOM, INC.-GRN-001212.pdf

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SAM.gov Registration

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

horizon-sam-09-27-2022 04-02-Horizon Telcom Inc-GRN-001212.pdf, Horizon SAM registration - FINAL-04-10-2023 11-21-HORIZON TELCOM, INC.-GRN-001212.pdf

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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 Appalachian Ohio Middle Mile Expansion project will bring much-needed broadband infrastructure to the poorest and most underserved counties in the state. Horizon's proposal builds on previous NTIA investments in the region by closing key gaps in the region's existing, NTIA-funded, open middle mile network, establishing multiple redundant paths between communities, and creating a new option for K-12 institutions, healthcare facilities, and internet service providers to obtain high-speed access to major urban hosting facilities and Internet Exchanges.

Horizon's project will build 239 miles of fiber in Appalachian Ohio, including 2 counties that currently have no open middle (Coshocton and Perry) and 6 others that have only limited routes (Holmes, Muskingum, Athens, Knox, Tuscarawas, and Jefferson). The proposed new fiber will pass within 1,000 feet of 16,257 households, 525 Community Anchor Institutions (57 of which remain unserved), and 2,114 businesses. The project also will install new 400 Gbps Points of Presence (POPs) in 3 counties that currently do not have a POP (Coshocton, Holmes, and Perry) and upgrade 28 more POPs on Horizon's existing NTIA-funded open middle mile network to 400 Gbps. To improve access to major internet exchanges, the project also will install a connector route from the southwestern edge of Horizon's rural middle mile network to Cincinnati that will interconnect with ComNet's portion of the state's existing open middle mile network.

All of this work will be completed within 3 years of a successful grant award.

As a community benefit, Horizon will provide indefeasible rights of use (IRUs) along 711 miles of existing and new Horizon fiber for key community anchors. These IRUs will give four fiber strands to K-12, four to healthcare, and four to OARnet, the academic resource network that serves most high education institutions in the state.

Because the proposed routes would be part of an open, nondiscriminatory, wholesale middle mile network, competing broadband providers will be able to enter the market or improve existing offerings at a reduced cost. For community fiber and fixed wireless providers who otherwise would need to depend on wireless backhaul and/or a patchwork of multiple, proprietary, closed network providers, our network will deliver significantly lower latency, higher speeds, and lower cost. Horizon prides itself on the performance of our fiber deployments. Our existing network serving Appalachian Ohio consistently delivers latency under 10 ms and jitter of under 2 ms.

The broadband situation remains dire in Appalachian Ohio. Regrettably, 75% of the populated area in our proposed service area, lacks access to broadband that meets even the meager standard of 25 Mbps down and 3 Mbps up. When extending to the slightly more ambitious speed target of 100 Mbps down and 20 Mbps up, the combined unserved and underserved area in Appalachian Ohio rises to a staggering 97%. For our K-12 community, this means that 60,000 students must live without the possibility of remote learning and Internet-based research. Adult learners face the same challenges. Many businesses likewise struggle to operate within these severe connectivity constraints, with

ingenuity and dedication to place the only ways to keep their businesses afloat.

To make matters worse, the financial realities in most of Appalachian Ohio make it unlikely that anyone will deploy ubiquitous fiber to the home without grant subsidy. With as few as six households per fiber mile, the pro forma for what we call the "rural expanse" never rises into the positive without substantial subsidy of the deployment costs. Crushing poverty across much of the proposed service area further deters investment. With nine of the ten most impoverished counties in Ohio, 40% of our region's citizens live at or below 200% of the poverty line, including 237,000 children, of whom 101,000 are enrolled in the National School Lunch Program. These demographics result in lower average revenue per user than in more affluent areas, further cooling investor interest.

In 2010, Horizon Telcom was successful in its application to the NTIA BTOP program, winning $66 million to build fiber across much of Appalachian Ohio as a member of the Ohio Middle Mile Consortium (OMMC). Two other companies, ComNet and Everstream (One Community at the time), also successfully applied for funding under the OMMC banner. The resulting networks have had a tremendous impact on their respective regions. In approaching the current NTIA Middle Mile Grant opportunity, Horizon focused on how best to build upon those previous NTIA investments. We worked closely with Appalachian Regional Commission-designated Local Development Districts (Buckeye Hills Regional Council, Ohio Valley Regional Development Commission, and Ohio Mid-Eastern Governments Association) to identify key gaps in the region's open middle mile.

Horizon saw an opportunity to increase the density and diversity of the existing network, deliver open middle mile to two high-need counties that currently have none, and create new meet points among the original OMMC participants. Horizon already offers connections to hosting facilities and Internet Exchanges (IXCs) in Columbus and Pittsburgh. Our proposed build into Cincinnati will provide additional IXC connectivity of importance to the K-12 and healthcare communities.

The proposed 239 miles of new fiber will close multiple rings, greatly improving reliability. Further, by deploying fiber primarily on existing utility poles, the Horizon proposal will help harden the electrical grid. The "make-ready" process will result in the replacement of many marginal power poles, thus increasing the grid's resistance to climate-driven weather events. While it is often claimed that underground fiber is necessary to achieve high uptimes, Horizon asserts that densifying the existing aerial networks by closing rings will do more to increase reliability than installing underground fiber in areas already well-served with open middle mile. Horizon's approach will also save money, coming in at a fraction of the cost of buried cable.

The project's total cost will be $48,275,817. Horizon proposes to invest $15,655,303.17 in cash with an additional $5,079,960 of in-kind match, bringing the NTIA's grant contribution to $27,540,553.83. Horizon's combined cash and in-kind match represents 42.9517% of the total project cost.

Once the grant agreement has been executed, the project will proceed in three key phases: design,

material logistics, and deployment. Final route design and POP site selection will need to take place before environmental impact and historical review studies can begin. For efficiency, make-ready, long-lead-time permitting, and fiber engineering will happen in parallel with those studies. This parallel design/review approach will enable us to complete submission of pole applications by early in Q-2 of 2024.

Make-ready execution time frames can be difficult to predict and control because of the demands this unprecedented time of broadband expansion will place on electric utility pole owners. Horizon, however, maintains strong relationships with investor-owned utilities and rural electric cooperatives as a result of our decades of successful fiber construction in Appalachian Ohio. We also have well-established relationships with suppliers and construction contractors which we shall leverage to accommodate the needs of this project. The initial tranche of materials can be ordered as soon as routes are finalized, helping to circumvent supply chain delays. Timing and demand levels for construction crews can be forecast well in advance, slotting the needs of this project into our existing contractors' schedules.

Once make-ready is complete and material delivery dates confirmed, the actual execution of the project is straightforward. Of course, that does not mean that challenges won't arise, but rather that Horizon and its construction contractors can draw on our many years of experience managing complex projects like this one to successful conclusion.

