Infrastructure Quarterly Performance Report Introduction

SUBMISSION REQUIREMENTS:

All Broadband Technology Opportunities Program (BTOP) grant recipients are required to complete a quarterly performance report. The attached performance report form must be completed and submitted after the end of every quarter, and reports must be submitted separately for each BTOP award. The prime recipient is solely responsible for the accurate completion and timely submission of this form.

DEADLINE:

All recipients are required to submit their quarterly performance report by 11:59pm ET on the 30th calendar day after the fiscal quarter ends (for example, if the fiscal quarter ends on June 30, performance reports are due no later than 11:59pm ET on July 30). The timely submission of performance reports is a requirement of all BTOP awards as stated in the special award conditions. Incomplete submissions will be sent back to the recipient for further information.

COMPLETING THE PERFORMANCE REPORT:

The BTOP performance report form consists of three main sections:

- Section 1: General Information
- Section 2: Report Data Fields
- Section 3: Budget Data Fields

Each question must be answered fully and accurately (within word limits). If your answer to certain questions does not fit in the space provided, please provide additional information in a separate document or spreadsheet, using the format provided in the performance report form. If particular questions do not apply to your project, please write "N/A." All fields should be filled out with the requested data or "N/A." Please note that to the extent that only your subrecipient, contractor, and/or subcontractor has access to any of the information requested in the performance report, the prime recipient is responsible for collecting this information and submitting it to NTIA.

Please reference the attached line item instructions for assistance. If you have additional questions, please contact your assigned Federal Program Officer.

DATA REVIEW:

Program Office staff will be responsible for reviewing performance reports and may need to follow up with recipients regarding the submitted data. Recipients must promptly respond to any and all Program Office follow-up questions regarding the submitted data; in some cases, recipients will be required to revise and re-submit performance reports. The data provided will be compared to each recipient's Baseline Project Plan and will help the Program Office monitor the progress and performance of each BTOP project.

All progress reports will be made publicly available via the Internet. To the extent that recipients believe that the information they are providing is confidential, recipients may make a request for such information to be kept private and identify any information they believe should not be released to the public. They should also file both a redacted and an unredacted version of their report. Recipients should note, however, that the Recovery Act requires substantial transparency and that NTIA may not necessarily approve such requests. If NTIA does approve, the agency will keep such information private from public disclosure to the extent permitted by law, including the Freedom of Information Act, as amended (5 U.S.C. 552), the Trade Secrets Act, as amended (18 U.S.C. 1905), and the Economic Espionage Act of 1996 (18 U.S.C. 1831 et seq.).

RECIPIENT NAME: AWARD NUMBER: DATE: OMB CONTROL NO. 0660-XXXX EXPIRATION DATE: XX-XX-XXXX

Proposed Quarterly Performance Report Questions for Broadband Infrastructure Projects

| General Information | | | | | | |
|---|---|----------------------|--------------|----------------------|--|--|
| | | Page | of | Pages | | |
| 1. Federal Agency and | 2. Award | 3a. DUNS Nu | ımber | | | |
| Organization Element to Which Report is Submitted | Identification Number | 3b. EIN | | | | |
| 4. Recipient Organization (Name and complete address including county, congressional district, and zip code | | | | | | |
| 5. Current Reporting Period End Dat | e (MM/DD/YYYY) | 6. Is this the | • | □Yes | | |
| | | of the Award Period? | | □No | | |
| 7. Certification: I certify to the best performance of activities for the pu | | | - | ect and complete for | | |
| 7a. Typed or Printed Name and Title | 7c. Telephone (area code, number and extension) | | | | | |
| | 7d. Email Address | | | | | |
| 7b. Signature of Certifying Official | 7e. Date Rep | ort Submitted | (MM/DD/YYYY) | | | |

| Proiect | Indicators | (This Qua | arter) |
|----------------|------------|-----------|--------|
| | | | |

1. Please describe significant project accomplishments during this quarter (150 words or less).

2. Please provide the percent complete for the following key milestones in your project. Write "N/A" in the second column if your project does not include this activity. If you provided additional milestones in your baseline plan, please insert them at the bottom of the table. Unless otherwise indicated in the instructions, figures should be reported cumulatively from award inception to the end of the most recent reporting quarter. Please provide a narrative description if the percent complete is different from the target provided in your baseline plan (100 words or less).

