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	MCNC	**OMB Control No.**	OMB Control No. 0660-0052
		Expiration Date	Exp. Date: 2/28/2027

Middle Mile Grant Program Bi-Annual Performance Report								
A. GENERAL INFORMATION								
1a. Recipient Organization:	MCNC	**1h. Award Identification Number:**	37-40-MM177					
1b. Recipient Street Address:	3021 CORNWALLIS RD	**1i. Report Date (MM/DD/YYYY):**	06/11/2025					
1c. City, State, and Zip Code:	DURHAM, North Carolina 27709-0146	**1j. Final Report:**	**Yes**		**No**	X		
1d. Unique Entity Identification (UEI) Number:	W85LR2HMVMF5	**1k. Report Period Start Date (MM/DD/YYYY):**	10/01/2024					
1e. Award Start Date (MM/DD/YYYY):	07/01/2023	**1l. Report Period End Date (MM/DD/YYYY):**	03/31/2025					
1f. Award End Date (MM/DD/YYYY):	06/30/2025							
1g. Name of Person Completing Report:	Tommy Jacobson							
B. 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 scope of work/project priorities.	MCNC is a North Carolina private, not-for-profit corporation, who through its operation of the North Carolina Research and Education Network (NCREN), has a long and outstanding history of providing internet and National Research Network services to community anchor institutions (CAIs) throughout the state. MCNC operates NCREN explicitly for the good of the citizens of our state and the institutions we serve. NCREN serves as a critical communications backbone through which North Carolina residents pursue education and access modern healthcare and government services.							

	The HERO project will extend MCNC's reach via the construction of 209 miles of new middle mile fiber through substantially unserved and underserved areas, including some of the highest poverty areas in the state. Upon completion, HERO will support affordable, high-performance broadband for at least 4998 fully unserved locations (and nearly 4300 additional underserved locations) within just 5 miles of the planned routes. The 11-county area has over 16,000 unserved and 12,000 underserved housing units, including many substantially unserved local communities. In total, the affordability, latency, and resilience benefits of HERO would impact over 350,000 housing units and 696 CAIs, bringing new economic opportunities to these economically challenged rural areas of North Carolina.
2b. An overview of the significant outputs and outcomes to be accomplished in the project.	This NTIA grant will fund the engineering and construction of approximately 209 miles of middle mile infrastructure between Winston-Salem to Albemarle, Sanford to Fayetteville, and Fayetteville to Jacksonville, NC. Upon completion of the middle mile routes, MCNC will work with our education and health care partners to identify additional funding to connect community anchor institutions such as school districts, Charter schools, community colleges and health care locations on the direct fiber network. We have identified 25 locations that are current MCNC subscribers within 1 mile of the proposed network that will benefit from the increased bandwidth and resiliency that the new build will bring them when they can connect directly. In total 696 CAI's have been identified in the 11-county area that can benefit from the enhanced infrastructure enabled. In addition, Roanoke Connect, which has recently rebranded itself as Fybe, has committed to the IRU of fibers in the middle mile network to begin providing residential services in the southeastern portions of the network.
2c. How would the project meet the recipient's business and/or administrative need(s)?	This project will close several identified gaps in our current NCREN network throughout the State of North Carolina and will provide broadband access to underserved areas that currently have limited or no access to homes in the community. Given the way that the proposed routes interconnect with existing North Carolina Research and Education Network infrastructure, and the technologies utilized such as MPLS, ancillary benefits to both the new infrastructure and existing infrastructure will be added redundancy and resiliency afforded all users in these corridors through additional connectivity rings. The infrastructure will further enable MCNC to directly connect more school districts and community colleges to NCREN, further strengthening our relationship with the North Carolina Department of Public Instruction and North Carolina Community College System, and provide these entitIes in these new paths more equitable access.
2d. Provide an overview of key accomplishments achieved for this reporting period on the MM infrastructure project.	Network Design Finalizations – Design of all routes was completed as of 11/21/2024. Equipment – All equipment was ordered by 1/29/2025 with a final expected delivery date of 4/30/2025. Much of the equipment started arriving prior to 3/30/25 and is currently being stored at MCNC's corporate offices. Deployment of this equipment will begin in April/May 2025 as the facilities that will house the equipment are completed. Construction of Fiber Routes – As of this reporting period construction is ongoing on all 5 of the defined routes of the project. We project that we will complete conduit and fiber installation of approximately 200 miles of the planned 209 miles by 06/30/2025. The remaining miles are dependent on receipt of the Fort Bragg permit noted below which we do not anticipate until the first of calendar 2026. As such we submitted a request for a no cost extension which is pending. As of 3/31/2025, construction progress is as follows: Winston-Salem to Salisbury (S1) – 60% completion of conduit installation (24.6 miles); 17.6% completion of fiber installation (7.2 miles) Salisbury to Albemarle (S2) – 60% completion of conduit installation (19.5 miles); 11.5% completion of fiber installation (3.7 miles) Sanford to Fayetteville (S3) – 41% completion of conduit installation (13.6 miles); 0% completion of fiber installation (0 miles) Fayetteville to Kenansville (S4) – 80% completion of conduit installation (50.8 miles); 23.2% completion of fiber installation (14.7 miles) Kenansville to Jacksonville (S5) – 54% completion of conduit installation (20.7 miles); 0% completion fiber installation (0 miles) Telecommunication Huts - Ground clearing and foundation work for the two telecommunication hut locations where easements had previously been obtained began at Stanly Community College (Albemarle) and James Sprunt Community College (Kenansville). The delivery of the huts at these two locations is scheduled to occur in April 2025. The last easement required for the Salisbury Hut at Rowan- Cabarrus Community College was received on 3/11/2025. We do not forecast any delays in completing the full installation of all three locations by 6/30/2025.