Horizon Telcom has been providing telecommunications services in Ohio for over 125 years, initially as a Ross-county based telephone company and now as an enterprise and residential broadband provider operating in five states. The company operates in two distinct markets: Enterprise Middle-Mile, delivering world-class, ringed fiber services to healthcare, education, large businesses, and mobile operators across five states, and Residential and Small Business, building and operating fiber-to-the-home (FTTH) networks in Ohio.

Horizon's middle mile division has completed $400 million in expansion across Appalachian Ohio and portions of four additional states. To reach rural areas of Ohio, Horizon built extensive open-access middle mile across southern and eastern Ohio. This rural expansion was fueled by key partnerships in collaboration with Local Development Districts, the K-12 community and as a member of the Governor's Ohio Middle Mile Consortium. Horizon's considerable investment was joined with public funding from the NTIA ($66 million BTOP program award), the FCC ($16 million Rural Health Care Pilot program award), and the USDA ($1 million Community Connect program award).

Given this level of expertise and experience, Horizon is confident in its ability to execute successfully on the proposed Appalachian Ohio Middle Mile Expansion project.

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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.

Regrettably, 75% of the populated area in Appalachian Ohio, our proposed service area, lacks access to broadband that meets even the meager standard of 25 Mbps down and 3 Mbps up. For our K-12 students, this presents dire conditions with 60,000 students living without the possibility of remote learning and Internet-based research. Adult learners face the same challenges. Many businesses struggle to operate within these severe connectivity constraints, with ingenuity and dedication to place the only ways to keep their businesses afloat. At the slightly more ambitious target of 100/20, the unserved/underserved area rises to a staggering 97%.

The fundamental cause of this lack of broadband is the decrepit telecommunications infrastructure plaguing much of rural America. Twisted pair copper cables installed in the 1950's and 60's delivered essential telephone services for decades. Yet by the time DSL rolled out, these copper cables were already beyond end-of-life. Now, three decades into the Internet age, these crumbling twisted pairs do not even support reliable telephone service, let alone broadband.

Fortunately, the financial calculus for fiber-to-the-premise has enabled inroads into smaller and smaller markets in our region with investment funding from a variety of sources. Most of these fortunate towns and villages are connected to the broader world by Horizon's existing open middle mile infrastructure. One example is Massillon Cable TV (MCTV), a family-owned business that invests its profits back into surrounding communities and made the jump to fiber several years ago. When MCTV identifies a community of interest, their first gating criteria is whether Horizon middle mile is nearby. Numerous small and medium-sized ISPs, fiber-based and fixed wireless, count on Horizon for backhaul services. Horizon itself is also actively deploying fiber-to-the-premise. With a dozen communities underway, Horizon has identified a total of 100+ towns of interest in the proposed service area.

Horizon provides backhaul to 20 ISPs across Appalachian Ohio. We had time to obtain letters of support from 5 of those providers. These ISPs are interested in using the proposed middle mile to expand their broadband service offerings. All of these companies are current Horizon customers who are always prompt in paying their monthly invoices for broadband services, who are WISPA members or regularly attend WISPA events and who actively meet with Horizon to request network design solutions, mapping out areas where they can utilize the Horizon fiber for broadband expansion into the underserved communities in Ohio.

JB-Nets is a WISP based in Gallipolis, OH that has been in business since 2002 providing internet service to communities in the Southeastern Ohio segment of the Appalachian region. The company has grown

its business to a 26-tower network that serves approximately 2200 last mile customers. Horizon has played a critical role in this growth due to the availability of their middle mile fiber infrastructure to support JB-Nets internet traffic transport at an affordable cost. JB-Nets currently utilizes four entry points into Horizon's middle mile infrastructure. In 2022, the State of Ohio's ORBEG program awarded JB-Nets $3,628,700 to deploy broadband coverage to 811 unserved households. As a part of this expansion JB-Nets is utilizing additional connect points to Horizon's middle mile fiber where it is available. The first of seven fiber head ends required for this project has been activated via Horizon due to funding from the ORBEG Grant.

[redacted]

[redacted]

Rowe Internet, a local ISP based in Byesville OH, has been providing broadband services since 2010. Current customer counts include 1000+ residential connections, 100+ business connections, and an additional 100+ government, VoIP, and other accounts. Rowe has upgraded 3 of their long-term services and added new 10G equipment into their network during 2022 preparing for expansion into additional communities.

Armstrong Cable, headquartered in Bulter, PA, is one of the largest MSOs (multiple system operators) in the nation. Their broadband network serves more than 400,000 homes in a 6-state area, including Ohio. Armstrong is providing residential services into the Southern Ohio market and is under a long-term Dark Fiber agreement with Horizon signed in 2021.

New Era Broadband is a local WISP based in Pomeroy, OH. Founded in 2007, New Era currently offers residential and business fixed wireless services, VoIP, internet-based security, and TV in the southern portion of Horizon's middle mile territory. New Era has purchased additional broadband infrastructure from Horizon in 2022 supporting future growth plans with expansion into other Ohio markets. New Era also offers a training certification program to certify tower climbers and technicians in Ohio.

GMN Wireless Broadband is a non-profit program administered by the GMN Tri-County Community Action Committee. GMN currently delivers broadband to over 600 customers via a 9-tower network in

the eastern portion of Horizon's middle mile territory. Along with fixed wireless, GMN also operates the Graysville Broadband Connectivity Center in Graysville, OH. GMN Wireless has upgraded and expanded their existing broadband services with Horizon to prepare for additional new clients they intend to serve. They will be issuing an RFP later this year to expand services in Monroe County, OH.

While Horizon also intends to expand its own last mile footprint in the region, it is important to note that Horizon historically has maintained strong relationships with its small ISP customers in Appalachian Ohio. This proposal is no different: Horizon believes that the region is best served by fostering diverse deployments from multiple last mile providers to close the internet gap and get services delivered efficiently & quickly into the homes in at-risk communities.

Despite success stories like MCTV, the financial realities in most of Appalachian Ohio require grant funding for fiber-to-the-premise to be feasible. With as few as six households per fiber mile, the pro forma for what we call the "rural expanse" never rises into the positive without substantial subsidy of the deployment costs. Crushing poverty across much of the proposed service area further deters investment. With nine of the ten most impoverished counties in Ohio, 40% of our region's citizens live at or below 200% of the poverty line, including 237,000 children, of whom 101,000 are enrolled in the National School Lunch Program. These demographics result in lower average revenue per user than in more affluent areas, further cooling investor interest.

The BEAD, ReConnect, ARC, and State of Ohio last mile broadband programs offer great hope for replacing the region's decrepit rural telecommunications infrastructure; however, robust middle mile remains a key element for this mission, connecting each service area to the region and the world, lowering costs, and improving resilience.