| | Milestone | Percent Complete | Narrative (describe reasons for any variance from baseline plan or subsequent written updates provided to your program officer) |
|-----|--|---------------------|---|
| 2a. | Overall Project | Complete | apaates provided to your program officery |
| 2b. | Environmental Assessment | | |
| 2c. | Network Design | | |
| 2d. | Rights of Way | | |
| 2e. | Construction Permits and Other Approvals | | |
| 2f. | Site Preparation | | |
| 2g. | Equipment Procurement | | |
| 2h. | Network Build (all components - owned, leased, IRU, etc.) | | |
| 2i. | Equipment Deployment | | |
| 2j. | Network Testing | | |
| 2k. | Other (please specify): | | |

- 3. To the extent not covered above, please describe any challenges or issues faced during this past quarter in achieving planned progress against the project milestones listed above. In particular, please identify any areas or issues where technical assistance from the BTOP program may be useful (150 words or less).
- 4. Please report the following information regarding network build progress. Write "N/A" in the second column if your project does not include this activity. Unless otherwise indicated in the instructions, figures should be reported cumulatively from award inception to the end of the most recent reporting quarter. Please provide a narrative description if the total is different from the target provided in your baseline plan (100 words or less).

| Indicator | Total | Narrative (describe your reasons for any variance from the baseline plan or any other relevant information) |
|--|-------|---|
| New network miles deployed | | |
| New network miles leased | | |
| Existing network miles upgraded | | |
| Existing network miles leased | | |
| Number of miles of new fiber (aerial or underground) | | |
| Number of new wireless links | | |
| Number of new towers | | |
| Number of interconnection points | | |

For questions 5 and 6, please include information relating to agreements that you are negotiating or have entered into, or that your subrecipient, contractor, or subcontractor is negotiating or entered into.

5a. If applicable, please provide the following information with regard to agreements with broadband wholesalers and/or last mile providers as a result of your project.

| Indicators | |
|---|--|
| Number of signed agreements with broadband wholesalers or last mile providers | |
| Number of agreements currently being negotiated with broadband wholesalers or | |
| last mile providers | |
| Average term of signed agreements | |

- 5b. Please list the names of the wholesale and last mile providers with whom you have signed agreements. Providers:
- 5c. What wholesale services are being provided by this project? Please describe below. As an attachment to this report, please provide pricing plans (in \$ per month) associated with each wholesale service provided by your project.

Wholesale services description:

- 5d. If you have designated a third party to operate all or a portion of your network, please provide the name and contact information for this third party, indicate if this entity is a subrecipient, contractor, and/or subcontractor, and describe with specificity the portion of your network that this third party operates (150 words or less).
- 6. Please provide the data according to the type of subscriber. Write "N/A" if your project does not pass or serve a particular subscriber type. Unless otherwise indicated in the instructions, figures should be reported cumulatively from award inception to the end of the most recent reporting quarter. Please provide a narrative description if the total is different from the target provided in your baseline plan (100 words or less).

| Subscriber Type | Access Type | Total | Narrative (describe your reasons for any variance from the baseline plan or any other relevant information) |
|---------------------------------------|--|-------|---|
| | Providers with signed agreements receiving new | | |
| Broadband | Providers with signed agreements receiving | | |
| Wholesalers or Last Mile Providers | improved access Providers with signed agreements receiving access to dark fiber | | |
| | Please identify the speed tiers that are available and the number of subscribers | | |
| Community Anchor | for each Total subscribers served | | |
| Institutions (including Government | Subscribers receiving new access | | |
| institutions) | Subscribers receiving improved access | | |
| | Please identify the speed tiers that are available and | | |

| | the number of subscribers | |
|----------------------------|--|--|
| | for each | |
| | Entities passed | |
| | Total subscribers served | |
| | Subscribers receiving new access | |
| Residential/ Households | Subscribers receiving improved access | |
| | Please identify the speed tiers that are available and the number of subscribers | |
| | for each | |
| | Entities passed | |
| | Total subscribers served | |
| | Subscribers receiving new | |
| | access | |
| Businesses | Subscribers receiving | |
| Dusiliesses | improved access | |
| | Please identify the speed | |
| | tiers that are available and | |
| | the number of subscribers | |
| | for each | |

7. Please describe any special offerings you may provide (150 words or less).

8. Have your network management practices changed over the last quarter? If so, please describe the changes (150 words or less).