	Permitting- All permitting is complete or has been submitted and under review. The primary permits outstanding relate to Fort Bragg (time for approval has been extended due to the base name change) and five railroad permits that are in various stages of completion.
2e. Provide any roadblock experienced during this reporting period impacting the expansion of the MM infrastructure project (i.e., supply chain, availability of labor).	During this reporting period it was identified that MCNC needed to obtain a federal permit from the U.S. Army to construct on a North Carolina DOT roadway that traverses the Fort Bragg army base property. The application for permit began but was delayed with the administration change and subsequent renaming of Fort Liberty to Fort Bragg, meaning that all paperwork needed to be resubmitted in late February. As a result it is unlikely that we will receive the permit in time to complete construction at the originally planned completion of June 30, 2025. As such MCNC has applied for a no cost extension. Completion progress of project milestones in section 4 are in some cases less than the anticipated baseline in section 3. MCNC had anticipated receiving environmental clearance to begin construction in April of 2024. Formal clearance did not come until August 2024 and as a result we were 5 months slower to start than anticipated. This is impacting completion status of some milestones, most notably construction and thus the overall project.
2f. Provide any barriers to improving job quality experienced during this reporting period.	Not Applicable

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	PROJECT DURATION	3a. PROJECT START DATE	3b. PROJECT END DATE
	730	07/01/2023	06/30/2025

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%.

*** Period 1 ends September 30 and Period 2 ends March 31. Additional columns may be added for a Year 6, Period 1 or 2, Baseline if the Period of Performance is 5 years.

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	
3c. MILESTONE CATEGORIES	3d. DURATION (Days)	3e. START DATE	3f. END DATE	Period 1	Period 2	Period 1	Period 2	Period 1	Period 2	Period 1	Period 2	Period 1	Period 2

Overall Project	730	2023-07-01	2025-06-30	0.3%	3%	41%	86%	100%	%	%	%	%	%
Environmental Assessment	446	2023-10-02	2024-12-21	0%	100%	100%	100%	100%	%	%	%	%	%
Network Design	92	2023-10-09	2024-01-09	1%	95%	95%	95%	100%	%	%	%	%	%
Rights Of Way	366	2023-10-23	2024-10-23	0%	100%	100%	100%	100%	%	%	%	%	%
Construction Permits And Other Approvals	366	2023-11-21	2024-11-21	0%	25%	75%	100%	100%	%	%	%	%	%
Site Preparation	195	2024-11-01	2025-05-15	0%	0%	0%	95%	100%	%	%	%	%	%
Equipment Procurement	364	2023-12-01	2024-11-29	0%	0%	0%	100%	100%	%	%	%	%	%
Network Build (all components - owned, leased, Indefeasible Rights of Use, etc.)	427	2024-04-01	2025-06-02	0%	0%	43%	86%	100%	%	%	%	%	%

Equipment Deployment	197	2024-12-01	2025-06-16	0%	0%	0%	33%	100%	%	%	%	%	%
Network Testing	90	2025-04-01	2025-06-30	0%	0%	0%	33%	100%	%	%	%	%	%
Status of Procurement				0%	0%	0%	0%	0%	%	%	%	%	%
Other: Admin Expenses	1068	2022-07-28	2025-06-30	30%	66%	78%	95%	100%	%	%	%	%	%

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 primary activities involved in meeting each milestone (a single description should be provided for each milestone, covering all periods in years one through N).