Horizon, a 125-year-old telecommunications company, has expanded from its rural telco roots to become a regional middle mile provider with open middle mile in forty Ohio counties and portions of five adjoining states. We built the rural portions of our network in Ohio largely based on funding from the NTIA Broadband Technology Opportunity Program (BTOP) in 2010 ($66 million) as a member of the Ohio Middle Mile Consortium, and the FCC Rural Health Care Pilot Program in 2008 ($16 million) in partnership with the Southern Ohio Health Care Network.

In this proposal, we identify key gaps in Appalachian Ohio's open middle mile infrastructure and offer the most cost-effective approach to addressing the need. Building upon NTIA's previous investments in the Ohio Middle Mile Consortium, our design reaches two counties currently lacking any open middle mile, establishes new POPs in three counties, and densifies the existing network in six additional counties. Our design closes multiple rings, increases reliability and resiliency for the entire service area, and creates additional interconnection points among the original OMMC members.

The proposed new fiber will pass within 1,000 feet of 16,257 households, 525 Community Anchor Institutions (57 of which remain unserved), and 2,114 businesses.

Because the proposed routes would be part of an open, nondiscriminatory, wholesale middle mile network, competing broadband providers will be able to enter the market or improve existing offerings at a reduced cost. For community fiber and fixed wireless providers who otherwise would need to depend on wireless backhaul and/or a patchwork of multiple, proprietary, closed network providers, our network will deliver significantly lower latency, higher speeds, and lower cost.

We also propose to upgrade existing points-of-presence to support 400 Gbps speeds, up from the current 10 Gbps. This capacity boost will support the robust growth in demand from Community Anchor Institutions (CAIs) with a particular focus on supercharging the K-12 networks. The increased speed and refreshed equipment will support burgeoning demand for backhaul to support last mile projects while reducing backhaul costs. Horizon prides itself on the performance of our fiber deployments. Our existing network serving Appalachian Ohio consistently delivers latency under 10 ms and jitter of under 2 ms.

As a community benefit, we are providing Indefeasible Rights to Use (IRUs) on our network to the K-12 Information Technology Centers (ITCs) serving school districts in the region (OME-RESA and META Solutions), the Southern Ohio Health Care Network (a high-speed fiber network that serves over 350+ health care facilities in 40 Ohio counties), and OARnet (the state's academic fiber network that serves the majority of Ohio's higher education institutions). These IRUs will be used to create high-capacity, physically diverse rings.

The Horizon middle mile network connects hundreds of K-12, healthcare, and higher education CAIs today with fiber. Horizon proposes to deploy 400 Gbps, physically diverse rings to support each of these three key CAI sectors. These rings will utilize 12 strands of fiber on existing and proposed fiber routes, covering a total of 817 route miles. The upgraded points-of-presence, along with 711 miles of existing Horizon fiber, will enable us to deliver this significant connectivity upgrade to the CAIs. 437 miles of the existing fiber were funded by a 2010 NTIA BTOP grant and thus are excluded as in-kind match. 274 miles were privately funded by Horizon and thus are included as in-kind match.

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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.

In 2010, Horizon Telcom was successful in its application to the NTIA BTOP program, winning $66 million to build fiber across much of Appalachian Ohio as a member of the Ohio Middle Mile Consortium (OMMC). Two other companies, ComNet and Everstream (called One Community at the time), also were awarded funding under the OMMC banner. The Horizon BTOP project received support from all CAI sectors including three Appalachian Regional Commission-designated Local Development Districts: Buckeye Hills Regional Council (BHRC), Ohio Mid-Eastern Government Association (OMEGA), and the Ohio Valley Regional Development Commission (OVRDC), two K-12 Information Technology Centers (OME-RESA and META Solutions), the Southern Ohio Health Care Network (SOHCN), and the Ohio Academic Resources Network (OARnet). These entities along with their stakeholders benefited greatly from the previous NTIA project and have continued to collaborate with Horizon to address broadband shortfalls in Appalachian Ohio.

In approaching the current NTIA Middle Mile Grant (MMG) opportunity, Horizon is focused on how best to build upon those previous NTIA investments. We again are working closely with the ARC-designated Local Development Districts, the K-12 Information Technology Centers, and OARnet to identify key gaps in the region's open middle mile. Together we agreed that the top priorities should include reaching two counties that currently have no open middle mile, establishing new POPs in three counties, and densifying the existing network in six additional counties. This project closes multiple rings and creates additional interconnection points among the original OMMC members, thus increasing reliability and resiliency for the entire service area.

This combined vision also will upgrade existing points-of-presence from 10 Gbps to 400 Gbps to support the robust growth in demand from CAIs, with a particular focus on supercharging K-12 networks. The resulting higher speeds and refreshed equipment also will support burgeoning demand for backhaul to support last mile projects while reducing backhaul costs.

Horizon has received letters of support from all three Local Development Districts (BHRC, OVRDC, and OMEGA), both K-12 Information Technology Centers (OME-RESA and META), plus the following local and regional stakeholders: The Buckeye Hills Foundation, Coshocton County, Perry County, and Sunday Creek Horizons. These groups also are assisting with outreach at the local level, providing context to

county officials and messaging for community stakeholders.

As a community benefit, Horizon will be providing Indefeasible Rights to Use (IRUs) on our network to the K-12 ITCs serving 160+ school districts in the region, the SOHCN serving 350+ health care facilities in 40 Ohio counties, and OARnet, the state's academic and research fiber network that serves the majority of Ohio's higher education institutions. These IRUs will be used to create high-capacity, physically diverse rings operating at 400 Gbps. For the K-12 community, Horizon will use these IRU rings to deliver 10 Gbps links to each district network center and 1 Gbps to each school building. These IRU rings will utilize 12 strands of fiber on both existing and proposed fiber routes, covering a total of 817 route miles.

During 2010 NTIA BTOP program, the Governor of Ohio worked to de-conflict the three OMMC providers' applications before submission. After deconflicting, each of the three participating carriers submitted independent proposals that cited the OMMC overarching design. All three won funding.

In the run-up to the current NTIA Middle Mile Grant program, the state attempted to coordinate efforts by creating a single proposal that would include multiple carriers, including Horizon. The last iteration of this Ohio Middle Mile Partnership (OMMP) plan that we saw would overbuild several areas already well-served with existing NTIA-funded middle mile, based on a desire to have underground facilities. While underground deployment can protect fiber from some hazards, the OMMP approach offers no improvement to the region's predominantly aerial power grid, and it duplicates rather than densifying middle mile in the region. As a result, Horizon elected to apply independently while offering to remain under the new OMMP umbrella in order to deconflict the routes. The OMMP instead elected to replace Horizon in its proposal.

