

BTOP Comprehensive Community Infrastructure Service Offerings and Competitor Data Template

Please complete the complete the following worksheets--either of the Last Mile or Middle Mile Service Offerings worksheets may be omitted if the applicant is not proposing to provide service of that type.

For both the Last Mile and Middle Mile Service Offerings worksheets, the service offerings should include all relevant tiers and markets (*e.g.* residential, business, wholesale). Applicants should be sure to include details on any services that would be offered at discounted rates to particular classes of customers (*e.g.* community anchor institutions or third party service providers).

In the Last Mile Service Offerings worksheet, applicants are required to provide estimated end user speeds. Average speeds should be the average sustained actual, non-burst speed that an end user would receive during a peak hour. For purposes of calculating these speeds, applicants should utilize their subscriber projections for year eight of the project, and develop subscriber utilization projections that are consistent with any additional services the applicant plans to offer. For wireless broadband services, this speed should be an average of the speeds available across the entire cell. Beyond these general guidelines, due to the multiplicity of technical solutions that may be proposed, the applicants may use discretion to determine the most reasonable manner to estimate actual speeds on their network. Applicants should explain the underlying assumptions used to calculate the average speeds in the space provided.

In the Competitor Data worksheet, applicants are required to provide data on both last mile and middle mile service providers, regardless of whether the applicant proposes to offer both last mile and middle mile services. In the column titled Service Areas Where Service Offered, applicants should list all of the Last Mile and Middle Mile Service Areas within their Proposed Funded area in which the listed services are available. Please ensure that the Service Area names are consistent with those provided within the application and the Service Areas attachment. If the actual availability of the listed services is limited (*e.g.* the service is only available within a particular Last Mile or Middle Mile Service Area), note this in the Other Comments column.

In contrast to several other attachment templates in this application, the data provided via this template will NOT be subject to automated processing. These templates worksheets are provided to demonstrate the level of data required and to provide a suggested format. Applicants are permitted to modify the template layouts in order to provide the most effective presentation of the data for their specific project. Applicants should, however, ensure that they provide at least as much data as these templates require. To the extent that you modify these templates please ensure that the print layouts are adjusted so that rows do not break across pages in a manner that will be difficult to understand. It is recommended that you provide these documents in PDF format when submitting a copy of your application on an appropriate electronic medium, such as a DVD, ROM, or flash drive.

Mile
services of

should
ould be
lar

average
ls that an
licants
ber
o offer.
cross an
that may
in which
mptions

e and
ast mile
ants
Service
are
the
rt of the

this
rovided
re free
lata for
ch detail
hat the
difficult

, CD-

Proposed Last Mile Service Offerings

Name of Service Tier	Advertised Speeds		Estimated Average Speeds		Average Latency	Pricing Plan (\$ per month)	Other Comments/Description/Features or Limitations
	Downstream Mbps	Upstream Mbps	Downstream Mbps	Upstream Mbps	@ End User CPE milliseconds		

Explanation of Average Speed Calculations:

Proposed Middle Mile Service Offerings

Name of Service Offering	Distance Band or Point to Point	Minimum Peak Load Network Bandwidth Capacity (Mbps)	Monthly Pricing (\$)	Other Comments/Description/Features or Limitations
10Mbps Ethernet	Point to Point	10Mbps	500	Dedicated bandwidth
50Mbps Ethernet	Point to Point	50Mbps	1000	Dedicated bandwidth
100Mbps Ethernet	Point to Point	100Mbps	1200	Dedicated bandwidth
1GigE Ethernet	Point to Point	1,000Mbps	5000	Dedicated bandwidth
2.5Gbps	Point to Point	2,500Mbps	8500	Dedicated bandwidth
10Gbps	Point to Point	10,000Mbps	11000	Dedicated bandwidth
Dark Fiber	Point to Point	N/A	4167	Dependent on Mileage, location and strands

BTOP Comprehensive Community Infrastructure Project Plan and Build-out Timeline

PROJECT PLAN

- Use the following table to list the major network build-out phases and milestones that can demonstrate that your entire project will be substantially complete by the end of Year 2 and fully complete by the end of Year 3. This is to be done at the aggregate level (combining all proposed funded service areas.)
- Indicated how the milestones listed below will demonstrate these completion objectives. The applicant should consider such project areas as: a) network design; b) securing all relevant licenses and agreements; c) site preparation; d) inside plant deployment; e) outside plan deployment; f) deployment of business & operational support systems; g) network testing; f) network operational. The applicant may provide any other milestones that it believes showcase progress.
- Project inception (Year 0) starts at the date when the applicant receives notice that the project has been approved for funding.
- In the table, provide any information (e.g., facts, analysis) to: a) demonstrate the reasonableness of these milestones; b) substantiate the ability to reach the milestones by the quarters indicated.

Time Period	Quarter	Milestones	Support for Reasonableness/Data Points
Year 0	-	<ul style="list-style-type: none"> • Grant awarded • Acceptance process completed 	
	Qtr. 1	<ul style="list-style-type: none"> • Environmental Assessment (EA) RFP distributed • EA responses evaluated & award made • Network design finalized • EFI RFP prepared and distributed to bidders 	<ul style="list-style-type: none"> • EA interval can be up to six months • In parallel, network design finalization and EFI bid packages can take place

Year 1	Qtr. 2	<ul style="list-style-type: none"> • Environmental Assessment completed • EF&I RFPs responses evaluated and bids awarded • Construction contracts executed • OSP engineering begins • Railroad crossing permits applied for • Easements obtained for node shelters 	<ul style="list-style-type: none"> • OSP engineering will be a six month interval and will begin once the contracts are executed with EF&I firm(s) • Since railroad crossing permits can take up to three months and the required number of crossings are identified in the network design, the application process will begin coincident with OSP engineering commencement
	Qtr. 3	<ul style="list-style-type: none"> • VDOT permitting process begins • Building permits obtained for node shelter locations • Commercial power for node sites applied for • OSP engineering completed • OSP material acquisition begins 	<ul style="list-style-type: none"> • VDOT permitting will be ongoing as segments are engineered; MBC enjoys preferred status with VDOT, so this should be a smooth process • All MBC node shelters will be located on municipal property, so complications or delays are to be expected • OSP engineering should take an estimated six months to complete
	Qtr. 4	<ul style="list-style-type: none"> • OSP construction begins • Node site civil construction begins • Nodes installed and commercial power installations complete 	<ul style="list-style-type: none"> • OSP construction should take approximately one year; the contracts will be structured for performance to drive contractors to adhering to this timeline
Year 2	Qtr. 1	<ul style="list-style-type: none"> • Node shelter installation complete • Transport equipment installed at nodes 	<ul style="list-style-type: none"> • Since there are only four node shelters, proposed the interval for completion should be well within six months • Transport equipment installation should take no more than a few weeks at the node locations
	Qtr. 2	<ul style="list-style-type: none"> • OSP splicing begins • Installation of transport equipment at anchor institutions begins 	<ul style="list-style-type: none"> • OSP splicing should be completed in a three month window
	Qtr. 3	<ul style="list-style-type: none"> • OSP construction including splicing concludes • Installation of transport equipment at anchor institutions concludes • Test and turn-up of network 	