*** Period 1 ends September 30 and Period 2 ends March 31. Additional columns may be added for a Year 6, Period 1 or 2, Baseline if the Period of Performance is 5 years.

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	
		Period 1	Period 2	Period 1	Period 2	Period 1	Period 2	Period 1	Period 2	Period 1	Period 2
4a. MILESTONE	**4b. DESCRIPTION**	**Actual Milestone Completion (Cumulative)**									
Overall Project	As of end of March 2025 we have expended $9.96M of the planned $18.9M budget, or approximately 52.6%. The reason for not being at baseline was a slower start to construction due to later receipt of NEPA clearance. We have completed 100% of network design, engineering, and permitting budgets at this point with the exception of 5% retainage related to hold back on design services for completion of as-builts at the end of the project. Construction activities relative to spend are at approximately 50% which represents completion of about 59% of the actual conduit placement. All	0.3%	4%	28%	53%						

	equipment has been ordered and begun to be received. Telecommunication site ground work and site preparation is well underway at two of the three locations with a third planned for April and placement of two of the huts in April. We anticipate that we will continue to spend and complete the project at a rapid pace during the April through June timeframe and complete the bulk of the project by June 30, 2025 as planned. We will require a no-cost extension to fully complete the project that will extend us beyond the June 30, 2025 initial timeline.										
Environmental Assessment	This milestone -Environmental Assessment - was reported as complete during the prior reporting period. No change during this reporting period.	0%	100%	100%	100%						
Network Design	This milestone is complete. For the period ended March 31, 2025, all network design had been completed and invoiced. The 95% completion is based on this metric but with 5% of expense (payment) retained for completion of as-builts by the engineering company.	1%	85%	95%	95%						
Rights Of Way	All permits have been applied for and the expense required to do so incurred. We do have outstanding permits to be received but the 100% completion is based on actual spend.	0%	100%	100%	100%						
Construction Permits And Other Approvals	During this reporting period, the engineering firm continued to submit/refine Encroachments and Permits applications and MCNC continued to receive encroachment and permit approvals from the respective regulatory agencies. All permits, encroachment, and municipal agreements have been applied for as of March 30, 2025	0%	100%	100%	100%						
Site Preparation	Site preparation was started and completed at two of the three planned telecommunication facilities. The third was pending start in April of 2025. As of end of March we have expended $85k of a planned $168.9k, or approximately 50%. The reason for not being at baseline was slower start to construction due to later receipt of NEPA clearance.	0%	0%	0%	50%						
Equipment Procurement	This milestone is in progress. All equipment has been ordered. We are far under baseline on this but this is primarily due to the fact the cost of the equipment has been less than budgeted due to higher discounts obtained than anticipated.	0%	0%	0%	35%						
Network Build (all components - owned, leased, Indefeasible Rights of Use, etc.)	Construction on four of the five segments started in mid-September 2024, the prior reporting period. The fifth segment started construction in October 2024. All segments are now currently under active construction. As of March 31, 2025 we had expended $7.9M of an anticipated $15.4M on construction costs. The reason for not being at baseline was slower start to construction due to later receipt of NEPA clearance.	0%	0%	24%	53%						
Equipment Deployment	This milestone - Equipment deployment - has not started due to slower start to construction as noted above and is the reason that we are under baseline.	0%	0%	0%	0%						

Network Testing	This milestone has not started due to to slower start to construction which is the reason for being below baseline.	0%	0%	0%	0%						
Status of Procurement	N/A	0%	0%	0%	0%						
Other: Admin Expenses	Slower construction start means our anticipated deminimis indirects are less than anticipated. This is why we are not at baseline. We in error reported 100% last reporting period when it should have been 69%.	30%	64%	100%	80%						

Subrecipient and Subawards

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 names to any subrecipient or subaward associated with grant, approved grant funds, and expenditures to date.