Horizon's current proposal builds on existing NTIA-funded middle mile, fills in gaps where no open middle mile currently exists, and closes multiple rings to improve diversity and increase density. Our focus on predominantly aerial construction also reduces overall costs while directly benefiting the electric grid's resiliency through the many pole replacements that will occur during the make-ready process.

[redacted]

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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

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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

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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

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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?

No

———

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

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Please describe:

This proposal will diversify and densify the region's middle mile and harden the power grid. Our upgraded Ciena 6500 POP hardware will support integrated AES-256 encryption at wire-speed to safeguard data in-flight. Ciena's approach is FIPS certified and includes hitless key rotation every second.

Many routes in Appalachian Ohio currently depend on a single path. Such spurs are vulnerable to storms, heavy equipment damage, and sabotage. A single fiber cut or downed pole has the potential to interrupt service for thousands of customers. Time to repair depends not only on Horizon's own technicians but also on utility providers. The proposed design will close ten rings, making the network significantly denser and more redundant. With so many new, diverse paths available, the likelihood of an outage from a fiber cut goes down significantly, since traffic can be rerouted automatically, keeping services online while field techs repair the damage. Protection options include 1+1 OTN and MSP linear, LAG, 1+1 optical protection, etc.

The project also will harden the region's electric grid. Because 87% of the new routes are aerial, significant make-ready will need to be performed as part of the fiber install. An average of $40,000 per mile has been built into the budget to account for the need to update existing utility poles for fiber attachment. Due to rugged terrain and old poles, it is not unusual to replace half or more of the poles, averaging 8-12 replacements per mile or more. Every new or updated pole for this project is one less risk to the electrical and communication grids supported by those poles.

It has been claimed that underground deployment is good for protecting the fiber from some weather risks, but burying fiber does not help the aerial power grid. Given that the NTIA wishes to enable last mile access, grid resiliency becomes an important proxy for reliability and operational stability, both of which could be crucial in many national security scenarios.

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Project Duration

Number of Years

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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.

Once the grant agreement has been executed, the project will proceed in three key phases: design, material logistics, and deployment. Naturally the final route design and POP site selection will need to be completed prior to commencing with the environmental impact and historical preservation reviews. We anticipate make-ready engineering occurring in parallel with the environment/historical review.

This parallel design/review approach will enable us to complete submission of pole applications by early in Q-2 of 2024, a critical milestone in the critical path analysis. The progress on the actual make-ready work will also be critical to the overall timeline. Make-ready execution time frames are more difficult to predict and control because of the demands this unprecedented time of broadband expansion will place on electric utility pole owners. Horizon, however, maintains strong relationships with investor-owned utilities and rural electric cooperatives as a result of our decades of successful fiber construction in Appalachian Ohio.

Permitting activity will also commence in Q-4 of 2023, as soon as the routes are finalized. Naturally the early focus will be on the “long-pole” permits that can impact the critical path. These include, but are not limited to, railroad crossings; sensitive ecologies such as streams, rivers and wetlands; and interstate highways. Permit packages for more routine requirements will be submitted to relevant jurisdictions based on their preferred timelines.

Material and labor availability has become a big issue in the telecommunications industry. Horizon has well-established relationships with suppliers and construction contractors. Thus, we anticipate being able to leverage these working relationships to accommodate the needs of this project. To mitigate the risk of supply chain delays, we intend to commence ordering materials as soon as engineering processes allow a reasonable level of certainty. We can true-up the orders later as the project moves forward, with the option of internally swapping materials as needed to keep on schedule. Similarly, we will communicate our expected needs for fiber installation crews to our contractors as soon as the timetable becomes reasonably assured.

Once make-ready is complete and material delivery dates confirmed, the actual execution of the project is straightforward. Of course, that does not mean that challenges won't arise, but rather that Horizon and its construction contractors bring many years of experience managing complex projects like this one to successful conclusion. Horizon Telcom has been providing telecommunications services in Ohio for over 125 years, initially as Ross-county based telephone company now operating in five states. The company operates in two distinct markets.
- Enterprise middle-mile: Delivering world-class, ringed fiber services to healthcare, education, large businesses, and mobile operators across five states.
- Residential and small business: Building and operating fiber-to-the-home (FTTH) networks in Ohio.

Horizon's middle mile division has completed $400 million in expansion across Appalachian Ohio and portions of four additional states. To reach rural areas of Ohio, Horizon built extensive open-access middle mile across southern and eastern Ohio. This rural expansion was fueled by key partnerships in collaboration with Local Development Districts, the K-12 community and as a member of the Governor's Ohio Middle Mile Consortium. Horizon's considerable investment was joined with public funding from the NTIA ($66 million BTOP program award), the FCC ($16 million Rural Health Care Pilot program award), and the USDA ($1 million Community Connect program award).

Given this level of expertise and experience, Horizon is confident in its ability to execute successfully on the proposed Appalachian Ohio Middle Mile Expansion project.
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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.

Horizon GANTT Chart 29 Sept 2022 v2 tr-09-29-2022 10-50-Horizon Telcom Inc-GRN-001212.pdf, Project Timeline and Capital Investment Sched-04-10-2023 04-57-HORIZON TELCOM, INC.-GRN-001212.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

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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.

Horizon values our internal team members and the contractors with whom we routinely do business. Our successes, past and future, depend on the solid relationships forged through fair labor practices. With 125 years of operational history, Horizon exemplifies the opportunities available to productive workers in the telecommunications industry.

Our craftspeople are paid at or above prevailing wages with benefits and career advancement options. Many of our middle and upper managers began their careers with Horizon as entry level technicians. Much of our internal workforce is unionized and the major contractors we work with are also unionized. Rather than an adversarial relationships with the unions, Horizon finds shared-purpose and vision to advancing fair labor practices including recruitment among under-represented populations.

Horizon has and will continue to require its contractors and subcontractors to commit to fair labor practices as part of their contracts with Horizon. Contractors and subcontractors also will be required to disclose to Horizon on an annual basis any citations for violation of fair labor standards. Neither Horizon nor any of its subcontractors, to our current knowledge, have any prior determinations of unfair labor practices.

Horizon is committed to equal opportunity in employment throughout the corporation's workforce. Horizon strictly prohibits discrimination against any employee or applicant for employment because of race, color, religion, sex, sexual orientation, gender identity, national origin, age, family medical history or genetic information, disability, veteran status, or any other characteristic protected by law. This applies to personnel actions such as recruitment, selection, training, compensation, administration of

benefits plans, promotions, transfers, layoffs, terminations, and other phases of employment. Horizon also makes reasonable accommodations for qualified individuals with disabilities to enable them to effectively perform their jobs, unless doing so would result in undue hardship.

Horizon endorses the concept of affirmative action to promote and implement equal employment opportunity and carries out business activities designed to recruit, hire, advance in employment, and support opportunities for professional growth and development among qualified minorities, women, protected veterans, and individuals with disabilities in accordance with federal and state law.

