Note: Form instructions and definitions will be created to support the report. Instructional guidance and training will be developed. Numbering to be updated based on final approved form.

RECIPIENT NAME
Mid-Atlantic Broadband Communities Corp.

OMB Control No. 0660-0052
Expiration Date: 4/30/2024

# Middle Mile Grant Program Bi-Annual Performance Report

## A. GENERAL INFORMATION

**GENERAL**

| | | | |
|---|---|---|---|
| 1a. Recipient Organization: | Mid-Atlantic Broadband Communities Corp. | 1b. Award Identification Number: | 51-10-MM010 |
| 1b. Recipient Street Address: | 711 Wilburn Avenue | 1c. Report Date (MM/DD/YYYY): | 10/30/2023 |
| 1c. City, State, and Zip Code: | North Boston, VA 20202 | 1j. Final Report: | Yes ☐ No ☒ |
| 1d. Unique Entity Identification (UEI) Number: | KTTFHJXTEKM | 1h. Report Period Start Date (MM/DD/YYYY): | 7/1/2023 |
| 1e. Award Start Date (MM/DD/YYYY): | 4/1/2022 | 1i. Report Period End Date (MM/DD/YYYY): | 9/30/2023 |
| 1f. Award End Date (MM/DD/YYYY): | 4/31/2027 | | |
| 1g. Name of Person Completing Report: | Hal Dorton | | |

## B. PROJECT NARRATIVE

**PROJECT NARRATIVE**

Please use the section below to provide a project narrative of the project(s).
This section aims to help reviewers better understand what project is being proposed and steps taken to achieve this goal.

| | |
|---|---|
| 2a. A brief description of the recipient's organization and scopes of work/project priorities: | The purpose of this project will be to build eight (8) open access middle mile fiber segments that will provide critical broadband connectivity and diversity for economic development purposes in twelve (12) localities in the Commonwealth of Virginia including the Counties of Mecklenburg, Lunenburg, Prince Edward, Nottoway, Dinwiddie, Prince George, Sussex, Greensville, Cumberland, Goochland, Louisa, and the City of Petersburg. |
| 2b. An overview of the significant outputs and outcomes to be accomplished in the project: | The key impacts of this 130-mile middle mile construction project are:<br>•Provide open access middle mile diverse fiber infrastructure to a total of 12 community anchor institutions and 12 industrial and business park sites in eleven localities.<br>•Middle telecommunications infrastructure that will support technology driven businesses that provide high paying jobs in the existing Industrial and Business parks in the region. |
| 2c. How would the project meet the recipient's business and/or administrative needs?: | Upon completion of this project, the eight (8) open access middle mile fiber segments will allow MAC to enhance the economic development infrastructure and improve last mile access for community anchor institutions in the twelve localities |
| 2d. Provide an overview of key accomplishments achieved for this reporting period on the MM infrastructure project. | Executed CD-450 Contract Agreement with NTIA, submitted initial six month budget, submitted draft letter of credit, submitted draft legal opinion letter, and executed 12 million ECFA grant agreement. |
| 2e. Provide any challenges experienced during this reporting period impacting the expansion of the MM infrastructure project (i.e., supply chain, availability of labor). | Not Applicable - First Report |
| 2f. Provide any barriers to improving job quality experienced during this reporting period. | Not Applicable - First Report |

## C. INFRASTRUCTURE MILESTONE CATEGORIES AND PROJECT TIMELINE

Please use the chart below to provide the start date and end date of your project.

| OVERALL PROJECT | 3a. PROJECT DURATION | 3b. PROJECT START DATE | 3c. PROJECT END DATE |
|---|---|---|---|
| | 1460 | September 1, 2019 | August 31, 2027 |

**INFRASTRUCTURE MILESTONE CATEGORIES AND PROJECT TIMELINE**

Please provide the start and end dates for each milestone category of your project. The duration is be based on the start and end dates of each category.

Please use the table provided to indicate your EXPECTED percentage of completion on a bi-annual basis for each year of your project. Year 1 begins with your award start date.