5a. Project Name	Status	5b. Project Description	5c. Subrecipient	5d. Minority Business Enterprise (MBE)	5e. Women's Business Enterprise (WBE)	5f. Labor Surplus Area Firm	5g. Awarded Funds	5h. Expenditures to Date	5i. Remaining Grant Balance	5j. % of work complete
							$	$	$	%

D. INFRASTRUCTURE BUDGET EXECUTION DETAILS

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)
6a. Administrative and legal expenses	$50,000.00	$156,479.80	$206,479.80	$50,000.00	$116,802.11	$166,802.11	100%
6a. Land, structures, rights-of way, appraisals, etc.	$453,712.02	$0.00	$453,712.02	$509,147.19	$0.00	$509,147.19	112%
6a. Relocation expenses and payments	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	N/A
6a. Architectural and engineering fees	$707,627.80	$0.00	$707,627.80	$627,852.79	$0.00	$627,852.79	89%
6a. Other architectural and engineering fees	$175,860.00	$43,888.00	$219,748.00	$154,072.06	$48,296.80	$202,368.86	88%
6a. Project inspection fees	$0.00	$275,808.00	$275,808.00	$0.00	$80,370.01	$80,370.01	N/A
6a. Site work	$168,900.00	$0.00	$168,900.00	$85,105.00	$0.00	$85,105.00	50%
6a. Demolition and removal	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	N/A
6a. Construction	$8,273,626.00	$7,121,344.38	$15,394,970.38	$2,982,107.38	$4,919,128.89	$7,901,236.27	36%

6a. Equipment	$975,000.00	$0.00	$975,000.00	$336,100.75	$0.00	$336,100.75	34%
6a. Miscellaneous	$28,500.00	$161,616.00	$190,116.00	$0.00	$57,429.43	$57,429.43	0%
6a. Subtotal	$10,833,225.82	$7,759,136.18	$18,592,362.00	$4,744,385.17	$5,222,027.24	$9,966,412.41	44%
6a. Contingencies	$352,937.00	$14,299.00	$367,236.00	$0.00	$0.00	$0.00	0%
6a. Totals	$11,186,162.82	$7,773,435.18	$18,959,598.00	$4,744,385.17	$5,222,027.24	$9,966,412.41	42%

E. COMMUNITY BENEFIT AGREEMENT	
As stated in the MM 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 apprentices and disadvantaged groups in labor marker, education and training opportunities, sub-contracting to local small business for construction, services, and supply chain needs).	
Description of Community Agreement	
7a. Community Benefit Group Name: Please provide the name of the Community Benefit Group	These questions were answered via file upload. **Number of Community Agreements:** 0 **File(s) Uploaded with Responses:**
7b. Developer Name: Please provide the name of the Developer.	
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.	

F. 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

This 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 alternatives 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. Were any geographic areas identified for this reporting period subject to an initial and/or updated hazard screening for future weather and climate related risk? If so, please provide the date of the screening and provide related documentation as an attachment to this report.

No

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 Completion

No files uploaded for Hazard Screening.

8f. Identified Risk: 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)?
This project spans several counties in western NC, including Forsyth, Davidson, Rowan, and Stanly, as well as Lee, Harnett, Cumberland, Sampson, Duplin, and Onslow, that are in Eastern NC. This region, considered the southeast in chapter 19 of the 2018 National Climate Assessment (USGCRP, 2017), has been identified as prone to increasing flood risks, heat and drought events, heavy precipitation events, and Freeze-free Season lengths. NC is also susceptible to highly variable hurricanes and rainfall, projected to increase with the global sea level continuing to rise, leaving the Coastal Plain and low-lying areas susceptible to flood. NOAA's disaster and risk mapping tool (NCEI.Monitoring.Info., n.d.) and their storm event database (NCEI, 2019) indicates tornadoes reported have increased with a focused location running north and south through Cumberland and Sampson counties in the east and Rowan, Davidson, and Forsyth in the west. These stated risk factors contribute to FEMA's National Risk Index (Learn More | National Risk Index, n.d.), ranking all natural hazards. Sampson and Duplin counties are rated Relatively High; Cumberland, Harnett, and Lee ranked Relatively Moderate; Davidson, Rowan, and Stanly relatively low. The two fiber routes proposed cross areas known to experience these weather and climate-related risks above. As a result of this careful review of this risk profile, MCNC is confident that the proposed routes seeking MMG funding are as well designed as possible for long-term sustainability in the face of future weather-and climate-related risks. MCNC plans to recheck the climate data every five years to address any evolving risks.
8g. Weather and Climate Hazards: Were any significant climate or weather hazards experienced during this reporting period (i.e., floods, tornados) impacting infrastructure buildout or service? Briefly describe how you monitored for weather and climate caused issues for the reliability of the system. If so, please provide the date of the disaster, location and backup documentation related (i.e., news articles).
No N/A
8h. Risks to Deployment 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?
No
8i. Risk Mitigation: How will the project avoid and/or mitigate the risk identified? If not applicable, please explain why.
During this reporting period, MCNC did not identify any risk to deployment of the new infrastructure due to weather and climate related threats.
8j. Additional Information: Is there any additional information you would like to share during this reporting period that the grant team should be aware of regarding the management of sustainable climate resiliency for your MM project?
During this reporting period, MCNC did not identify any risk to deployment of the new infrastructure due to weather and climate related threats.