	Qtr. 4	<ul style="list-style-type: none"> • Network accepted • Services offered • Project Final Completion 	
Year 3	Qtr. 1	<ul style="list-style-type: none"> • List all relevant milestones 	
	Qtr. 2	<ul style="list-style-type: none"> • List all relevant milestones 	•
	Qtr. 3	<ul style="list-style-type: none"> • List all relevant milestones 	•
	Qtr. 4	<ul style="list-style-type: none"> • List all relevant milestones 	•

BUILD-OUT TIMELINE

Complete the following schedule for *each* Last Mile or Middle Mile Service Area to note the degree of build-out, based on: a) infrastructure funds awarded; b) entities passed (households, businesses, and community anchor institutions.). In addition, please complete a schedule that aggregates the build-out timeline across all of the Proposed Funded Service Area.

Service Area	Southern Route												
	YEAR 0	YEAR 1				YEAR 2				YEAR 3			
		Qtr. 1	Qtr. 2	Qtr. 3	Qtr. 4	Qtr. 1	Qtr. 2	Qtr. 3	Qtr. 4	Qtr. 1	Qtr. 2	Qtr. 3	Qtr. 4
Infrastructure Funds		\$12,500	\$62,100	\$117,597	\$975,864	\$1,147,635	\$1,233,272	\$2,548,925	\$216,753				
Infrastructure Funds Advanced (estimate)													
Percentage of Total Funds		0.10%	0.50%	0.94%	7.79%	9.16%	9.84%	20.34%	1.73%				
Entities Passed & %													
Households													
Percentage of Total Households													
Businesses													
Percentage of Total Businesses													
Community Anchor Institutions						2	3	2					
Percentage of Total Institutions						7.1%	10.7%	7.1%					

Service Area	Northern Route												
	YEAR 0	YEAR 1				YEAR 2				YEAR 3			
		Qtr. 1	Qtr. 2	Qtr. 3	Qtr. 4	Qtr. 1	Qtr. 2	Qtr. 3	Qtr. 4	Qtr. 1	Qtr. 2	Qtr. 3	Qtr. 4
Infrastructure Funds	\$11,527	\$47,165	\$97,159	\$721,684	\$987,456	\$1,367,512	\$1,505,263	\$173,625					
Infrastructure Funds Advanced (estimate)													
Percentage of Total Funds	0.09%	0.38%	0.78%	5.76%	7.88%	10.91%	12.01%	1.39%					
Entities Passed & %													
Households													
Percentage of Total Households													
Businesses													
Percentage of Total Businesses													
Community Anchor Institutions					3	3	4	4					
Percentage of Total Institutions					10.7%	10.7%	14.3%	14.3%					

Service Area	School Connector Route												
	YEAR 0	YEAR 1				YEAR 2				YEAR 3			
		Qtr. 1	Qtr. 2	Qtr. 3	Qtr. 4	Qtr. 1	Qtr. 2	Qtr. 3	Qtr. 4	Qtr. 1	Qtr. 2	Qtr. 3	Qtr. 4
Infrastructure Funds	\$1,300	\$11,256	\$27,543	\$129,687	\$243,021	\$541,320	\$286,354	\$62,541					
Infrastructure Funds Advanced (estimate)													
Percentage of Total Funds	0.01%	0.09%	0.22%	1.04%	1.94%	4.32%	2.29%	0.50%					
Entities Passed & %													
Households													
Percentage of Total Households													
Businesses													
Percentage of Total Businesses													
Community Anchor Institutions					2	2	3						
Percentage of Total Institutions					7.1%	7.1%	10.7%						

Service Area	Aggregated												
	YEAR 0	YEAR 1				YEAR 2				YEAR 3			
		Qtr. 1	Qtr. 2	Qtr. 3	Qtr. 4	Qtr. 1	Qtr. 2	Qtr. 3	Qtr. 4	Qtr. 1	Qtr. 2	Qtr. 3	Qtr. 4
Infrastructure Funds		\$25,327	\$120,521	\$242,299	\$1,827,235	\$2,378,112	\$3,142,104	\$4,340,542	\$452,919	0	0	0	0
Infrastructure Funds Advanced (estimate)													
Percentage of Total Funds		0.20%	0.96%	1.93%	14.58%	18.98%	25.08%	34.64%	3.61%				
Entities Passed & %													
Households													
Percentage of Total Households													
Businesses													
Percentage of Total Businesses													
Community Anchor Institutions						7	9	8	4				
Percentage of Total Institutions						25%	32.10%	28.60%	14.30%				

BTOP Comprehensive Community Infrastructure Community Anchor Institution and Network Points of Interest Detail Template

Please complete the Anchor Institution Details worksheet by providing information on Community Anchor Institutions that will be directly connected by the proposed network as necessary. All Community Anchor Institutions should be given a type from the specification. A Community Anchor Institution is considered a minority-serving institution if it is a post-secondary educational institution with enrollment of minority students exceeding 50% of its total enrollment. The "Project Role" column only requires a word or two, or a short phrase, not a detailed explanation of the role of project partners and community anchor institutions provided in the essay portions of the application.

Please complete the Points of Interest worksheet by providing information on all points of interest (passive, non-environmentally controlled points of interconnection, cell towers, etc. points, may be excluded), collocation facilities, central offices, head ends, and other facilities, network access points to last mile service providers, Internet peering points, etc. For each point of interest you may provide either a street address or geocoordinates (lat/long). You must provide detail on what the point of interest is, whether it is already existing or will be created by the proposed project. Where more than one facility type applies, select the most appropriate facility type. For example, if a central office houses a point of interconnection, select central office as the facility type, or if a cell site is located on a tower, select tower as the facility type. Interconnection Available at the Facility field should be Yes if interconnection to the proposed network is available at that location, otherwise No. The brief description field is optional and can be used to convey a better understanding of what the facility is. You may use the space at the bottom of the table to provide additional notes, if desired.