Horizon is committed to providing a work environment that is free from all forms of discrimination and harassment. Horizon will not tolerate physical or verbal conduct directed against any employee that creates or permits an offensive or intimidating work environment because of the employee's race, color, religion, sex, sexual orientation, gender identity, national origin, genetic information, disability, veteran status, or any other legally protected characteristic. Horizon strictly prohibits all forms of harassment based upon any of the above protected categories, including but not limited to sexual harassment.

Horizon strictly prohibits discrimination based on genetic information pursuant to the Genetic Information Nondiscrimination Act ("GINA").

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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.

NTIA Labor Certification Executed-09-26-2022 11-55-Horizon Telcom Inc-GRN-001212.pdf

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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.

Horizon maintains a large, highly skilled technical workforce, including a 67 employee Network Partners Enterprise Operations division that covers service delivery, network engineering, and NOC operation, and a 56 employee Hometown Services Plant Operations division that includes general plant technicians, PFT Copper technicians, and PFT Fiber technicians. Both divisions also include field teams dedicated to fiber construction, installation, and maintenance.

All of Horizon's technicians and engineers hold current industry certifications appropriate to their duties. Much of our internal workforce is unionized and the major contractors we work with are also unionized. Rather than an adversarial relationships with the unions, Horizon finds shared-purpose and vision to advancing fair labor practices including recruitment among under-represented populations. To encourage our staff to maintain their skills in an ever-evolving industry, all regular employees of Horizon who (a) have completed their initial six-month introductory period and (b) worked an average of thirty hours or more per week over the previous six-month period are eligible to participate in our Education Assistance program. Employees are eligible to receive up to 100% reimbursement for job-related academic pursuit. Such continuing education opportunities improve commitment to Horizon and help individuals to prepare personally for optimal functioning in a present position. It also helps employees with advancement opportunities to positions in which they could make an even greater contribution to the achievement of corporate goals.

When implementing a large project, Horizon may utilize contractors and subcontractors to augment its own workforce. To ensure that these partners also have a highly skilled workforce, Horizon's contractors typically are unionized and are expected to maintain appropriate certifications and licensure for their technical and construction teams.

Horizon's middle mile division has completed $400 million in expansion across Appalachian Ohio and portions of four additional states. To reach rural areas of Ohio, Horizon built extensive open-access middle mile across southern and eastern Ohio. This rural expansion was fueled by key partnerships in collaboration with Local Development Districts, the K-12 community and as a member of the Governor's Ohio Middle Mile Consortium. Horizon's considerable investment was joined with public funding from the NTIA ($66 million BTOP program award), the FCC ($16 million Rural Health Care Pilot program award), and the USDA ($1 million Community Connect program award).

Given this level of expertise and experience, Horizon is confident in its ability to execute successfully on the proposed Appalachian Ohio Middle Mile Expansion project. If approved, this project can be slotted into existing, active relationships with engineers, contractors, and suppliers.

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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.

Horizon recognizes the importance of developing a skilled and diverse workforce. As such, we conduct extensive outreach to identify potential job candidates in populations that have been traditionally underrepresented in our industry, and we have taken an active role in helping the state of Ohio create workforce development programs.

Horizon has been instrumental in developing two statewide initiatives in partnership with the Governor's Office for Workforce Transformation: a Certified Fiber-Optics Splicer training program and a Certified Fiber-Optics Technician training program. Both programs offer 12-week, instructor-led courses with certification requirements and final examinations to demonstrate competency.
The splicer program is focused on the skill set required to be a competent fiber splicer and the potential career options from that track. The C-FOT program is focused on broadband installation activities, including not only the technical capabilities to perform an installation at customer premises but also the customer service skills required in roles like this. Both of these initiatives are qualified to use TechCred and IMAP state dollars to subsidize or fully support training for candidates at little or no cost.

Horizon also has established a partnership with Pickaway-Ross Career & Technology Center (PRCTC) to develop a permanent Internship Program. We have provided a letter of intent to hire PRCTC students from the Cybersecurity and Networking class in our Network Operations Center (NOC), and our Customer/Technical Support, Engineering, and Information Technology Departments. We also meet on a quarterly basis with PRTC Job Placement Coordinator Kim Graves and PRTC Administrative Staff to discuss placement progress. In 2022, Horizon hired 6 graduates from the Cybersecurity and Networking Class, and one PRTC student completed a summer internship with our IT Department. That student has now returned to PRTC to complete their senior year.

Due to the pandemic, limited in-person targeted outreach occurred over the last year and a half; however, this restriction has not reduced our efforts. Between April and September 2022, Horizon's HR department sent over 8,400 outreach messages to more than 200 different community organizations. These messages were designed to inform these organizations about upcoming job postings and to solicit applications from members of underrepresented groups. Those organizations fall into the

following categories: Construction/Skilled Trades; Diversity Organizations, Women, Minorities; Engineering; Human Resources; Minorities; One-Stop Centers; People with Disabilities; Professional/Technical; State Workforce Agencies; Universities and Colleges; Veterans; Women. The top 5 categories for outreach during this time period were diversity organizations, veterans' organizations, universities/colleges, people with disabilities, and women's organizations. Horizon staff are beginning to return to in-person outreach. For example, we will be attending the Veteran Job and Resource Fair in Columbus, OH on November 2.

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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.

Multiple government agencies and private foundations, including USGCRP, NOAA, FEMA, the Environmental Resilience Institute, and the First Street Foundation, all agree that flooding and extreme rain events are the primary risk factors for Ohio and the Midwest. As part of Horizon's commitment to network reliability, our climate assessment also includes ice storm, strong wind, and tornado risks.

According to the Fourth National Climate Assessment - Midwest Region (https://nca2018.globalchange.gov/chapter/21/) "modeling suggests that the southern half of the Midwest likely will see increases in saturated soils, which also indicates risks to agriculture and property from inundation and flooding." The report goes on to note that heavy precipitation events are expected to increase throughout the current century. NOAA's 2022 NCEI State Climate Summary for Ohio corroborates these predictions, noting that the state has seen a "significant increase in the number of 2-inch extreme precipitation events since the mid-1990s." (https://statesummaries.ncics.org/chapter/oh/)

Horizon's proposed fiber routes pass through seven counties with moderate flood risk (Coshocton, Holmes, Tuscarawas, Knox, Perry, Fairfield, and Hamilton) and two counties with major flood risk (Clermont and Muskingum), as measured by the First Street Foundation's Risk Factor service (https://riskfactor.com/county/fairfield-county-oh/39045_fsid/flood). When examined more closely using FEMA's National Risk Index for riverine flooding at the census tract level, however, most of the proposed route passes through areas classified as Very Low or Relatively Low risk with the following

exceptions: the route segments in Coshocton and Tuscarawas are rated Relatively Moderate, while Hamilton is rated Relatively High. Analysis was conducted by overlaying FEMA risk index map layers at the census tract level with our proposed fiber routes. Layers were obtained from https://hazards.fema.gov/nri/map. FEMA identifies risk on a five-point scale: Very Low, Relatively Low, Relatively Moderate, Relatively High, and Very High. Event incidence thresholds for each risk level vary based on the risk factor being examined (figures included in parentheses where appropriate).