8k. Additional Resources Has the team utilized the available resources to assist with mitigation and long-term planning efforts for this reporting period? If so, which resources? 2018 National Climate Assessment NOAA's 2022 State Climate Summaries NOAA Disaster and Risk Mapping Tool NOAA's Storms Event Database NOAA Climate Explorer and Digital Coast FEMA National Risk Index Consulted FEMA-approved Hazard Mitigation Plans prepared by states in which they propose to build middle mile infrastructure to help identify key risk and hazards
Yes 2018 National Climate Assessment NOAA's 2022 State Climate Summaries NOAA Disaster and Risk Mapping Tool NOAA's Storms Event Database NOAA Climate Explorer and Digital Coast FEMA National Risk Index Consulted FEMA-approved Hazard Mitigation Plans prepared by states in which they propose to build middle mile infrastructure to help identify key risk and hazards

G. Workforce	
For projects receiving over $5,000,000 (based on expected total cost), as determined by the U.S. Secretary of Labor by subchapter IV of chapter 31 of title 40, United States Code (commonly known as the "Davis-Bacon Act"), all laborers and mechanics employed by contractors and subcontractors in the performance of such project are paid wages at rates not less than those prevailing.	
Davis-Bacon Certification	
9a. Does the recipient have access to the information requested (all laborers and mechanics employed by contractors and subcontractors in the performance of such project are paid wages at rates not less than those prevailing?)	Yes
Local Hire Prioritization and Impact	
Local hiring is a goal or requirement to hire people who live close to the place of work. This aim is often more specifically structured as a requirement for contractors awarded certain types of publicly funded projects to recruit a certain proportion of the people working on the project from a particular area. Please **provide all direct hires and contractors supporting** the MM Infrastructure project. Please use the table below to describe how the project prioritizes local hiring.	

Hires by Race, Ethnicity and Sex	Number of Hires																			
	Race/Ethnicity																			
	9b. Hispanic or Latino			9c. Non-Hispanic/Non-Latino																Totals
				9c-1. Men						9c-2. Women										
	9b-1. Men	9b-2. Women		White	Black or African American	Native Hawaiian or Pacific Islander	Asian	Native American or Alaska Native	Two or More Races	White	Black or African American	Native Hawaiian or Pacific Islander	Asian	Native American or Alaska Native	Two or More Races						
Number of Local Direct Hires	0	0		28	1	0	0	0	4	5	0	0	0	0	0						38
Number of Non-Local Direct Hires	0	0		1	0	0	0	0	0	0	0	0	0	0	0						1
Percentage of Local Direct Hires on Award	0%	0%		97%	100%	0%	0%	0%	100%	100%	0%	0%	0%	0%	0%						
Number of Local Subcontractors	44	1		15	0	0	0	0	0	0	0	0	0	0	0						60
Number of Non-Local Subcontractors	1	0		0	0	0	0	0	0	0	0	0	0	0	0						1
Percentage of Local Subcontractors on Award	98%	100%		100%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%						

Davis-Bacon Act Wages	
Please confirm if wages are at least prevailing*	
*As stated in the MM NOFO as determined by the U.S. Secretary Labor in accordance with subchapter IV of chapter 31 of title 40, United States Code (commonly known as the "Davis-Bacon Act"), for the corresponding classes of laborers and mechanics employed on projects of a character similar to the contract work in the civil subdivision of the State (or the District of Columbia) in which the work is to be performed.	
10a. Are wage rates at least the Davis-Bacon prevailing wage for all laborers?	Yes
10b. Please cite your source of how this information was gathered (for 10a).	MCNC's finance office collects and reviews financial data to ensure that wages for all laborers are wage rates that at least meet the Davis-Bacon prevailing wages. MCNC reviewed the Department of Labor guidance at: https://www.dol.gov/agencies/whd/government[1]contracts/construction#:~:text=Davis%2DBacon%20Act%20and%20Related,similar%20projects%20in%20the%20area
10c. Are wage rates at least the prevailing wage for all mechanics?	Yes
10d. Please cite your source of how this information was gathered (for 10c).	MCNC's finance office collects and reviews financial data to ensure that wages for all laborers are wage rates that at least meet the Davis-Bacon prevailing wages. MCNC reviewed the Department of Labor guidance at: https://www.dol.gov/agencies/whd/government[1]contracts/construction#:~:text=Davis%2DBacon%20Act%20and%20Related,similar%20projects%20in%20the%20area
10e. If you answered "No" to either 10a. or 10c., please provide an attachment reporting the wages and benefits of workers on the project by job classification, and whether those wages are less than the prevailing wage.	