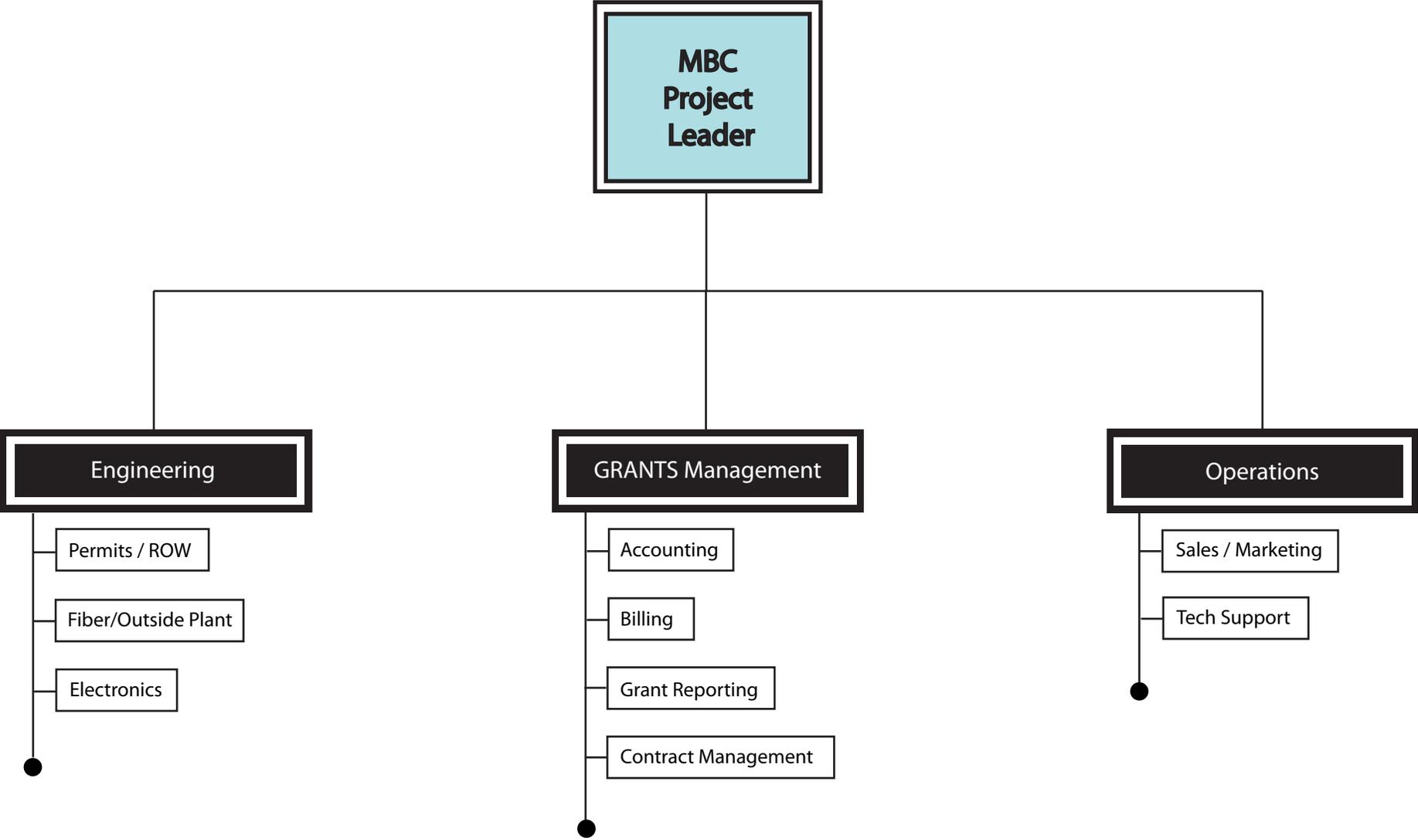
The data provided via this template will be subject to automated processing. Applicants are therefore required to provide this upload as an Excel file, and not to convert it to a PDF or other format for upload. Additionally, applicants should not modify the format of this file.

all
ork. Add rows
cified list. A
dary
ment. The
xplanation. A
is should be

its of
e.g. splice
entralized
, and towers.
or both. You
ould be
ie larger
central office
e. The
roposed
onal, but may
ce provided at

cants are
PDF prior to

Organizational Chart
for
Mid-Atlantic Broadband Cooperative



18.5 Resumes/Organizational Chart

Tad Deriso

Title – President and CEO of Mid-Atlantic Broadband Cooperative

Role in this project -

Education - Tad attended Georgia State University in Atlanta, Georgia for undergraduate and received a BBA in Management.

Qualifications – Tad has been working in the field of rural telecommunications for more than sixteen years and has dealt with rural telecommunications providers and cooperatives. During this time, he helped plan and coordinate broadband telecommunications projects for rural communities across the United States. He helped establish the Mid-Atlantic Broadband Cooperative, which is striving to construct an advanced open-access fiber optic network in rural Southside Virginia. Tad, being the General Manager at MBC, focuses on managing construction of the regional fiber network to provide educational support to local communities and for drawing technology-based opportunities for economic development to rural Virginia.

Responsibilities for this project -

Gray Ramsey

Title – General Manager of Mid-Atlantic Broadband Cooperative

Education – BA Virginia Tech, Blacksburg, VA

Years of Experience – 31

Qualifications – Gray has been working in the telecommunications field for 31 years holding various management positions of increasing responsibility. The majority of his career has been in OSP Engineering and Construction. In his current position as General Manager, Gray is responsible for the day-to-day operations of MBC including network operations, cooperative member relationships, and network expansion.

Responsibilities for this project – Gray will have the responsibility of overseeing all aspects of this project including the planning, engineering, construction and the turn up/testing of the proposed network elements.