See below for a detailed breakdown of FEMA risk assessments by route:

Hamilton-Clermont:

-Strong wind: Relatively Moderate (2.1-3.9 events per year)
-Tornado: Very Low (0-0.038 events per year)
-Riverine Flooding
--Hamilton; Relatively High (4.37-7.2 events per year)
--Clermont: Very Low (0-0.9 events per year)
-Ice storm: Relatively Moderate (0.66-1.1 events per year) with one exception:
--A single census tract at the northern end of the proposed route in Hamilton rates Relatively High (1.1-1.78 events per year)

Holmes, Tuscarawas, Coshocton, Knox, Muskingum, Perry, Fairfield:

-Strong wind: Relatively Low (0.77-2.1 events per year)
-Tornado: Very Low (0-0.038 events per year) with the following exceptions:
--Segments in the northern and western parts of Coshocton and eastern Knox: Relatively Moderate (0.134-.318 events per year)
-Riverine Flooding: Relatively Low (0.9-2.45 events per year) with the following exceptions:
--Coshocton and Tuscarawas: Relatively Moderate (2.45-4.37)
-Ice storm: Relatively Low (0.27-0.66 events per year) with the following exceptions:
--Fairfield and Perry: Relatively Moderate (0.66-1.1 events per year)

Climate risk analysis is a rapidly evolving field. To ensure that our climate strategy remains up to date, Horizon will conduct periodic climate risk reviews throughout the useful life of the project's network assets. Each review will include the following steps:

-Literature survey: Examine the current state of climate research to verify the continuing relevance of existing resources and identify new resources and tools.
-Risk Assessment:
--Examine previously identified risks for change over time.
--Identify any new risk factors for possible inclusion.
--Conduct route and location-based analyses using FEMA Risk Index map layers and any additional

sources identified during the literature survey, including but not limited to updated National Climate Assessment reports.
-Update Plan: As appropriate, modify our climate risk mitigation strategies to account for increased and decreased risks as identified in the assessment.

Horizon takes great care to operate a highly reliable network. As part of that effort, multiple operational plans are in place to minimize disruptions caused by failures. Horizon continually inspects the over 6,500 route miles of fiber to identify any issues needing proactive remediation. Common items identified for correction include areas that require tree trimming, fallen limbs on fiber cable, rodent damage, lashing wire coming undone, open splice cases, and any other items field personnel report in their survey. Items reported are tracked for resolution before they become service affecting. Any cable needing replacement due to damage is replaced with armored fiber or an equivalent for greater fiber resilience.

Horizon also has a large focus on maintaining the facilities and associated equipment which provide services over fiber. With power reliability being a concern in many of these rural areas, a strong battery and generator maintenance plan is in place. This maintenance plan includes annual testing of batteries and replacement as needed to ensure 8+ hours of battery carrying capacity. All facilities are also equipped with generators that are started/run weekly, as well as full load bank tested annually. Both generators and the battery plant are alarmed with multiple sensors to report issues including rectifier failure, generator start failure, power transfer switch fault, and fuel level. In addition, the facilities have dual HVAC capability with a regular annual maintenance cycle along with both interior and exterior cameras to give real-time visibility into any issues or current status.
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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.

NTIA Technical Certification Executed-09-27-2022 12-11-Horizon Telcom Inc-GRN-001212.pdf
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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 routes funded by this project will offer open access, non-discriminatory interconnection in perpetuity at competitive rates and will include both the ability to connect to the public internet and to physically interconnect for the exchange of traffic.

This project will construct carrier-neutral POPs operating at 400 Gbps on the proposed new routes and upgrade existing Horizon POPs that were funded by BTOP under the Ohio Middle Mile Consortium (OMMC) to 400 Gbps. Horizon currently maintains interconnect facilities where Horizon's fiber meets middle mile networks maintained by Everstream, IFN, CEC Enlite, Zayo and others. Those facilities would be utilized by the proposed project. The project also would facilitate a third connection to a major Internet Exchange in Cincinnati, augmenting the Horizon network's existing connections in Columbus and Pittsburgh.

The project will pass within 1000 feet of 525 community anchor institutions and will include the necessary facilities for those anchors to connect directly to the middle mile network at speeds of at least 1 Gbps symmetrical and up to 100 Gbps. The network will also pass within 1000' of 2,114 business and 16,250 households that may be served by Horizon directly or by other ISPs utilizing Horizon back-haul capacity.

Horizon Telcom, Inc. will manage its network and provide access in accordance with the Federal Communications Commission's (FCC's) Open Internet Rules (GN Docket No. 09-191 and WC Docket No. 07-52. Adopted December 21, 2010) and in compliance with any future Internet policies or rules adopted by the FCC. Horizon may add, delete, or modify certain practices, performance characteristics, or terms and conditions from time to time at its discretion. Horizon will provide clear written notice of these changes on our website but will not notify customers via direct communication unless specifically required to do so by federal or state authorities. To ensure Open Access to the broadband Internet, Horizon Telcom, Inc. will not unjustly or unreasonably:

- Block, interfere with or degrade an end user's ability to access, use, send, post, receive, or offer lawful content (including fair use), applications, or services of the user's choice.

- Block, interfere with or degrade an end user's ability to connect and use the end user's choice of legal

devices that do not harm the network.

- Prevent or interfere with competition among network, application, service or content providers.

- Engage in discrimination against any lawful Internet content, application, service or service provider with respect to network management practices, network performance characteristics, or commercial terms and conditions.

- Give preference to affiliated content, applications, or services with respect to network management practices, network performance characteristics, or commercial terms and conditions.

- Charge a content, application, or service provider for access to the Company's broadband Internet access service end users based on differing levels of quality of service or prioritized delivery of Internet protocol packets.

- Prioritize among or between content, applications, and services among or between different types of content, applications, and services unless the end user requests to have such prioritization.

Horizon Telcom, Inc. will:

- Provide connections and transport services of the public Internet to customers.

- Negotiate in good faith with all requesting parties making a bona fide request for interconnection or wholesale services.

- Provide rates and terms for interconnection that are reasonable and nondiscriminatory.

Under its Network Security and Congestion Management Policies, Horizon:

- Utilizes standard industry practices for safeguarding children, intellectual property rights and our customers' privacy and security. Horizon does not guarantee that it can protect customers from any and/or all security breaches.

-Follows standard best efforts for Internet delivery with respect to allocation of capacity without differentiation among applications, providers, or sources.