Workforce Demographic Data																							
Jobs by Race, Ethnicity and Sex	**Number of Jobs**																						
	Race/Ethnicity																						
	11-a. Hispanic or Latino			**11b. Non-Hispanic/Non-Latino**																			**Totals**
				11b-1. Men						**11b-2. Women**													
	11a-1. Men	11a-2. Women		White	Black or African American	Native Hawaiian or Pacific Islander	Asian	Native American or Alaska Native	Two or More Races	White	Black or African American	Native Hawaiian or Pacific Islander	Asian	Native American or Alaska Native	Two or More Races								
Jobs Created	2	1		4	0	0	0	0	0	1	0	0	0	0	0								8
Jobs Retained	24	0		12	1	0	0	0	0	4	0	0	0	0	0								41

Unionized Workforce	
12-a. Does this project include some workforce elements that are unionized?	No

12-b. Are workers provided access to union educators/organizers on employer property or during the work day?	No
12-c. Does your MM project utilize a project labor agreement?	No
12-d. Did workers receive additional information or training about their workplace rights in addition to already required notice postings?	No

H. Workforce Continuity Plan
National Labor Relations Act (29 U.S.C. 158 (f)

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.

Below are steps MCNC has undertaken 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.

Over the last forty years MCNC has earned and maintains a great record of success in the use of a highly skilled workforce that is safe and effective. MCNC requires that all those working on this project continue to work in such a manner. Furthermore, throughout our history we have maintained relationships with various administrations, education and training providers, unions and any other labor-management organizations, the public workforce system, unions, and worker organizations, and community-based organizations that provide relevant training to attract, train, retain, or transition to meet local workforce needs and increase high-quality job opportunities. We will continue to seek such opportunities via this project including the development and expansion of fiber certification programs and other such programs provided by community colleges and the afore-mentioned entities.

Additionally, MCNC will continue and expand our Students@Work and Teachers@Work programs providing educational and training sessions with students and faculty across North Carolina on a host of topics including cybersecurity, workforce readiness, and career planning. MCNC will continue to create equitable on-ramps into broadband related jobs via the afore-mentioned and new programs. We would continue to engage with various stakeholders such as State, Territorial, local workforce boards, and others throughout the planning and implementation process of this project. Finally, seeking to ensure that our proposed efforts are consistent with our North Carolina’s established broadband plan and priorities, we have coordinated and consulted with both the Office of Governor and the Broadband Infrastructure Office. We are pleased that they find our efforts to be aligned and supportive of their vision. Their letters of support for our project are part of our application submission.

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

MCNC continues to provide relevant training to attract, train, retain, or transition to meet local workforce needs and increase high-quality job opportunities such as in broadband network construction. MCNC offers relevant paid training to its staff members. Staff are encouraged to pursue training and are free to choose training that will enhance their roles and responsibilities at MCNC and enrich their current skillsets. Vendors and contractors working on the MMBG HERO project will be required to adhere to the same and/or similar standards.

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

MCNC's internal field inspector is OSHA 10 and NCDOT Work Zone Installation certified. He is tasked with field inspections and ensuring contractors are setting up equipment and work area to comply with regulations. Additionally, contractors selected for this MMBG HERO project also certified that they perform daily inspections with their construction crews in the field.

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.

During our weekly meetings with the construction contractors, there is a standing agenda item where we inquire about any complaints or disputes for the week. Comments are captured in the meeting minutes. Additionally, contractors are required to submit daily reports and and include any events or incidents. Any disputes or complaints that become known to MCNC, will be taken seriously and documented and investiagted until it is satisfactorily resolved, including contractor restittution, if required. These will be retained in the construction contractor's folder.

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.