Hunter Ford

Title – Network Operations Manager for Mid-Atlantic Broadband Cooperative

Role in this project – Engineer and managing network operations

Education -

Qualifications – Hunter is responsible for managing and maintaining more than 800 miles of fiber that make up the Mid-Atlantic Broadband Cooperative fiber optic outside plant network. He also manages the MBC Network Operations Center facility in South Boston, VA. Before joining MBC, he was employed by Embarq (formerly Sprint and Central Telephone of Virginia) in South Boston, VA. Here he held various roles in network engineering, outside plant planning and supervision.

Responsibilities for this project – Hunter will be responsible for engineering, permitting, construction, and inspection of this project. He will verify that construction is progressing as it should and will inspect the work after it is finished to confirm that the construction has been done correctly and will function properly. The responsibilities that he has already fulfilled include planning and design.

Glenn Ratliff

Title – Technical Advisor for Mid-Atlantic Broadband Cooperative

Role in this project -

Education – Glenn attended the University of Virginia in Charlottesville, Virginia for undergraduate and received a BS in Electrical Engineering. He also received a Master of Engineering in Systems Engineering from the University of Virginia.

Qualifications – In 1992, Glenn founded GCR Company, a technology company that specializes in PCs, LANs, WANs, and specialty software. GCR Company began to offer Internet service (gconline.com) to Southside Virginia in 1997. GCR Company has grown, and today employs six full-time positions and has sales exceeding \$1 million per year. Glenn is the owner, founder, and president of GCR Company. In 1999, he founded GCR Telecommunications to assist the development of GCR Online and to take advantage of technology and services only available to incumbent telephone companies. These two companies work together today to deliver a full range of services, which includes ADSL, SDSL, dedicated T1, web hosting, e-commerce, SONET services, and practically any other traditional telecom or Internet service.

In addition to founding these communication companies, Glenn has substantial background experience with telecommunications. He has extensive knowledge with all types of networks. He has experience designing telco grade fiber optic networks and collocation space in ILEC central offices. He also has experience with management of projects exceeding \$3 million.

Responsibilities for this project -

Dana Jones

Title – Accounting/Finance Manager for Mid-Atlantic Broadband Cooperative

Role in this project – Financial Oversight as well as Grant Administrator

Education – Dana attended Lee University in Cleveland, Tennessee for undergraduate and received a BS in Accounting.

Qualifications – As the Accounting and Finance Manager for Mid-Atlantic Broadband Cooperative, Dana manages all the financial aspects for this not-for-profit telecommunication company. Included in this role is monthly financial reporting, grant administration, as well as the daily activities associated with accounts payable and accounts receivable. Outside of her experience with Mid-Atlantic Broadband Cooperative she has been in the accounting profession for over eight years. Within these eight years, Dana has worked for both profit and not-for-profit companies. Her experience has been in multiple industries including banking, education, hospitality, health care and most recently telecommunications.

Responsibilities for this project – The responsibilities that Dana will have in this project will include but not be limited to financial oversight. Included in this role is ensuring our compliance with accounting and audit requirements, as well as Mid-Atlantic Broadband Cooperative transparency and accountability with quarterly and semi-annual financial and technical reports. The responsibility of financial oversight will also include that Mid-Atlantic Broadband Cooperative complies with federal record retention requirements as well as the submittal of funding requests and all the responsibilities associated with those requests.

Income Statement

	Historical - MBC	
	FY 2008	FY 2009
Revenues		
Network Services Revenues:		
Local Voice Service	\$0	\$0
Broadband Data	\$1,406,015	\$3,180,694
Video Service	\$0	\$0
Network Access Service Revenues	\$0	\$0
Universal Service Fund	\$0	\$0
Toll Service/Long Distance Voice	\$0	\$0
Installation Revenues	\$52,817	\$81,863
Other Operating Revenues	\$40,419	\$299,048
Other Revenues	\$7,305,001	\$8,940,324
Uncollectible Revenues	\$0	\$0
Total Revenues	\$8,804,252	\$12,501,929
Expenses		
Backhaul	\$0	\$0
Network Maintenance/Monitoring	\$1,207,886	\$2,947,602
Utilities	\$47,085	\$67,770
Leasing	\$0	\$0
Sales/Marketing	\$89,101	\$169,891
Customer Care	\$10,535	\$19,894
Billing	\$0	\$0
Corporate G&A	\$363,838	\$414,513
Other Operating Expense	\$195,031	\$232,659
Total Expense	\$1,913,476	\$3,852,329
EBITDA	\$6,890,776	\$8,649,600
Depreciation	\$3,033,427	\$3,745,244
Amortizaion	\$0	\$0
Earnings Before Interest and Taxes	\$3,857,349	\$4,904,356
Interest Expense - New RUS Debt	\$0	\$0
Interest Expense - Existing RUS Debt	\$0	\$0
Interest Expense - Other	\$37,288	\$31,522
Income Before Taxes	\$3,820,061	\$4,872,833
Property Tax	\$574	\$1,770
Income Tax	\$0	\$0
Net Income	\$3,819,487	\$4,871,063

Balance Sheet			
		Historical - MBC	
		FY 2008	FY 2009
Assets			
<i>Current Assets</i>			
Cash		\$817,586	\$2,242,198
Marketable Securities		\$0	\$0
Accounts Receivable		\$2,359,261	\$364,227
Notes Receivable		\$0	\$0
Inventory		\$227,480	\$999,383
Prepayments		\$160,920	\$212,728
Other Current Assets		\$0	\$0
Total Current Assets		\$3,565,247	\$3,818,536
<i>Non-Current Assets</i>			
Long Term Investments		\$0	\$0
Amortizable Assets		\$0	\$0
Plant in Service		\$41,398,301	\$47,252,090
Less: Accumulated Depreciation		-\$4,832,463	-\$8,919,166
Net Plant		\$36,565,838	\$38,332,924
Other		\$20,650	\$36,806
Total Non-Current Assets		\$36,586,488	\$38,369,730
Total Assets		\$40,151,735	\$42,188,266
Liabilities and Owners' Equity			
		FY 2008	FY 2009
Liabilities			
<i>Current Liabilities</i>			
Accounts Payable		\$1,836,289	\$166,123
Notes Payable		\$0	\$0
Current Portion - Total RUS Debt		\$0	\$0
Current Portion - Other Debt		\$0	\$0
Other Current Liabilities		\$0	\$75,000
Total Current Liabilities		\$1,836,289	\$241,123
<i>Long-Term Liabilities</i>			
Existing RUS Debt		\$0	\$0
Proposed RUS Debt		\$0	\$0
Existing non-RUS Debt		\$2,000,000	\$0
Total Long-Term Liabilities		\$2,000,000	\$0
Total Liabilities		\$3,836,289	\$241,123
Owner's Equity			
Capital Stock		\$0	\$0
Additional Paid-In Capital		\$0	\$0
Patronage Capital Credits		\$0	\$0
Retained Earnings		\$36,315,446	\$41,947,143
Total Equity		\$36,315,446	\$41,947,143
Total Liabilities and Owner's Equity		\$40,151,735	\$42,188,266