- Complies with applicable laws and regulations, including the Children's Online Privacy Protection Act, which requires the consent of a parent or guardian for the collection of personally identifiable information from children under 13.

- Complies with the Online Copyright Infringement Liability Limitations Act, a portion of the Digital Millennium Copyright Act, which allows Internet service providers to remove or disconnect customer

access to copyright infringing material.

- Uses generally accepted technical measures to provide acceptable service levels to all customers, such as application-neutral bandwidth allocation, as well as measures to address service attacks, illegal content and other harmful activities to protect network integrity and reliability.

- Reserves the right to prioritize traffic based on real time and non-real time applications during heavy congestion periods based on generally accepted technical measures.

The public URL for our interconnect policy is

https://www.horizonconnects.com/network-management-policy/

This policy will be offered in perpetuity for NTIA MM grant funded assets.

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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 proposed routes will facilitate last-mile service by providing competitively priced, open access, non-discriminatory backhaul to interested internet service providers. Horizon also is considering offering new last-mile fiber-to-the-home services in the project area.
Horizon's residential and small business division already delivers fiber-to-the-home in many Ohio locations, with expansion projects underway. Using our own financial resources, Horizon has projects completed or under way in Lancaster, Circleville, Chillicothe, Athens, Zanesville, Greenfield, Washington Courthouse, Jackson, Johnstown, Logan, and Hillsboro. We currently are analyzing opportunities to deploy fiber-to-the-home in an additional 100+ towns and villages near our existing and proposed middle mile. All of these towns and villages are located in the Appalachian Ohio Middle Mile Expansion proposed service area.

Horizon continues to pursue multiple grant options to complete the broadband puzzle in the low population density areas of Appalachian Ohio. We won $30 million in the first round of the Ohio Residential Broadband Expansion Grants announced in March to reach unserved rural homes in Fayette and Ross counties. We are currently working on last-mile proposals to the USDA ReConnect program for additional low population density areas in Appalachian Ohio. We will also participate in BEAD-funded expansion programs.

While Horizon actively seeks last mile opportunities, we know that the needs of the region exceed our

own internal capacity in the near term. To support ubiquitous broadband, Horizon provides non-discriminatory access to backhaul services to any ISP, and we have done so for over a decade. Horizon currently provides backhaul services to numerous last mile providers ranging from small WISPs like New Era Broadband to tier 1 mobile carriers such as Verizon. We have received letters of support from five ISPs who would be interested in purchasing capacity on the new fiber routes:

- New Era Broadband
- Rowe Wireless
- GMN Wireless
- Armstrong
- JB Nets

All of these ISPs are current Horizon backhaul customers in adjacent territories. This project would allow these providers to expand their service offerings to households that currently have no reasonable residential broadband options.

Please see the attached Technical Capabilities 2 - 2 Supplemental document for additional details about Horizon's middle and last mile technologies, our rate structure and service offerings, and a list of the towns and villages we are considering serving in the future with fiber-to-the-home.

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Applicants are encouraged to upload supplemental documentation.

JB_Nets LLC MIddle Mile Letter of Support-09-27-2022 12-18-Horizon Telcom Inc-GRN-001212.pdf, New Era Letter of Support - NTIA Grant - Sept-09-27-2022 12-18-Horizon Telcom Inc-GRN-001212.pdf, NTIA LETTER OF SUPPORT FROM ARMSTRONG 083022-09-27-2022 12-18-Horizon Telcom Inc-GRN-001212.pdf, NTIA LETTER OF SUPPORT FROM ROWE WIRELESS 090-09-27-2022 12-18-Horizon Telcom Inc-GRN-001212.pdf, GMN Letter of Support for HORIZON NTIA Middle-09-27-2022 10-12-Horizon Telcom Inc-GRN-001212.pdf, Technical Capabilities 2-2 Supplement-09-29-2022 06-20-Horizon Telcom Inc-GRN-001212.pdf

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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 counties in which this project would build new fiber routes currently have no open access middle mile available.

One may be able to piece together a connection using a combination of carriers including AT&T, Charter and legacy telcos. For decades, creating such a mish mash of a connection was the only option in Appalachian Ohio. These types of multi-carrier links generally cost much, provide poor performance and result in lots of finger-pointing among the various carriers' services that had been stitched together. These closed network operators do not publish their rates, do not publish their fiber routes, do not guarantee equitable access and do not offer dark fiber as an option.

Horizon, a 125-year-old telecommunications company, has expanded from its rural telco roots to become a regional middle mile provider with open middle mile in forty Ohio counties and portions of five adjoining states. We built the rural portions of the network in Ohio largely based on funding from the NTIA Broadband Technology Opportunity Program in 2010 ($66 million) as a member of the Ohio Middle Mile Consortium and the FCC Rural Health Care Pilot Program in 2008 ($16 million) in partnership with the Southern Ohio Health Care Network.

In this proposal, we identify key gaps in the open middle mile infrastructure in Appalachian Ohio and offer the most cost-effective approach to addressing the need. Building upon NTIA's previous investments in the Ohio Middle Mile Consortium, Horizon's design reaches two counties currently lacking any open middle mile, establishes new POPs in three counties, and densifies the existing network in six additional counties.

We also propose to upgrade the existing points-of-presence to support 400 Gbps speeds, up from the current 10 Gbps. This capacity boost will support the robust growth in demand from CAIs with a particular focus on supercharging the K-12 networks. The additional speeds and refreshed equipment will support burgeoning demand for back-haul to support last mile projects while reducing back-haul costs. Our company prides itself on the performance of our fiber deployments. Our existing network serving Appalachian Ohio consistently deliver latency under 10 ms and jitter of under 2 ms.

This will expand the mission of the NTIA for the region, delivering open middle mile with non-discriminatory access and high-performance connections to fuel the needs of the CAIs, the businesses and the last mile providers. Horizon will continue as the sole open middle mile operator, maintaining its commitment to the region.

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Type of technology to be used in proposal:

Fiber Optic Technology

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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

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

Horizon MMG Community Anchor Institution Fina-09-28-2022 09-28-Horizon Telcom Inc-GRN-001212.xlsx

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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

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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.

Horizon_Shape_File_for_NTIA_Middle_Mile_29_Se-09-29-2022 11-45-Horizon Telcom Inc-GRN-001212.zip

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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.

Horizon interconnect list-09-28-2022 09-46-Horizon Telcom Inc-GRN-001212.xlsx

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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.

Network Logical Diagram 26 Sept 2022 - STO-09-28-2022 09-52-Horizon Telcom Inc-GRN-001212.pdf, Horizon proposed and existing routes with uns-09-28-2022 10-05-Horizon Telcom Inc-GRN-001212.pdf
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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.