MCNC has a safety inspector, in the field, performing onsite safety and compliance inspections to ensure that contractors are adhering to the standards they provided, and are creating a safe and healthy work environment. These are performed two days per week. The safety inspector receives copies of the required Daily Crew Location reports. These provide guidance on where crews are working in the field and where he should be directing his onsite inspections. MCNC has an existing safety plan that our staff and Outside Plant Engineers utilize.
Additionally, all construction contractors, who responded to the Construction and Splicing RFP, were required to submit any OSHA related safety violations and concerns for the past 3 years. Contractors awarded work on this project were also required to submit copies of the safety plans utilized by them and any of their subcontractors. This information was reviewed as part of the construction selection process.
Finally, during the weekly construction meetings, safety is included as a standing agenda item that is discussed and documented in the meeting minutes.

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

MCNC's internal field inspector is OSHA 10 and NCDOT Work Zone Installation certified. He is tasked with field inspections and ensuring contractors are setting up equipment and work area to comply with regulations. Additionally, contractors selected for this MMBG HERO project also certified that they perform daily inspections with their construction crews in the field.

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

N/A

Subcontracted Entities Information			
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.			
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	**Status**	**13e-2. Total Number of Workers within this Subcontract**	**13e-3. Job Categories of Workers Supporting Project within this Subcontract**
Colliers Engineering and Design	Active	33	Task 1.0 Environmental (14 total) Geographic Discipline Leader/PM Geographic Discipline Leader Registered Professional Archaeologist (RPA) Field Manager, Natural Resources Scientist Natural Resources Technician (5) Project Natural Resources Scientist (3) Assistant Project Manager Project Manager Intern Task 2 – OSP Design/Permitting (15 total) Geographic Discipline Leader/PM Project Manager Field Manager OSP Field Engineer OSP CADD Designer (8) Permit Coordinators (3) Task 3 – Site/Hut Design and Survey (4 total) Senior Project Manager Project Specialist (CADD Production Manager & Senior Engineer) (2) Specialist Engineer
CVO	Active	28	Construction Laborers, Project Managers, Field Inspectors to perform fiber optic installation services.
KVA	Active	9	Construction Laborers, Project Managers, Field Inspectors to perform fiber optic installation services.
River City Construction	Active	11	Construction Laborers, Project Managers, Field Inspectors to perform fiber optic installation services.
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.			

MCNC’s Outside Plant Engineering team and project manager met with each contractor to discuss reporting requirements for the MMBG HERO project including adherence to the Davis-Bacon Act, Certified Payroll reporting requirements, Daily Crew Location reports and weekly project status reporting.

When submitting invoices for payment, MCNC's accounting team requires all contractors to submit Certified Payroll Reports for any contractor or subcontractor subject to Davis-Bacon requirements. Additionally, a Certified Payroll Reports reminder email was sent to contractors on 9/13/2024. In that email, contractors were given the email address for submission of their certified payroll reports - GrantReporting@mcnc.org.

Upon receipt of the Certified Payroll reports, MCNC’s finance office reviews the reports to determine whether contractors’ employees have received legally required wages and fringe benefits. Upon completion of their review, the finance office sends a reply email to the contractor with its determination of compliance. During this reporting period the finance office reviewed these documents for CVO, KVA, and River City.

I. ANCHOR INSTITUTIONS	
Please provide Anchor Institution (AI) data for the current period only (not cumulative). Please add rows as needed.	
14a. Anchor Institution Name	No files were uploaded for this nonobligatory section.
14b. Street Address	
14c. City	
14d. State	
14e. Type of Anchor Institution	
14f. Interconnection with 1,000 Feet of AI Enabling Gig Symmetrical Service	
14g. Narrative Description of how the Anchor Institution may benefit from the Grant Funded Infrastructure	

J. BROADBAND ACCESS KEY INDICATOR: 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. *** Period 1 ends September 30 and Period 2 ends March 31. Additional columns may be added for a Year 6, Period 1 or 2, Baseline if the Period of Performance is 5 years.

PROJECTED NUMBER OF SUBSCRIBERS AND SPEED	Year 1		Year 2		Year 3		Year 4		Year 5	
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	0						
15a-2 Number of AIs within 1,000 feet of the middle mile infrastructure	0	0	0	0						
15a-3. Total number of AIs served	0	0	0	0						
15a-4. AIs with new access	0	0	0	0						
15a-5. AIs with improved access	0	0	0	0						
15a-6. Total number of AIs served with speeds of at least 1/1Gbps	0	0	0	0						
15b. Broadband Wholesalers or Last Mile Providers* **										
15b-1. Total number of broadband wholesalers or last mile providers served	0	0	0	0						
15b-2 Broadband wholesalers or last mile providers with new access	0	0	0	0						
15b-3. Broadband wholesalers or last mile providers with improved access	0	0	0	0						
15b-4. Total number of broadband wholesalers or last mile providers offering speeds of at least 25/3 Mbps	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	0						
15b-6. Total number of broadband wholesalers or last mile providers offering speeds of at least 1/1 Gbps	0	0	0	0						