Statement of Cash Flows

	Historical - MBC	
	FY 2008	FY 2009
Beginning Cash	\$804,516	\$817,586
CASH FLOWS FROM OPERATING ACTIVITIES		
Net Income	\$3,819,487	\$4,871,063
<i>Adjustments to reconcile Net Income to Net Cash provided by Operating Activities</i>		
Add: Depreciation	\$3,033,427	\$5,460,227
Add: Amortization	\$0	\$0
<i>Changes in Current Assets and Liabilities</i>		
Marketable Securities	\$0	\$0
Accounts Receivable	-\$1,540,591	-\$232,046
Inventory	\$0	-\$264,920
Prepayments	-\$70,381	\$212,728
Other Current Assets	\$2,826	\$0
Accounts Payable	\$1,363,814	\$190,305
Other Current Liabilities	\$10,698	\$0
Net Cash Provided (Used) by Operations	\$6,619,280	\$10,237,357
CASH FLOWS FROM FINANCING ACTIVITIES		
Notes Receivable	\$5,100	\$0
Notes Payable	-\$37,288	\$0
Principle Payments	\$0	\$2,000,000
New Borrowing	\$750,000	\$0
Additional Paid-in Capital	-\$7,335,112	-\$43,304,172
Additions to Patronage Capital Credits	\$3,550	\$32,499,959
Payment of Dividends	\$0	\$0
Net Cash Provided by Financing Activities	-\$6,613,750	-\$8,804,213
CASH FLOWS FROM INVESTING ACTIVITIES		
Capital Expenditures	\$26,590	\$7,524
Amortizable Asset (Net of Amortization)	\$0	\$0
Long-Term Investments	-\$19,050	-\$16,056
Net Cash Used by Investing Activities	\$7,540	-\$8,532
Net Increase (Decrease) in Cash	\$13,070	\$1,424,612
Ending Cash	\$817,586	\$2,242,198



Comprehensive Community Infrastructure Budget Narrative Template

Applicant Name: Mid-Atlantic Broadband Cooperative

EasyGrants Number: 7280

Organization Type: Cooperative or Mutual

Proposed Period of Performance: August 1, 2010 – September 30, 2013

Total Project Costs: \$12,529,059

Total Federal Grant Request: \$10,023,247

Total Matching Funds (Cash): \$2,505,812

Total Matching Funds (In-Kind): \$0

Total Matching Funds (Cash + In-Kind): \$2,505,812

Total Matching Funds (Cash + In-Kind) as Percentage of Total Project Costs: 20%

1. Administrative and legal expenses - \$418,200

- Legal expenses for drafting and executing contracts with vendors are estimated to be \$40,000 (100 hours @ \$400/hour).

- Grant administration is estimated at \$93,600 (3,120 hours @ \$30/hour).

-Project management costs are estimated at \$249,600 (6,240 hours @ \$40/hour).

-Grant preparation costs are estimated at \$35,000 which is based on \$15,000 in network conceptual design, \$10,000 in mapping costs, and \$10,000 in staff administrative time.

- Matching funds for this will be 20% of \$418,200 or \$83,640; matching funds will be split equally between the applicant and ODU Foundation.

2. Land, structure, rights-of-way, appraisals, etc. - \$332,000



- Along the course of the proposed fiber route, four 12'x20' concrete shelters will be required at strategic locations to house fiber multiplexing equipment. Each of these sites will require a 45 kW generator for backup power.

- Matching funds for this will be 20% of \$332,000 or \$66,400; matching funds will be split equally between the applicant and ODU Foundation.

3. Relocation expenses and payment - \$0

- There are no expenses of this kind on the project.

4. Architectural and engineering fees - \$186,000

- While the basic routes of the proposed fiber cables and structures have been identified, MBC will engage contract OSP Engineering firm(s) to provide detailed OSP construction prints. The current average cost per mile for OSP engineers for MBC is \$1,094 per mile, and with the project encompassing ~170 miles, the estimated OSP engineering costs will be \$186,000.

- Matching funds for this will be 20% of \$186,000 or \$37,200; matching funds will be split equally between the applicant and ODU Foundation.

5. Other architectural and engineering fees - \$50,000

- Before construction of the project can begin, an environmental assessment will be required, and the cost for an Environmental Engineering firm to conduct this assessment is \$50,000.

- Matching funds for this will be 20% of \$50,000 or \$10,000; matching funds will be split equally between the applicant and ODU Foundation.

6. Project inspection fees - \$145,600

- During the construction phase of the project, two project inspectors will be engaged to ensure that the contractors are constructing the project to the required standards, and that all state, local, and federal regulations are being observed.



-The estimated cost was calculated using the assumption that we construction phase would last one year resulting in 4,160 manhours at \$35/hour for the budgeted amount of \$145,600.

- Matching funds for this will be 20% of \$145,600 or \$29,120; matching funds will be split equally between the applicant and ODU Foundation.

7. Site work - \$200,000

- Four concrete shelters will be placed on municipal property to house MBC transport equipment and fiber terminations. Historical pricing for site preparation work is \$50,000 for site preparation and installing the shelter and generator.

- Matching funds for this will be 20% of \$200,000 or \$40,000; matching funds will be split equally between the applicant and ODU Foundation.

8. Demolition and removal - \$0

- No demolition or removal is required on this project.

9. Construction - \$8,260,120

Item	Unit Basis	Unit Cost	Units	Cost
144 Fiber Cable	Foot	\$1.45	723,276	\$1,048,750
24 Fiber Cable	Foot	\$0.47	177,114	\$83,245
Hand holes	Each	\$649.00	133	\$86,317
Pole Line Hardware/Strand	Foot	\$0.40	112,768	\$45,107
Cable Route Markers	Each	\$27.29	1,375	\$37,524
Splice Cases	Each	\$475	79	\$37,525
Buried Cable Placement	Foot	\$7.00	774,372	\$5,420,604
Aerial Cable Placement	Foot	\$4.75	112,768	\$535,648
Bridge Attachments	Foot	\$60.00	13,250	\$795,000
Building Conduits	Each	\$1,500.00	28	\$42,000
Splicing Labor	Each	\$1,200.00	107	\$128,400
Total Cost				\$8,260,120



-This work will be completed by MBC contractors.