The percentage of completion should be based primarily on the expenditure of your project budget and should be reported cumulatively from award inception through the end of each semi-annual reporting period. For example, if you expect to complete a particular milestone within the first three periods of your project, the third period and all subsequent periods should state 100%.

Please write "0" in the duration field if your project does not include an activity. If necessary, please insert additional milestones at the end.

| ANTICIPATED PROJECT MILESTONES | | | | Year 1 Baseline | | Year 2 Baseline | | Year 3 Baseline | | Year 4 Baseline | | Year 5 Baseline | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3e. MILESTONE CATEGORIES | 3f. DURATION (Days) | 3g. START DATE | 3h. END DATE | Period 1 | Period 2 | Period 1 | Period 2 | Period 1 | Period 2 | Period 1 | Period 2 | Period 1 | Period 2 |
| Overall Project | 1460 | September 1, 2019 | August 31, 2027 | 0% | | | | | | | | | |
| Environmental Assessment | 180 | November 1, 2019 | April 29, 2020 | 0% | 90% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% |
| Network Design | 180 | November 1, 2019 | April 29, 2020 | 0% | 90% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% |
| Rights of Way | 180 | December 1, 2020 | May 29, 2021 | 0% | 50% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% |
| Construction Permits And Other Approvals | 180 | January 3, 2022 | July 1, 2022 | 0% | 25% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% |
| Site Preparation | 0 | | | | | | | | | | | | |
| Equipment Procurement (Fiber is considered Equipment) | 252 | March 1, 2024 | September 10, 2024 | 0% | 0% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% |
| Network Build (all components - owned, leased, indefeasible rights of use, etc.) | 759 | October 1, 2024 | September 28, 2026 | 0% | 0% | 0% | 20% | 50% | 80% | 100% | 100% | 100% | 100% |
| Equipment Deployment | 0 | | | 0% | | | | | | | | | |
| Testing & Acceptance | 30 | July 1, 2026 | September 28, 2026 | 0% | | | | | | 50% | 100% | 100% | 100% |
| Point of Presence(Open Ended Procurement) | 0 | | | 0% | | | | | | | | | |
| Other (please specify) | 0 | | | 0% | | | | | | | | | |
| | 0 | | | 0% | | | | | | | | | |

**ACTUAL PROJECT MILESTONES**

Please use the table provided to indicate your ACTUAL percentage of completion on a bi-annual basis for each year of your project. Year 1 begins with your award start date.

The percentage of completion should be based primarily on the expenditure of your project budget and should be reported cumulatively from award inception through the end of each semi-annual reporting period. For example, if you expect to complete a particular milestone within the first three periods of your project, the third period and all subsequent periods should state 100%.

Please provide a brief description of the previous activities involved in meeting each milestone.Longer description should be provided for each milestone, covering all periods in years one through 5. Please write the number "0" if your project does not include an activity. If necessary, please insert additional milestones at the bottom of the chart. Please add additional milestones as applicable.

| ACTUAL PROJECT MILESTONES | | Year 1 | | Year 2 | | Year 3 | | Year 4 | | Year 5 | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 4a. MILESTONE | 4b. DESCRIPTION | Period 1 | Period 2 | Period 1 | Period 2 | Period 1 | Period 2 | Period 1 | Period 2 | Period 1 | Period 2 |
| | | | | | | Actual Milestone Completion (Cumulative) | | | | | |
| Overall Project | Name of Reporting Period | 0% | | | | | | | | | |
| Environmental Assessment | Prior Report | 0% | | | | | | | | | |
| Network Design | Executed Grant Agreement in September 2023 | 0% | | | | | | | | | |
| Rights of Way | | 0% | | | | | | | | | |
| Construction Permits And Other Approvals | | 0% | | | | | | | | | |
| Site Preparation | | 0% | | | | | | | | | |
| Equipment Procurement (Fiber is considered Equipment) | | 0% | | | | | | | | | |
| Network Build (all components - owned, leased, indefeasible rights of use, etc.) | | 0% | | | | | | | | | |
| Equipment Deployment | | 0% | | | | | | | | | |
| Testing & Acceptance | | 0% | | | | | | | | | |
| Point of Presence(Open Ended Procurement) | | 0% | | | | | | | | | |
| Other (please specify) | | 0% | | | | | | | | | |

**SUBRECIPIENTS AND PARTICIPANTS**

List of Subrecipient(s) that received a subaward or subcontract from the eligible entity and a description of the specific project for which grant funds were provided.