9. Community Anchor Institutions:

Using the table below, please provide a list by service area of the community anchor institutions (including Government institutions) connected to your network as a result of BTOP funds. Unless otherwise indicated in the instructions, figures should be reported cumulatively from award inception to the end of the most recent calendar year. Also indicate whether your organization is currently providing broadband service to the anchor institution. Finally, provide a short narrative description with examples of how institutions are using BTOP-funded infrastructure (100 words or less).

| Institution Name | Service Area (town or county) | Type of Anchor Institution (as defined in your baseline) | Are you also the broadband service provider for this institution? (Yes/No) | Narrative description of how anchor institutions are using BTOP-funded infrastructure |
|------------------|--|--|---|---|
| | | | | |
| | | | | |
| | | | | |

Project Indicators (Next Quarter)

1. Please describe significant project accomplishments planned for completion during the next quarter (150 words or less).

2. Please provide the percent complete for the following key milestones in your project. Write "N/A" in the

RECIPIENT NAME: AWARD NUMBER: DATE: OMB CONTROL NO. 0660-XXXX EXPIRATION DATE: XX-XX-XXXX

second column if your project does not include this activity. If you provided additional milestones in your baseline plan, please insert them at the bottom of the table. Unless otherwise indicated in the instructions, figures should be reported cumulatively from award inception to the end of the most recent reporting quarter. Please provide a narrative description if the percent complete is different from the target provided in your baseline plan (100 words or less).

| | Milestone | Planned Percent Complete | Narrative (describe your reasons for any variance from the baseline plan or any other relevant information) |
|-----|--|--------------------------------|---|
| 2a. | Overall Project | | |
| 2b. | Environmental Assessment | | |
| 2c. | Network Design | | |
| 2d. | Rights of Way | | |
| 2e. | Construction Permits and Other Approvals | | |
| 2f. | Site Preparation | | |
| 2g. | Equipment Procurement | | |
| | Network Build (all components - owned, | | |
| 2h. | leased, IRU, etc.) | | |
| 2i. | Equipment Deployment | | |
| 2j. | Network Testing | | |
| 2k. | Other (please specify): | | |

^{3.} Please describe any challenges or issues anticipated during the next quarter that may impact planned progress against the project milestones listed above. In particular, please identify any areas or issues where technical assistance from the BTOP program may be useful (150 words or less).

INFRASTRUCTURE BUDGET EXECUTION DETAILS

Activity Based Expenditures (Infrastructure)

1. Please provide details below on your total budget, cumulative actual expenditures (for the period ending the current quarter), and cumulative anticipated expenditures (for the period ending next quarter) for each line item, including detailed disbursements of both matching funds and federal funds from project inception through end of this quarter (actual) or next quarter (anticipated). Actual and anticipated figures should be reported cumulatively from award inception to the end of the applicable reporting quarter.

| Budget for Entire Project | | | | n Project Incep urrent Reportir | | Inceptio | ed Actuals from through End Reporting Perio | l of Next | |
|--|----------------------|-----------------------------|----------------------------|------------------------------------|-------------------|------------------|---|-------------------|------------------|
| COST CLASSIFICATION | Total Cost (plan) | Matching Funds (plan) | Federal Funds (plan) | Total Costs | Matching Funds | Federal Funds | Total Costs | Matching Funds | Federal Funds |
| a. Administrative and legal expenses | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 |
| b. Land, structures, rights-of- way, appraisals, etc. | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 |
| c. Relocation expenses and payments | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 |
| d. Architectural and engineering fees | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 |
| e. Other architectural and engineering fees | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 |
| f. Project inspection fees | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 |
| g. Site work | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 |
| h. Demolition and removal | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 |
| i. Construction | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 |
| j. Equipment | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 |
| k. Miscellaneous | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 |
| I. SUBTOTAL (add a through k) | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 |
| m. Contingencies | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 |
| TOTALS (sum of I and m) | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 |

2. Program Income: Please provide the program income you listed in your application budget and actuals to date through the end of the reporting period.

a. Application Budget Program Income:

b. Program Income to Date:

Infrastructure Quarterly Performance Report Instructions

Line Item Instructions for the Performance Report Attachment (BTOP Quarterly Report for Infrastructure Projects)

| Question Number | Reporting Item | Instructions | Clarifications and Definitions |
|---------------------|---|---|---|
| General Information | | | |
| 1 | Federal Agency and Organizational Element to Which Report is Submitted | Enter the name of the Federal agency and organizational element identified in the award document or otherwise instructed by the agency. | Enter "Department of Commerce, National Telecommunications and Information Administration." |
| 2 | Award Identification Number | Enter the award number assigned to each award by the Federal agency. | Enter your 10 digit grant award number liste on your award package CD-450 form. |
| 3a | DUNS Number | Enter the recipient organization's Data Universal Numbering System (DUNS) number or Central Contract Registry extended DUNS number. | The number entered should match the DUN number listed on your award package CD-45 form. |
| 3b | EIN | Enter the recipient organization's Employer Identification Number (EIN). | The number entered should match the EIN number listed on your award package CD-4 form. |
| 4 | Recipient Organization | Enter the name and complete address of the recipient organization including zip code. | The data entered should match the data list on your award package CD-450 form. |
| 5 | Reporting Period End Date | Enter the last day of the current reporting period. | The date entered should match a calendar year quarterly end date. |
| 6 | Is this the last report of | Check yes or no. | The last report is the final performance repo |

| | the award period? | | submitted during the closeout of the grant. |
|--------------------------------------|----------------------------------|---|--|
| 7a | Certifying Official | Enter the name of your organization's Certifying Official. | The Certifying Official should be the AOR or the Principal Investigator/Project Manager designated by the AOR. |
| 7b | Certifying Official Signature | Enter the signature of your organization's Certifying Official. | The Certifying Official should be the AOR or the Principal Investigator/Project Manager designated by the AOR. |
| 7c | Telephone Number | Enter the telephone number of the Certifying Official. | The number may be needed in case of any follow-up questions regarding the performan report. |
| 7d | Email Address | Enter the email address of the Certifying Official. | The email address may be needed in case of any follow-up questions regarding the performance report. |
| 7e | Report Submission Date | Enter the date the report was submitted. | Reports are to be submitted by the quarterly due dates. |
| Project Indicators (This Quarter) | | | |
| 1 | Project Accomplishments | Please describe significant project accomplishments during the quarter. | Include only accomplishments that took place during this reporting period. Accomplishment can be described quantitatively or qualitative For example, project accomplishments may include counts, percentages, targeted dates time periods, or levels. It could also describe condition, a result, or a status. Please limit narrative responses to 150 word or less. |

| 2 | Percent of Milestones Complete | Please provide the percent complete for the following key milestones in your project. Write "N/A" in the second column if your project does not include this activity. If you provided additional milestones in your baseline plan, please insert them at the bottom of the table. Figures should be reported cumulatively from award inception to the end of the most recent reporting quarter. Please provide a narrative description if the percent complete is different from the target provided in your baseline plan. | The percentage of completion for each milestone should be based primarily on the expenditure of your project budget, and the percentages should be reported cumulatively from award inception through the end of the each quarter. For example, if you expect to complete a particular milestone in the first three quarters of your project, the third quart and all subsequent quarters should state 100%. Please limit narrative descriptions to 100 words or less. |
|---|--|--|---|
| 3 | Challenges or Issues | Please describe any challenges or issues faced during this past quarter in achieving planned progress against the project milestones listed above. In particular, please identify any areas or issues where technical assistance from the BTOP program may be useful. | Provide information on any challenges, incidents, barriers or issues that you have encountered. In your narrative, indicate whether the issue remains or has been corrected or mitigated. If corrected or mitigated, indicate how the issue was resolved. Please limit narrative descriptions to 150 words or less. |
| 4 | Network Build Progress (Indicators) | Please indicate the following information regarding network build progress. Write "N/A" in the second column if your project does not include this activity. Figures should be reported cumulatively from award inception to the end of the most recent reporting quarter. Please provide a narrative description if the total is different from the target provided in your baseline plan. | Please provide the total, to date, for each indicator. If the project involves activities such as lighti existing dark fiber, upgrading electronics, upgrading existing fiber, or otherwise improving speed and/or performance of existing fiber, please include such upgrades under the indicator for "Existing network mile upgraded." |