- Matching funds for this will be 20% of \$8,260,120 or \$1,652,024; matching funds will be split equally between the applicant and ODU Foundation.

10. Equipment - \$2,937,139

Item	Units	Unit Cost	Cost
170 Ah Batteries	28	\$306	\$8,568
55 Ah Batteries	4	\$148	\$592
Nortel 6110	29	\$4,500	\$130,500
Nortel 6130	4	\$8,000	\$32,000
Nortel 6500	4	\$150,000	\$600,000
Nortel OC-48 Cards (at existing nodes)	8	\$9,500	\$76,000
Infinera DWDM 3 Way System	2	\$447,558	\$895,116
Infinera DWDM 2 Way System	1	\$287,927	\$287,927
Infinera BMM/XLM Cards (at existing nodes)	2	\$116,754	\$233,508
Infinera TAM Cards	12	\$29,756	\$357,072
Infinera OLA	4	\$49,514	\$198,056
Ethernet Switch	4	\$7,500	\$30,000
Fiber Panels - Nodes	9	\$700	\$6,300
Fiber Panels - Anchor Location	29	\$350	\$10,150
Installation Labor	358	\$75	\$26,850
Equipment Cabinet	1	\$9,500	\$9,500
Valere DC System (100 amp)	1	\$3,500	\$3,500
Valere DC System (200 amp)	6	\$4,000	\$24,000
Wilmore Inverter	3	\$2,500	\$7,500
Grand Total			\$2,937,139

-Matching funds for this will be 20% of \$2,937,139 or \$587,428; matching funds will be split equally between the applicant and ODU Foundation.

11. Miscellaneous - \$0

- No expenses of this type will be required on this project.



13. Contingencies - \$0

- Contingencies are an unallowable expenditures under BTOP.

15. Project (program) income - \$0

- The value for this line-item on the SF-424C is \$0. Please do not provide an estimated Project (program income) on the SF-424C.

Addendum

- Very few indirect costs are allowable through BTOP. If any allowable indirect costs and/or fringe benefits are included in the budget, please provide a copy of your existing Negotiated Indirect Cost Recovery Agreement (NICRA), if available. If the NICRA is applied accordingly in the budget, there is no need to justify the costs. If a NICRA is not available or is not consistent with the rates/calculations in the budget, please provide an explanation of how the amounts were calculated. Please clearly list the manner in which indirect costs are calculated in the budget.



Note: Verify that indirects are calculated correctly and are eligible BTOP costs. To clarify, reasonable indirect costs under BTOP are only allowable for Full Time Employees (FTEs) associated with the construction, deployment, or installation of facilities or equipment used to provide broadband service.

General Budget Overview

Budget	Federal Funding Request	Matching Funds (Cash)	Matching Funds (In-Kind)	Budget TOTAL	Last Mile Allocation	Middle Mile Allocation	Allocated TOTAL
Network & Access Equipment (switching, routing, transport, access)	\$2,349,711	\$587,428		\$2,937,139		\$2,937,139.00	\$2,937,139
Outside Plant (cables, conduits, ducts, poles, towers, repeaters, etc.)	\$6,608,096	\$1,652,024		\$8,260,120		\$8,260,120.00	\$8,260,120
Buildings and Land – (new construction, improvements, renovations, lease)	\$265,600	\$66,400		\$332,000		\$332,000.00	\$332,000
Customer Premise Equipment (modems, set-top boxes, inside wiring, etc.)	\$0	\$0		\$0			\$0
Billing and Operational Support Systems (IT systems, software, etc.)	\$0	\$0		\$0			\$0
Operating Equipment (vehicles, office equipment, other)	\$0	\$0		\$0			\$0
Engineering/Professional Services (engineering design, project management, consulting, etc.)	\$639,840	\$159,960		\$799,800		\$799,800.00	\$799,800
Testing (network elements, IT system elements, user devices, test generators, lab furnishings, servers/computers, etc.)	\$0	\$0		\$0			\$0
Site Preparation	\$160,000	\$40,000		\$200,000		\$200,000.00	\$200,000
Other				\$0			\$0
TOTAL BROADBAND SYSTEM:	\$10,023,247	\$2,505,812	\$0	\$12,529,059	\$0	\$12,529,059	\$12,529,059
Cost Share Percentage:	80.00%	20.00%	0.00%				

DETAIL OF PROJECT COSTS

PLEASE COMPLETE THE TABLE BELOW FOR THE DIFFERENT CATEGORIES OF EQUIPMENT THAT WILL BE REQUIRED FOR COMPLETING THE PROJECT. EACH CATEGORY SHOULD BE BROKEN DOWN TO THE APPROPRIATE LEVEL FOR IDENTIFYING UNIT COST