Associate projects namely to any subrecipient or subaward associated with grant, approved grant funds, and expenditures to date.

| 5a. Project Name | 5b. Project Description | 5c. Subrecipient | 5d. Minority Business Enterprise (MBE) | 5e. Women Business Enterprise (WBE) | 5f. Labor Surplus Area Firm | 5g. Awarded Funds | 5h. Expenditures to Date | 5i. Remaining Grant Balance | 5j. % of work complete |
|---|---|---|---|---|---|---|---|---|---|
| Not Applicable | There are no subrecipients with the award | | Yes ☐ No ☒ | Yes ☐ No ☒ | Yes ☐ No ☒ | | | | |
| | | | Yes ☐ No ☒ | Yes ☐ No ☒ | Yes ☐ No ☒ | | | | |
| | | | Yes ☐ No ☒ | Yes ☐ No ☒ | Yes ☐ No ☒ | | | | |
| | | | Yes ☐ No ☒ | Yes ☐ No ☒ | Yes ☐ No ☒ | | | | |

## D. INFRASTRUCTURE BUDGET EXECUTION DETAILS

**INFRASTRUCTURE BUDGET EXECUTION TABLE**

Please provide details below on your total budget and total fund expended to date for each budget element, including detailed disbursements of both matching funds approved and Federal funds obligated from project inception through end of this reporting period. Figures should be reported cumulatively from award inception to the end of the applicable reporting period.

| 6a. Projected Budget Element | 6b. Federal Funds | 6c. Non-Federal Funds | 6d. Total Project Budget | 6e. Total Federal Funds Expended to Date | 6f. Total Non-Federal Funds Expended to Date | 6g. Total Funds Expended | 6h. Percent of Federal Funding Expended to Date (Cumulative) |
|---|---|---|---|---|---|---|---|
| Administrative and legal expenses | $306,200.00 | $153,750.00 | $459,950.00 | $0.00 | $0.00 | $0.00 | 0% |
| Land, structures, rights-of-way, appraisals, etc. | $343,000.00 | $172,000.00 | $515,000.00 | $0.00 | $0.00 | $0.00 | 0% |
| Telecommunications Equipment | $0.00 | $0.00 | $0.00 | $0.00 | $0.00 | $0.00 | 0% |
| Architectural and engineering fees | $757,786.00 | $229,571.00 | $1,065,357.00 | $0.00 | $0.00 | $0.00 | 0% |
| Other architectural and engineering fees | $0.00 | $0.00 | $0.00 | $0.00 | $0.00 | $0.00 | 0% |
| System acquisition fees | $1,000,000.00 | $1,000,000.00 | $2,000,000.00 | $0.00 | $0.00 | $0.00 | 0% |
| Pre-work | $0.00 | $0.00 | $0.00 | $0.00 | $0.00 | $0.00 | 0% |
| Demolition and removal | $0.00 | $0.00 | $0.00 | $0.00 | $0.00 | $0.00 | 0% |
| Construction | $24,000,000.00 | $8,000,000.00 | $32,000,000.00 | $0.00 | $0.00 | $0.00 | 0% |
| Equipment | $12,001,001.00 | $000,001.00 | $12,001,001.00 | $0.00 | $0.00 | $0.00 | 0% |
| Miscellaneous | $0.00 | $0.00 | $0.00 | $0.00 | $0.00 | $0.00 | 0% |
| Contingency | $16,996,000.00 | $7,058,571.00 | $24,054,571.00 | $0.00 | $0.00 | $0.00 | 0% |
| Unobligated | $0.00 | $0.00 | $0.00 | $0.00 | $0.00 | $0.00 | 0% |
| Totals | $56,403,986.00 | $17,614,371.00 | $72,018,357.00 | $0.00 | $0.00 | $0.00 | 0% |

## E. COMMUNITY BENEFIT AGREEMENT

**COMMUNITY BENEFIT AGREEMENT**

As stated in the BEAD Grant Program NOFO a Community Benefit Agreement (CBA) is an agreement signed by community benefit groups and a developer, identifying the community benefits a developer agrees to deliver, in return for community support of the project.