| | | | For indicators asking about "miles" (e.g., "Ne network miles deployed,"" Number of miles of fiber," etc.), please include both last mile and middle mile infrastructure. In all instances, "new" means infrastructure that did not pre-exist and was purchased usi BTOP funds. Please limit narrative descriptions to 100 words or less. |
|---------|-----------------|--|--|
| 5a – 5d | Agreements | If applicable, please provide the following information with regard to agreements with broadband wholesalers and/or last mile providers as a result of your project. Please list the wholesale and last mile providers with whom you have signed agreements. What wholesale services are being provided by this project? Please describe below. As an attachment to this report, please provide pricing plans (in \$ per month) associated with each wholesale service provided by your project. If you have designated a third party to operate all or a portion of your network, please provide the name and contact information for this third party, indicate if this entity is a subrecipient, contractor, and/or subcontractor, and describe with specificity the portion of your network that this third party operates. | Enter total number of signed agreements sir inception, the number of agreements current in negotiation, and the average term of the agreements. Signed agreements include only finalized agreements that have been signed by both parties. Please limit narrative descriptions to 150 words or less. |
| 6 | Subscriber Data | Please provide the data according to the type of subscriber. Write "N/A" if your project does not pass or serve a particular subscriber type. Figures should be reported cumulatively from award inception to the end of the most recent reporting quarter. | Data related to broadband wholesalers/last mile providers will generally apply to middle mile projects, while data related to business and residential/households will generally apple to last mile projects. Data related to |

community anchor institutions may apply to both middle mile and last mile projects.

Broadband Wholesalers and Last Mile Providers: Please provide information regarding providers or subscribers receiving new access (did not previously subscribe to broadband), providers or subscribers receiving access to dark fiber; please also identify the speed tiers that are available and the number of providers or subscribers for each.

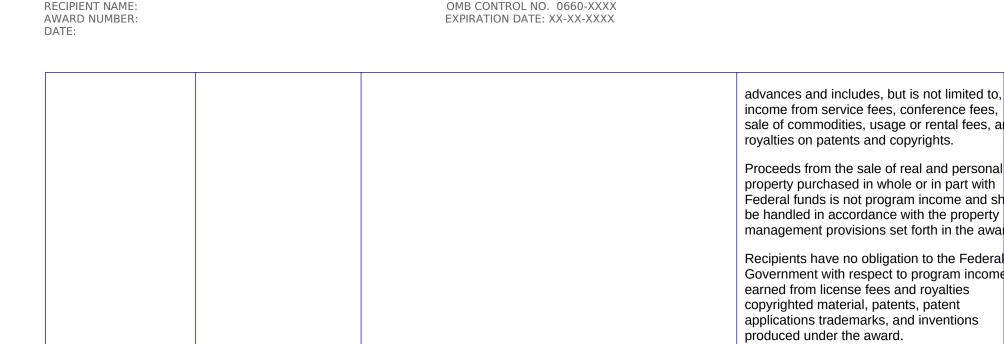
Community Anchor Institutions (including Government institutions): Please provide information regarding the total providers or subscribers served (connected), providers or subscribers receiving new access (did not previously subscribe to broadband), and providers or subscribers receiving improved access; please also identify the speed tiers that are available and the number of provide or subscribers for each.

Businesses and Residential/Households: Please provide information regarding the tot number of entities passed (not connected), total providers or subscribers served (connected), providers or subscribers receiving new access (did not previously subscribe to broadband), and providers or subscribers receiving improved access; plea also identify the speed tiers that are available and the number of providers or subscribers reach.