SERVICE AREA or COMMON NETWORK FACILITIES:	Match (Cash/In-kind)	Unit Cost	No. of Units	Total Cost	Last Mile Allocation	Middle Mile Allocation	Allocated Total	SF-424C Budget Category	Support of Reasonableness
NETWORK & ACCESS EQUIPMENT				\$2,937,139	\$0	\$2,937,139	\$2,937,139		
Switching				\$0			\$0		
				\$0			\$0		
				\$0			\$0		
Routing	Ethernet Switch	Cash Match	\$7,500.00	4	\$30,000	\$30,000.00	\$30,000		
					\$0		\$0		
					\$0		\$0		
Transport	Infinera DWDM 3 Way System	Cash Match	\$447,558.00	2	\$895,116	\$895,116.00	\$895,116	10. Equipment	
	Infinera DWDM 2 Way System	Cash Match	\$287,927.00	1	\$287,927	\$287,927.00	\$287,927	10. Equipment	
	Infinera BMM/XLM Cards (at existing nodes)	Cash Match	\$116,754.00	2	\$233,508	\$233,508.00	\$233,508	10. Equipment	
	Infinera OLA	Cash Match	\$49,514.00	4	\$198,056	\$198,056.00	\$198,056	10. Equipment	
	Infinera TAM Cards	Cash Match	\$29,756.00	12	\$357,072	\$357,072.00	\$357,072	10. Equipment	
	Nortel 6110	Cash Match	\$4,500.00	29	\$130,500	\$130,500.00	\$130,500	10. Equipment	
	Nortel 6130	Cash Match	\$8,000.00	4	\$32,000	\$32,000.00	\$32,000	10. Equipment	
	Nortel 6500	Cash Match	\$150,000.00	4	\$600,000	\$600,000.00	\$600,000	10. Equipment	
	Nortel OC-8 Cards (at existing nodes)	Cash Match	\$9,500.00	8	\$76,000	\$76,000.00	\$76,000	10. Equipment	
					\$0		\$0		
Access					\$0		\$0		
					\$0		\$0		
					\$0		\$0		
Other	Valere DC System (100 amp)	Cash Match	\$3,500.00	1	\$3,500	\$3,500.00	\$3,500	10. Equipment	
	Valere DC System (200 amp)	Cash Match	\$4,000.00	6	\$24,000	\$24,000.00	\$24,000	10. Equipment	
	170 Ah Batteries	Cash Match	\$306.00	28	\$8,568	\$8,568.00	\$8,568	10. Equipment	
	55 Ah Batteries	Cash Match	\$148.00	4	\$592	\$592.00	\$592	10. Equipment	
	Wilmore Inverter	Cash Match	\$2,500.00	3	\$7,500	\$7,500.00	\$7,500	10. Equipment	
	Fiber Panels - Anchor Institutions	Cash Match	\$350.00	29	\$10,150	\$10,150.00	\$10,150	10. Equipment	
	Fiber Panels - Nodes	Cash Match	\$700.00	9	\$6,300	\$6,300.00	\$6,300	10. Equipment	
	Equipment Cabinet	Cash Match	\$9,500.00	1	\$9,500	\$9,500.00	\$9,500	10. Equipment	
	Insallation Labor	Cash Match	\$75.00	358	\$26,850	\$26,850.00	\$26,850	10. Equipment	
					\$0		\$0		
OUTSIDE PLANT				\$8,260,120	\$0	\$8,260,120	\$8,260,120		
Cables	144 Fiber Cable	Cash Match	\$1.45	723,276	\$1,048,750	\$1,048,750.20	\$1,048,750	9. Construction	
	24 Fiber Cable	Cash Match	\$0.47	177,114	\$83,245	\$83,244.58	\$83,245		
					\$0		\$0		
Conduits	Building entrance conduits	Cash Match	1,500	28	\$42,000	\$42,000.00	\$42,000	9. Construction	
					\$0		\$0		
					\$0		\$0		
Ducts					\$0		\$0		
					\$0		\$0		
					\$0		\$0		
Poles					\$0		\$0		
					\$0		\$0		
					\$0		\$0		
Towers					\$0		\$0		
					\$0		\$0		
					\$0		\$0		
Repeaters					\$0		\$0		
					\$0		\$0		

					\$0			\$0		
Other	Pole Line Hardware/6M Strand	Cash Match	\$0.40	112,768	\$45,107		\$45,107.20	\$45,107	9. Construction	
	Cable Route Markers	Cash Match	\$27.29	1,375	\$37,524		\$37,523.75	\$37,524	9. Construction	
	Splice Cases	Cash Match	\$475.00	79	\$37,525		\$37,525.00	\$37,525	9. Construction	
	Buried Cable Placement	Cash Match	\$7.00	774,372	\$5,420,604		\$5,420,604.00	\$5,420,604	9. Construction	
	Aerial Cable Placement	Cash Match	\$4.75	112,768	\$535,648		\$535,648.00	\$535,648	9. Construction	
	Bridge Attachments	Cash Match	\$60.00	13,250	\$795,000		\$795,000.00	\$795,000	9. Construction	
	Splicing Labor	Cash Match	\$1,200.00	107	\$128,400		\$128,400.00	\$128,400	9. Construction	
	Hand Holes	Cash Match	\$649.00	133	\$86,317		\$86,317.00	\$86,317	9. Construction	

COMMON		Match	Unit Cost	No. of	Total Cost	Last Mile	Middle Mile	Allocated Total	SF-424C Budget	Support of Reasonableness
BUILDINGS					\$332,000	\$0	\$332,000	\$332,000		
New Construction					\$0			\$0		
					\$0			\$0		
					\$0			\$0		
Pre-Fab Huts	Node Shelter (12' x 20')	Cash Match	\$58,000.00	4	\$232,000		\$232,000.00	\$232,000	2. Land, structures	
					\$0			\$0		
					\$0			\$0		
Improvements &					\$0			\$0		
					\$0			\$0		
					\$0			\$0		
Other	45 kW Generator	Cash Match	\$25,000.00	4	\$100,000		\$100,000.00	\$100,000	2. Land, structures	
					\$0			\$0		
					\$0			\$0		
CUSTOMER PREMISE EQUIPMENT					\$0	\$0	\$0	\$0		
Modems					\$0			\$0		
					\$0			\$0		
					\$0			\$0		
Set Top Boxes					\$0			\$0		
					\$0			\$0		
					\$0			\$0		
Inside Writing					\$0			\$0		
					\$0			\$0		
					\$0			\$0		
Other					\$0			\$0		
					\$0			\$0		
					\$0			\$0		
BILLING SUPPORT AND OPERATIONS SUPPORT SYSTEMS					\$0	\$0	\$0	\$0		
Billing Support					\$0			\$0		
					\$0			\$0		
					\$0			\$0		
Customer Care					\$0			\$0		
					\$0			\$0		
					\$0			\$0		
Other Support					\$0			\$0		
					\$0			\$0		
					\$0			\$0		