Please use the fields below to state the Community Benefit Group and Developer Name and describe the activities in how this partnership has supported with the Middle Mile infrastructure project (i.e. wage agreements, targeting hiring of apprentice and disadvantaged groups in labor market, education and training opportunities, sub-contracting to local small business for construction, services, and supply chain needs).

**7a. Community Benefit Group Name:** Please provide the name of the Community Benefit Group

**Not Applicable in this Project**

**7b. Developer Name:** Please provide the name of the Developer

**Not Applicable in this Project**

**7c. Community Benefit Group and Developer Partnership:** Please describe in the space below the nature of the partnership and how the MM grant funds being used are assisting to provide community support for the infrastructure project.

**Not Applicable in this Project**

## F. CLIMATE RESILIENCE

**CLIMATE RESILIENCE**

Recipients must demonstrate that they have sufficiently accounted for current and future weather and climate-related risks to new MM infrastructure projects. At present, weather and climate-related risks to broadband networks include wildfires, extreme heat and cold, inland and coastal flooding, and the extreme winds produced by weather events such as tornadoes, hurricanes, and other weather events. Because retrofitted and new infrastructure for broadband might be expected to have a lifetime of 20 years or more, recipients must account not only for current risks but also for how the frequency, severity, and nature of these extreme events may plausibly evolve as our climate continues to change over the coming decades.

**Climate Resiliency Risk Mitigation**

The purpose of this section is for the recipient to demonstrate that they have sufficiently accounted for current and future weather and climate-related risks to new MM infrastructure projects. In particular, each recipient should demonstrate how they've addressed the known and identifiable risks of current and future projected weather and climate conditions through measures such as (but not limited to): choice of a technology platform suitable to the climate risk of the region, reliance on alternative siting of facilities (i.e., underground construction where appropriate), retrofitting, or hardening of existing assets, and use of network redundancy to safeguard against threats to infrastructure.

**8a. This is a geographic area identified by the recipient/applicant** subject to an initial and/or updated climate and climate-related risk? If yes, please provide **the date of the screening and provide related documentation as an attachment to this report.**

This is the first report. There has not been an updated hazard screening. This project will be build eight (8) open access middle mile fiber segments across twelve (12) localities in the Commonwealth of Virginia including the Counties of Mecklenburg, Lunenburg, Prince Edward, Nottoway, Dinwiddie, Prince George, Sussex, Greensville, Cumberland, Goochland, Louisa, and the City of Petersburg.

| 8b. Climate Resilience Category | 8c. Date of Most Recent Hazard Screening | 8d. Name and Title of Representative Completing Most Recent Hazard Screening | 8e. Date of Report Completed |
|---|---|---|---|
| Not Applicable - First Report | Not Applicable - First Report | Not Applicable - First Report | Not Applicable - First Report |

**8f. Identified Risks:** For your MM project, what are the potential weather and climate hazards that may be most important to be addressed that could impact the resiliency of the middle mile infrastructure deployed (i.e. wildfires, extreme heat and cold, inland and coastal flooding, extreme winds, tornadoes, hurricanes and other weather events)?

**As noted in the current response dated 1/25/23, the main weather and climate risks to the new middle mile infrastructure over the next 20 years would consist of localized flooding, prolonged drought, extreme temperature variations in winter and summer months, multiple and frequent wind events including increased tornado and hurricane activity in the mid-atlantic region. Additionally, there could be worsening air quality issues due to greenhouse gases, possible wildfires in our rural forested areas caused by prolonged drought, frequent lightning storms and increased carbon emissions from industrial and energy production (fuel and Natural Gas power plants) which contribute to overall global warming and climate change in Virginia.**

**8g. Weather and Climate Hazards:** Share any significant climate or weather hazards experienced during this reporting period (i.e., floods, tornadoes) impacting infrastructure buildout or service? Briefly describe how you monitored for weather and climate-caused issues for the stability of the system. If so, please provide the date of the disaster, location and backup documentation related (i.e., news articles).