The proposed Appalachian Ohio Middle Mile Expansion project will install new fiber optic cables on existing utility poles in existing, disturbed utility corridors. In locations where existing underground conduit is available, the route may use that conduit. However, except in the downtown Cincinnati area, greater than 90% of the fiber will be aerial, strand-and-lash deployment.

Before beginning make-ready, a utility company engineer will walk the route to inspect every pole and span to identify poles in need of improvement or replacement. This requires foot traffic within the disturbed utility corridor.

Replacing or reinforcing a pole will require medium weight equipment depending on location and size. For poles within or close to road rights-of-way, work can be conducted from the right-of-way with no impact on surrounding land. Medium weight vehicles including bucket trucks may need to be driven into the corridor. Some pole routes in Appalachian Ohio do run cross-county away from any road through rugged terrain. In those instances, most make-ready work will be completed using tracked vehicles with buckets.

Pole replacement steps include temporarily disconnecting power and communications cables from the pole, pulling the pole out of the ground with a hydraulic lift, placing the new pole into the existing hole,

compacting the soil around the pole with a hydraulic tamper, and reattaching the lines. Hole depth varies from 3 to 6 feet depending on pole height. Hole diameter is similar to pole diameter. Typical time per pole is 3-5 hours. Poles that have been removed for replacement will be transported via truck to a storage facility. Depending on the utility pole owner, discarded poles are redistributed for use in farming, landscaping, or recycled.

Fiber installation involves attaching a steel messenger wire to utility poles, then lashing fiber optic cable to that steel carrier. Typically, a cable reel truck and a bucket truck are needed for this process. As with make ready, fiber installation within or near road rights-of-way can be completed from the right-of-way using light-to-medium duty vehicles. Some pole routes in Appalachian Ohio do run cross-county away from any road through rugged terrain. In those instances, most fiber installation will be completed using tracked vehicles with buckets. In some cases, technicians will climb the poles rather than utilizing bucket trucks. No digging is involved in the fiber installation process.

The project also will install three new cast concrete POP structures with electric and fiber optic connections and a diesel backup generator. Construction of a new POP involves the following steps: site preparation, cast concrete enclosure delivery and assembly, electric and fiber optic installation, generator and HVAC installation, and installation of security fencing.

All of the proposed new fiber routes are closely aligned with existing road corridors, and all existing and proposed Points of Presence are located in developed areas above the 100-year flood plain.

The route passes near the following rivers, bodies of water, and other natural resources. Holmes County: Lake Buckhorn. Coshocton County: Walhonding River, Tuscarawas River, Muskingum River. Knox County: Apple Valley Lake, Kokosing River. Muskingum County: Muskingum River. Perry County: forested, reclaimed strip mine land. Athens County: Burr Oak Lake. Much of the forested land along these corridors has been heavily impacted in the past by extractive industries like coal mining, clay mining/brick making, and timber clearcutting. Current forests are second or third growth with some plantings the result of reclamation activities. Many waterways in this region also suffer from acid mine drainage.

The connector from Batavia to Cincinnati passes through mostly urbanized territory, with a portion near the Ohio River. The Steubenville connector route in Jefferson County passes through a combination of urban territory and developed mixed woodland.

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Upload Map Images:

coshocton-tuscarawas-river-09-29-2022 01-28-Horizon Telcom Inc-GRN-001212.jpg, jefferson-steubenville-09-29-2022 01-28-Horizon Telcom Inc-GRN-001212.jpg, coshocton-muskingum-river-09-29-2022 01-28-Horizon Telcom Inc-GRN-001212.jpg, coshocton-walhonding-river-09-29-2022 01-28-Horizon Telcom Inc-GRN-001212.jpg, athens-burr-oak-lake-09-29-2022 01-28-Horizon Telcom Inc-GRN-

001212.jpg, cincinnati-route-09-29-2022 01-28-Horizon Telcom Inc-GRN-001212.jpg, holmes-lake-buckhorn-09-29-2022 01-28-Horizon Telcom Inc-GRN-001212.jpg, knox-apple-valley-lake-kokosing-river-09-29-2022 01-28-Horizon Telcom Inc-GRN-001212.jpg, muskingum-muskingum-river-09-29-2022 01-28-Horizon Telcom Inc-GRN-001212.jpg, perry-strip-pits-09-29-2022 01-28-Horizon Telcom Inc-GRN -001212.jpg

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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.

Funded Partners and Unfunded Collaborators 29-09-29-2022 01-25-Horizon Telcom Inc-GRN-001212.pdf, Funded Partners and Unfunded Collaborators 19-10-19-2022 01-45-HORIZON TELCOM, INC.-GRN-001212.xlsx, Horizon Telcom GRN-001212 Funded Partners and-04-10-2023 04-06-HORIZON TELCOM, INC.-GRN-001212.xlsx

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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.

NTIA Operational Certificaiton Executed-09-27-2022 01-14-Horizon Telcom Inc-GRN-001212.pdf
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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.

NTIA Financial Certification Executed-09-27-2022 01-15-Horizon Telcom Inc-GRN-001212.pdf
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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.

Horizon bank confirmation letter 9-09-29-2022 04-16-Horizon Telcom Inc-GRN-001212.27.22.pdf, Horizon bank confirmation letter 10-10-18-2022 09-20-HORIZON TELCOM, INC.-GRN-001212.17.22 (002).pdf, Bank Eligibility for Pre-Letter of Credit Fin-04-10-2023 04-10-HORIZON TELCOM, INC.-GRN-001212.pdf
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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.**

Horizon Telcom, Inc-09-23-2022 10-15-Horizon Telcom Inc-GRN-001212. - December 2021 Audit FS FINAL - 5-5-2022.pdf

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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.**

Horizon Telcom - 2020 FS FINAL - 4-29-2021-09-23-2022 10-16-Horizon Telcom Inc-GRN-001212.pdf, Horizon Telcom 2019 Audit Report-09-23-2022 10-16-Horizon Telcom Inc-GRN-001212.pdf

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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.

Budget Narrative 29 September 2022 Final-09-29-2022 01-42-Horizon Telcom Inc-GRN-001212.docx, Budget Narrative 18 October 2022 Revised STO -10-19-2022 01-39-HORIZON TELCOM, INC.-GRN-001212.docx, Budget Narrative Final 10 April 2023-04-10-2023 04-21-HORIZON TELCOM, INC.-GRN-001212.docx

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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.

Horizon MMG Templage Detailed Budget Justific-09-29-2022 01-44-Horizon Telcom Inc-GRN-001212.xlsx, Template Budget Details Final 10 April 2023-04-10-2023 04-23-HORIZON TELCOM, INC.-GRN-001212.xlsx

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Any other funding provided for this project?

No

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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.

Horizon NTIA Income Statement and Addressable-09-29-2022 10-48-Horizon Telcom Inc-GRN-001212.xlsx

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