K. BROADBAND ACCESS KEY INDICATOR: 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. *** Period 1 ends September 30 and Period 2 ends March 31. Additional columns may be added for a Year 6, Period 1 or 2, Baseline if the Period of Performance is 5 years.										
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	0						
16b. Total of fiber miles leased	0	0	0	0						
16c. Total of existing fiber miles upgraded	0	0	0	0						
16d. Total number of new microwave links	0	0	0	0						
16e. Total number of new towers	0	0	0	0						
16f. Total number of new interconnection points	0	0	0	0						
16g. Total number of signed agreements with broadband wholesalers or last mile providers	1	1	1	1						

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						

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.

*** Period 1 ends September 30 and Period 2 ends March 31. Additional columns may be added for a Year 6, Period 1 or 2, Baseline if the Period of Performance is 5 years.

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	Buried	Buried	Buried						
17a-2. Number of strands deployed	0	0	0	0						
17a-3. Number of miles of buried fiber deployed	0	0	0	0						
17a-4. Number of miles of aerial fiber deployed	0	0	0	0						
17a-5. Estimated capacity of fiber (i.e. throughput)	0	0	0	0						
17a-6. Deployment cost per mile of buried fiber optics	$0.00	$0.00	$0.00	$0.00						
17a-7. Deployment cost per mile of aerial fiber optics	$0.00	$0.00	$0.00	$0.00						
17a-8. Total Spent on Buried Fiber Deployment this reporting period	$0.00	$0.00	$0.00	$0.00						
17a-9. Total Spent on Aerial Fiber Deployment this reporting period	$0.00	$0.00	$0.00	$0.00						

17a-10. Total spent on Fiber Deployment this reporting period	$0.00	$0.00	$0.00	$0.00						
17a. Fiber Optic Based *, Long Text Responses and File Uploads**										
Current Period (Year 2, Period 2)										
17a-11. Please provide any additional information about the Fiber Optic deployment (200 words or less)	MCNC as a standard practice will not be reporting fiber deployed and associated costs until it is tested and accepted.									
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.										

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?	0	0	0	0						
17b-2. How many microwave nodes are operating for reporting period?	0	0	0	0						
17b-3. Installation cost per microwavable node	$0.00	$0.00	$0.00	$0.00						
17b-4. Number of new towers built to support microwave structure	0	0	0	0						
17b-5. If applicable, what type of tower was constructed (a) Monopole (b) Self-Support, (c) Guyed, or (d) Other during this reporting period?	N/A	N/A	N/A	N/A						
17b-6. Average cost per tower installed	$0.00	$0.00	$0.00	$0.00						
17b-7. Total spend on Tower deployment this reporting period	$0.00	$0.00	$0.00	$0.00						

17b-8. Total spend on microwave deployment this reporting period	$0.00	$0.00	$0.00	$0.00						
17b. Microwave *, Long Text Responses and File Uploads**										
Current Period (Year 2, Period 2)										
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 associated costs. (200 words or less).										
17b-10. Please provide the digital mappings (e.g., CAD, Revit, KMZ, KML) for the microwave nodes created during this reporting period.										

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?	N/A	N/A	N/A	0						
17c-2. What is the estimated capacity of the satellite link (i.e. throughput)?	0	0	0	0						
17c-3. What is the associated cost to use this satellite service?	$0.00	$0.00	$0.00	$0.00						
17c. Satellite *, Long Text Responses and File Uploads**										
Current Period (Year 2, Period 2)										
17c-4. Please provide any additional information about the Satellite deployment (200 words or less)	0									
17c-5. Please provide the digital mappings (e.g., CAD, Revit, KMZ, KML) for the satellite network accessed during this reporting period.										

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 MCNC is in compliance with Federal labor and employment laws along with the requirements 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 MCNC is in compliance with the Build American, Buy America Act. **File Uploaded:** 2025.03.31 - MMG Inventory Report Draft for submission.xlsx

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:	Tommy Jacobson
20b. Signature of Certifying Official:	Tommy Jacobson
20c. Telephone (area code, number and extension):	9192481178
20d. Email Address:	tjacobson@mcnc.org
20e. Date:	06/11/2025