**Not Applicable - First Report**

**8h. Risks to Development of New Infrastructure:** Has the team identified any risks impacting the deployment of new or repaired infrastructure due to current and future weather and climate-related threats during this reporting period?

**Not Applicable - First Report**

**8i. Risk Mitigation:** How will the project avoid and/or mitigate the risk identified? If not applicable, please explain why.

MAC is well positioned to protect our middle mile fiber optic infrastructure and avoid and substantially mitigate these weather and climate risks over the next 20 years. The greatest protection from climate and weather risks is ensuring the middle mile infrastructure is protected from these elements. The new middle mile fiber network will be mostly buried underground about 36 inches below grade and placed within Virginia Department of Transportation (VDOT) rights of way. VDOT regularly maintains these rights of way to reduce the risk of grass fires, flooding, etc. that could have an impact on MAC's middle mile fiber infrastructure. The fiber cable installed will be double armored in a waterproof sheath and will be placed within a minimum 1.5" PVC conduit for additional protection. Extreme weather events such as high wind events (tornado or hurricane), temperature variations, flooding and drought conditions do not impact the underground fiber infrastructure. Where we have aerial crossings or spans over streams/rivers that may be exposed to the elements, we install these cables using a double bell technique, rather than a single bell technique to the aerial strand. This provides a bit more protection to keep the cable tethered to the aerial strand. And in the unfortunate event of downed power lines and pole destruction, our on-call contractors repair and replace fiber once the power poles and power lines are restored and we get an all clear notice from the electric utility that it is safe to reinstall fiber on those poles. MAC maintains a roster of active splicing and contractor resources and when severe weather events such as hurricanes are expected, MAC pre-positions and pays retainers to our construction company crews to be ready to respond to fiber issues or outages. As storms can impact construction project availability or our shorter holding locations, so we ensure our pre-positioned crews are ready to respond to any fiber issues or outages. Our contractors have a wide variety of equipment and resources to repair fiber and restore service in the event of a fiber cut or other fiber issue

National Labor Relations Act (29 U.S.C. 158 (f)

**WORKFORCE CONTINUITY PLAN / NATIONAL LABOR RELATIONS ACT**

As stated in the MM NOFO, if a recipient has not provided a certification that a project either will use a unionized project workforce or included a project labor agreement, meaning a pre-hire collective bargaining agreement consistent with section 8(f) of the National Labor Relations Act (29 U.S.C. 158 (f)), then the recipient must provide a project workforce continuity plan.

**Workforce Continuity Plan**

13a. Please describe the steps taken to ensure the project has ready access to a sufficient supply of appropriately skilled and unskilled labor to ensure construction is completed skillfully throughout the project's life (as required in Section III.B of the MM NOFO). As stated in the MM NOFO, the middle mile grant recipient is capable of carrying out the proposed project in a competent manner, including a plan to attract or retain an appropriate skilled and credentialed workforce.

For your MM project, please provide a brief description of efforts made to attract, train or retain a skilled and credentialed workforce.

Has the team offered any of the following resources to assist with maintaining a sufficient supply of appropriately skilled labor force for this reporting period? If so, which resources (please provide a brief description of any of the following that apply):
Professional Certifications
In-House Training
Registered Apprenticeships
Labor-Management Partnerships
Partnerships with entities like unions, community colleges, or community-based groups

**As Virginia is a right-to-work state, MBC will not require union labor on any construction project as we are not required to do so. MBC will welcome a review of all bids from all experienced contractors qualified to complete the scope of work whether they are unionized or not.**

**As MBC develops the RFPs for construction, we will include mention our desire for contractors to make use of existing workforce development programs in our region while recruiting employees for various levels of construction activity.**

**Outside plant construction services and skilled labor go hand in hand. There are not really certifications or licenses other than state issues contractor licenses. The best training on the market is on-the-job training, and the contractors that MBC uses in the region have found hard-working employees that enjoy their jobs that are mostly outdoor, and they tend to stick with the same contractor when the workloads are consistent.**

**All construction and inspection services that are part of this project will be completed by a third-party contractor.**

13b. Please describe below, the steps taken to minimize risks of labor disputes and disruptions that would jeopardize the timeliness and cost-effectiveness of completing the MM project.