| | | | Providers or subscribers receive "improved access" to the extent that they are receiving faster broadband connection than they had previously. Please limit narrative descriptions to 100 words or less. |
|---|----------------------------------|---|---|
| 7 | Special Offerings | Please describe any special offerings you may provide. | If you have special offerings not captured above, please describe them here. Please limit narrative descriptions to 150 words or less. |
| 8 | Network Management Practices | Have your network management practices changed over the last quarter? If so, please describe the changes. | Describe any changes to your network management practices for this reporting perionly. If your network practices have not changed, please write "N/A." Please limit narrative descriptions to 150 words or less. |
| 9 | Community Anchor Institutions | Using the table, please provide a list by service area of the community anchor institutions (including Government institutions) connected to your network as a result of BTOP funds. Figures should be reported cumulatively from award inception to the end of the most recent calendar year. Also indicate whether your organization is currently providing broadband service to the anchor institution. Finally, provide a short narrative description with examples of how institutions are using BTOP-funded infrastructure. | For each anchor institution, please provide t institution name, service area (town, county, etc.), and the type of anchor institution (as defined in your baseline report). Community anchor institutions may include: schools (K-12), libraries, medical and healthcare providers, public safety entities, community colleges, public housing, other institutions of higher education, other community support organizations, and other government facilitie A network is "connected" to an anchor |

| | | | institution to the extent that no further infrastructure needs to be built, and no additional equipment (other than CPE) need to be installed, in order to provide service to that entity. Anchor institutions that are "passed" by your network, but will require a network build and/or additional equipment installed before service may be provided should not be included in this calculation. Please limit narrative descriptions to 100 words or less. |
|--------------------------------------|-------------------------------------|--|--|
| Project Indicators (Next Quarter) | | | |
| 1 | Planned Project Accomplishments | Please describe significant project accomplishments planned for completion during the next quarter. | Include only anticipated accomplishments th will take place during the next reporting period Accomplishments can be described quantitatively or qualitatively. For example, project accomplishments may include count percentages, targeted dates, time periods, o levels. It could also describe a condition, a result, or a status. Please limit narrative descriptions to 150 words or less. |
| 2 | Anticipated Milestone Completion | Please provide the percent complete for the following key milestones in your project. Write "N/A" in the second column if your project does not include this activity. If you provided additional milestones in your baseline plan, please insert them at the bottom of the table. Figures should be reported cumulatively from award inception to the end of the most recent reporting quarter. Please provide a narrative description if the percent complete is different from the target | The percentage of completion for each milestone should be based primarily on the expenditure of your project budget, and the percentages should be reported cumulatively from award inception through the end of the each quarter. For example, if you expect to complete a particular milestone in the first three quarters of your project, the third quart |

| | | provided in your baseline plan. | and all subsequent quarters should state 100%. Please limit narrative responses to 100 word or less. |
|-------------------------|---|--|---|
| 3 | Anticipated Challenges or Issues | Please describe any challenges or issues anticipated during the next quarter that may impact planned progress against the project milestones listed above. In particular, please identify any areas or issues where technical assistance from the BTOP program may be useful. | Provide information on any challenges, incidents, barriers or issues that you have encountered. In your narrative, indicate whether the issue remains or has been corrected or mitigated. If corrected or mitigated, indicate how the issue was resolved. Please limit narrative descriptions to 150 |
| | | | words or less. |
| Activity-Based Expendit | ture and Revenues (Infrastru | cture) | |
| 1a-1m | Actual Budget Costs and Anticipated Budget Costs | Please provide details below on your total budget, cumulative actual expenditures (for the period ending the current quarter), and cumulative anticipated expenditures (for the period ending next quarter) for each line item, including detailed disbursements of both matching funds and federal funds from project inception through end of this quarter (actual) or next quarter (anticipated). Actual and anticipated figures should be reported cumulatively from award inception to the end of the applicable reporting quarter. | The budget line item definitions remain consistent with those in the original grants application. |
| 2a-2b | Program Income | Please provide the program income you listed in your application budget and actuals to date through the end of the reporting period. | Program income is gross income earned by the recipient from Federally supported activities. Recipients are required to account for program income related to projects financed in whole or in part with Federal fundering program income excludes interest earned or |



Notwithstanding any other provision of law, no person is required to respond to, nor shall any person be subject to a penalty for failure to comply with, a collection of information subject to the Paperwork Reduction Act unless that collection of information displays a currently valid OMB control number. Public reporting burden for this collection of information is estimated to average 4.95 hours per response, including time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding the burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Anthony G. Wilhelm, Director, Broadband Technology Opportunities Program, Office of Telecommunications and Information Applications, National Telecommunications and Information Administration, U.S. Department of Commerce (DOC), 1401 Constitution Avenue, N.W., HCHB, Room 4887, Washington, D.C. 20230