**Not Applicable**

13c. Please describe below the steps to ensure a safe and healthy workplace that avoids delays and costs associated with workplace illnesses, injuries, and fatalities.

**The contractor(s) selected to build Segments 1-8 of this project will be provided information on types of information to deliver to MBC which will be kept on file regarding their employment mix, job titles, safety training plans, any certification or license required including confined space training, and other training.**

13d. For your MM project, please provide a brief description below of efforts made to ensure a safe and healthy workplace.

Has the team offered any of the following resources to assist with maintaining a safe and healthy workplace for this reporting period? If so, which resources (please provide a brief description of any of the following that apply):
Safety Training
Certifications and/or Licensure Requirements for all relevant works (e.g., OSHA 10, OSHA 30, confined space, traffic control, or other training required of workers employed by contractors)
Issues raised by workplace safety committees and their resolutions

**The contractor(s) selected to build Segments 1-8 of this project will be provided information on types of information to deliver to MBC which will be kept on file regarding their employment mix, job titles, safety training plans, any certification or license required including confined space training, and other training.**

13e. Please provide the name(s) below of any subcontracted entities performing work on the project, and the total number of workers employed by each entity.

| 13e-1. Name of Subcontracted Entity Performing Work | 13e-2. Total Number of Workers within this Subcontract | 13e-3. Job Categories of Workers Supporting Project within this Subcontract |
|---|---|---|
| Not Applicable - First Report | 0 | 0 |

13f. Please describe below the steps taken to ensure that workers on the project receive wages and benefits sufficient to secure an appropriately skilled workforce in the context of the local and regional labor market.

**Davis Bacon requirements will be followed.**

## I. ANCHOR INSTITUTIONS

**ANCHOR INSTITUTIONS**

Please provide Anchor Institution (AI) data for the current period only (not cumulative). Please add rows as needed.

| 14a. Anchor Institution Name | 14b. Street Address | 14c. City | 14d. State | 14e. Type of Anchor Institution | 14f. Interconnection within 1,000 Feet of AI Enabling Gig Symmetrical Service | 14g. Narrative Description of how the Anchor Institution may benefit from the Grant Funded Infrastructure |
|---|---|---|---|---|---|---|
| Not Applicable - First Report | | | | | | |

## J. BROADBAND ACCESS KEY INDICATOR: SUBSCRIBERS AND SPEED

**PROJECTED NUMBER OF SUBSCRIBERS AND SPEED**

Please use the following table to provide anticipated key indicators with the projected totals for each beneficiary category, access type and speed category for your infrastructure service or project. Except as indicated, information should be reported cumulatively from award inception through the end of the bi-annual period for Bi-Annual Indicators. Please write the number "0" if your project does not include this indicator.

| PROJECTED NUMBER OF SUBSCRIBERS AND SPEED | | Year 1 | | Year 2 | | Year 3 | | Year 4 | | Year 5 | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SUBSCRIBER TYPE | ACCESS TYPE | Period 1 | Period 2 | Period 1 | Period 2 | Period 1 | Period 2 | Period 1 | Period 2 | Period 1 | Period 2 |
| 15a. Anchor Institutions (AIs) | 15a-1. Total number of AIs passed | 0 | 0 | 0 | 5 | 15 | 40 | 52 | 52 | 52 | 52 |
| | 15a-2. Number of AIs within 1,000 feet of the middle mile infrastructure | 0 | 0 | 0 | 5 | 15 | 40 | 52 | 52 | 52 | 52 |
| | 15a-3. Total number of AIs served | 0 | 0 | 0 | 5 | 15 | 40 | 52 | 52 | 52 | 52 |
| | 15a-4. AIs with new access | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 15a-5. AIs with improved access | 0 | 0 | 0 | 5 | 15 | 40 | 52 | 52 | 52 | 52 |
| | 15a-6. Total number of AIs served with speeds of at least 1/1Gbps | 0 | 0 | 0 | 5 | 15 | 40 | 52 | 52 | 52 | 52 |
| 15b. Broadband Wholesalers or Last Mile Providers | 15b-1.Total number of broadband wholesalers or last mile providers served | 0 | 0 | 0 | 1 | 2 | 3 | 4 | 4 | 4 | 4 |
| | 15b-2. Broadband wholesalers or last mile providers with new access | 0 | 0 | 0 | 1 | 2 | 3 | 4 | 4 | 4 | 4 |
| | 15b-3. Broadband wholesalers or last mile providers with improved access | 0 | 0 | 0 | 1 | 2 | 3 | 4 | 4 | 4 | 4 |
| | 15b-4. Total number of broadband wholesalers or last mile providers offering speeds of at least 25/3 Mbps | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 15b-5. Total number of broadband wholesalers or last mile providers offering speeds of at least 100/20 Mbps | 0 | 0 | 0 | 1 | 2 | 3 | 4 | 4 | 4 | 4 |
| | 15b-6. Total number of broadband wholesalers or last mile providers offering speeds of at least 1/1 Gbps | 0 | 0 | 0 | 1 | 2 | 3 | 4 | 4 | 4 | 4 |

## K. BROADBAND ACCESS KEY INDICATOR: NETWORK BUILD PROGRESS

**NETWORK BUILD PROGRESS**

Please use the following table to provide anticipated key indicators and progress of your infrastructure project. Except as indicated, information should be reported cumulatively from award inception through the end of the bi-annual period. Please write the number "0" if your project does not include this indicator.

| NETWORK BUILD PROGRESS | Year 1 | | Year 2 | | Year 3 | | Year 4 | | Year 5 | |
|---|---|---|---|---|---|---|---|---|---|---|
| KEY INDICATOR | Period 1 | Period 2 | Period 1 | Period 2 | Period 1 | Period 2 | Period 1 | Period 2 | Period 1 | Period 2 |
| 16a. Total of new fiber miles (aerial or buried) | 0 | 0 | 0 | 26 | 65 | 105 | 132 | 132 | 132 | 132 |
| 16b. Total of fiber miles leased | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 16c. Total of existing fiber miles upgraded | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 16d. Total of new microwave links | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 16e. Total of new towers | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 16f. Total of new interconnection points | 0 | 0 | 0 | 78 | 195 | 315 | 660 | 660 | 660 | 660 |
| 16g. Total of signed agreements with broadband wholesalers or last mile providers | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 16h. Total of potential agreements (i.e., agreements currently being negotiated) with broadband wholesalers or last mile providers (This Total should NOT be reported cumulatively) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

## L. QUANTIFIABLE METRICS

**Quantifiable Metrics** - Section designed to assist with **reporting** and **audit** purpose to quantify how much progress was made and track the location of where the progress was made.

**FIBER OPTIC BASED**

| 17a. Fiber Optic Based | Year 1 | | Year 2 | | Year 3 | | Year 4 | | Year 5 | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Period 1 | Period 2 | Period 1 | Period 2 | Period 1 | Period 2 | Period 1 | Period 2 | Period 1 | Period 2 |
| 17a-1. Is the fiber a buried/aerial or undersea application? | Buried/Aerial | | | | | | | | | |
| 17a-2. Number of strands deployed | 0 | | | | | | | | | |
| 17a-3. Number of miles of buried fiber deployed | 0 | | | | | | | | | |
| 17a-4. Number of miles of aerial fiber deployed | 0 | | | | | | | | | |
| 17a-5. Estimated capacity of fiber (i.e. throughput) | | | | | | | | | | |
| 17a-6. Deployment cost per mile of buried fiber optics | $0.00 | | | | | | | | | |
| 17a-7. Deployment cost per mile of aerial fiber optics | $0.00 | | | | | | | | | |
| 17a-8. Total Spent on Buried Fiber Deployment this reporting period | $0.00 | | | | | | | | | |
| 17a-9. Total Spent on Aerial Fiber Deployment this reporting period | $0.00 | | | | | | | | | |
| 17a-10. Total spent on Fiber Deployment this reporting period | $0.00 | | | | | | | | | |
| 17a-11. Please provide any additional information about the Fiber Optic deployment (200 words or less) | Not Applicable - First Report | | | | | | | | | |

17a-12. Please provide the digital mappings (e.g., CAD, Revit, KMZ, KML) for the new aerial fiber and buried fiber equipment installed during this reporting period.

**MICROWAVE BASED**

| 17b. Microwave Based | Year 1 | | Year 2 | | Year 3 | | Year 4 | | Year 5 | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Period 1 | Period 2 | Period 1 | Period 2 | Period 1 | Period 2 | Period 1 | Period 2 | Period 1 | Period 2 |
| 17b-1. How many microwave nodes have been deployed? | Not Applicable | | | | | | | | | |
| 17b-2. How many microwave nodes are operating for reporting period? | 0 | | | | | | | | | |
| 17b-3. Installation cost per microwavable node | 0 | | | | | | | | | |
| 17b-4. Number of new towers built to support microwave structure | 0 | | | | | | | | | |
| 17b-5. If applicable, what type(s) of tower were constructed (a) Monopole (b) Self-Support, (c) Guyed or (d) Other during this reporting period? | | | | | | | | | | |
| 17b-6. Average cost per tower installed | $0.00 | | | | | | | | | |
| 17b-7. Total spend on Tower deployment this reporting period | $0.00 | | | | | | | | | |
| 17b-8. Total spend on microwave deployment this reporting period | $0.00 | | | | | | | | | |
| 17b-9. If you answered "Other" to question 17b-5 or if it is a combination of multiple types, please provide a detailed narrative description detailing what type of tower or what combination of towers is used for the project and the their associated costs. (200 words or less). | Not Applicable | | | | | | | | | |

17b-10. Please provide the digital mappings (e.g., CAD, Revit, KMZ, KML) for the microwave nodes created during this reporting period.

**SATELLITE**

| 17c. Satellite | Year 1 | | Year 2 | | Year 3 | | Year 4 | | Year 5 | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Period 1 | Period 2 | Period 1 | Period 2 | Period 1 | Period 2 | Period 1 | Period 2 | Period 1 | Period 2 |
| 17c-1. What satellite provider is being used? | Not Applicable | | | | | | | | | |
| 17c-2. What is the estimated capacity of the satellite link (i.e. throughput)? | Not Applicable | | | | | | | | | |
| 17c-3. What is the associated cost to use this satellite service? | Not Applicable | | | | | | | | | |
| 17c-4. Please provide any additional information about the Satellite deployment (200 words or less) | Not Applicable | | | | | | | | | |

17c-5. Please provide the digital mappings (e.g., CAD, Revit, KMZ, KML) for the satellite network accessed during this reporting period.

**CERTIFICATIONS**

**Certifications**

18. Please provide certification evidencing compliance with Federal labor and employment laws along with the requirements of Infrastructure Investment and Jobs Act and Middle Mile Grant Program, for the bi-annual period for which this report is being filed.

**I certify that Mid-Atlantic Broadband Communities Corporation is in compliance with Federal labor and employment laws along with the requiremetns of the Infrastructure Investment and Jobs Act and Middle Mile Grant Program, for the bi-annual period for which this report is being filed.**

19. Please provide certification evidencing compliance with the Build America, Buy America Act. The Build America, Buy America Act requires that all of the iron, steel, manufactured products (including but not limited to fiber-optic communications facilities), and construction materials used in the project or other eligible activities are produced in the United States unless a waiver is granted.

**I certify that Mid-Atlantic Broadband Communities Corporation is in compliance with the Build America, Buy America Act.**

**MM GRANT PROGRAM BI-ANNUAL REPORT CERTIFICATION**

**20. I certify to the best of my knowledge and belief that this report is correct and complete for performance of activities for the purposes set forth in the award documents.**

| | | |
|---|---|---|
| 20a. Typed or Printed Name and Title of Authorized Certifying Official: | 20c. Telephone (area code, number and extension): | (434) 570-1301 |
| Phillip Daniel Lloyd, Senior Director of Finance and Administration | 20d. Email Address: | daniel.lloyd@mbc-va.com |
| 20b. Signature of Certifying Official: | | |
| Phillip Daniel Lloyd | 20e. Date: | 10/30/2023 |