COMMON		Match	Unit Cost	No. of	Total Cost	Last Mile	Middle Mile	Allocated Total	SF-424C Budget	Support of Reasonableness
OPERATING EQUIPMENT					\$0	\$0	\$0	\$0		
Vehicles					\$0			\$0		
					\$0			\$0		
					\$0			\$0		
Office Equipment /					\$0			\$0		
					\$0			\$0		
					\$0			\$0		
Other					\$0			\$0		
					\$0			\$0		
					\$0			\$0		
PROFESSIONAL SERVICES					\$799,800	\$0	\$799,800	\$799,800		
Engineering	OSP Engineering	Cash Match	\$1,000.00	186	\$186,000		\$186,000	\$186,000	4. Architectural and engr.	
					\$0		\$0	\$0		
					\$0		\$0	\$0		
Project	Project Management	Cash Match	\$6,240.00	40	\$249,600		\$249,600	\$249,600	1. Admin and Legal	
	Project Inspection	Cash Match	\$4,160.00	35	\$145,600		\$145,600	\$145,600	6. Inspection fees	
	Grant Administration	Cash Match	\$3,120.00	30	\$93,600		\$93,600	\$93,600	1. Admin and Legal	
Consulting	Environmental Assessment	Cash Match	\$50,000.00	1	\$50,000		\$50,000	\$50,000	5. Other archit. and engr.	
					\$0		\$0	\$0		
					\$0		\$0	\$0		
Other	Legal	Cash Match	\$400.00	100	\$40,000		\$40,000	\$40,000	1. Admin and Legal	
	Grant Preparation	Cash Match	\$35,000.00	1	\$35,000		\$35,000	\$35,000	1. Admin and Legal	
					\$0		\$0	\$0		
TESTING					\$0	\$0	\$0	\$0		
Network					\$0			\$0		
					\$0			\$0		
					\$0			\$0		
IT System					\$0			\$0		
					\$0			\$0		
					\$0			\$0		
User Devices					\$0			\$0		
					\$0			\$0		
					\$0			\$0		
Test Generators					\$0			\$0		
					\$0			\$0		
					\$0			\$0		
Lab					\$0			\$0		
					\$0			\$0		
					\$0			\$0		
Servers/Computer					\$0			\$0		
					\$0			\$0		
					\$0			\$0		

COMMON		Match	Unit Cost	No. of	Total Cost	Last Mile	Middle Mile	Allocated Total	SF-424C Budget	Support of Reasonableness
OTHER UPFRONT COSTS					\$200,000	\$0	\$200,000	\$200,000		
Site	Site preparation for node shelters	Cash Match	\$50,000.00	4	\$200,000		\$200,000	\$200,000	7. Site work	
					\$0			\$0		
					\$0			\$0		
Other					\$0			\$0		
					\$0			\$0		
					\$0			\$0		
PROJECT TOTAL:					\$12,529,059	\$0	\$12,529,059	\$12,529,059		

BTOP Comprehensive Community Infrastructure Pro Forma Financial Projections

Please complete the Income Statement, Balance Sheet, Cash Flows, and NPV-IRR Table worksheets. Key assumptions used to formulate these financial projections should be listed in the Key Assumptions worksheet. Please note that these are **project-specific** projections, in contrast to the historical financial information which is provided at the organizational level.

Please refer to the Comprehensive Community Infrastructure Grant Guidance for detailed instructions on the completing this attachment.

Applicants are required to provide this attachment as an Excel file, and not to convert it to a PDF when submitting a copy of their application on an appropriate electronic medium, such as a DVD, CD-ROM, or flash drive. Applicants may make adjustments to the format of the templates as necessary to provide the most effective presentation of the data for their specific project, but should not remove major headings (*e.g.* Revenues and Expenses on the Income Statement) or provide less detailed information than would be required to complete the provided templates.

Income Statement

	Forecast Period							
	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8
Revenues								
Broadband Offerings								
Wholesale Data	\$ -	\$ 75,200	\$ 374,900	\$ 586,800	\$ 648,800	\$ 657,700	\$ 677,200	\$ 723,600
Retail Data	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Dark Fiber	\$ -	\$ -	\$ 50,000	\$ 75,000	\$ 100,000	\$ 137,500	\$ 150,000	\$ 150,000
Collocation	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Other (list specific services)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Other Network Driven Revenues								
Video Services	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Voice Services (local/toll/long distance)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Other (list specific services)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Universal Service Fund	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Installation Revenues	\$ -	\$ 8,250	\$ 11,250	\$ 12,000	\$ 9,000	\$ 9,750	\$ 9,000	\$ 9,750
Other Revenues - Grant	\$ 2,215,382	\$ 10,313,677	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Total Revenues	\$ 2,215,382	\$ 10,397,127	\$ 436,150	\$ 673,800	\$ 757,800	\$ 804,950	\$ 836,200	\$ 883,350
Expenses								
Backhaul	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Network Maintenance/Monitoring	\$ -	\$ 26,532	\$ 47,381	\$ 50,698	\$ 54,247	\$ 58,044	\$ 62,107	\$ 66,454
Utilities	\$ -	\$ 15,600	\$ 15,912	\$ 16,230	\$ 16,555	\$ 16,886	\$ 17,224	\$ 17,568
Leasing	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Sales/Marketing	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Customer Care	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Billing	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Corporate G&A	\$ 209,100	\$ 209,100	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Other Operating Expense	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Total	\$ 209,100	\$ 251,232	\$ 63,293	\$ 66,928	\$ 70,801	\$ 74,930	\$ 79,330	\$ 84,022
EBITDA	\$ 2,006,282	\$ 10,145,895	\$ 372,857	\$ 606,872	\$ 686,999	\$ 730,020	\$ 756,870	\$ 799,328
Depreciation	\$ -	\$ 295,500	\$ 1,042,239	\$ 1,042,239	\$ 1,042,239	\$ 1,042,239	\$ 1,042,239	\$ 1,042,239
Amortization	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Earnings Before Interest and Taxes	\$ 2,006,282	\$ 9,850,395	\$ (669,382)	\$ (435,367)	\$ (355,240)	\$ (312,219)	\$ (285,369)	\$ (242,911)
Interest Expense	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Income Before Taxes	\$ 2,006,282	\$ 9,850,395	\$ (669,382)	\$ (435,367)	\$ (355,240)	\$ (312,219)	\$ (285,369)	\$ (242,911)
Property Tax	\$ -	\$ 2,296	\$ 2,296	\$ 2,319	\$ 2,342	\$ 2,366	\$ 2,389	\$ 2,413
Income Taxes	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Net Income	\$ 2,006,282	\$ 9,848,099	\$ (671,678)	\$ (437,686)	\$ (357,583)	\$ (314,584)	\$ (287,759)	\$ (245,325)

Balance Sheet

Assets	Forecast Period							
	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8
Current Assets								
Cash	\$ (203,872)	\$ (378,407)	\$ (19,020)	\$ 579,164	\$ 1,263,118	\$ 1,989,716	\$ 2,743,506	\$ 3,539,378
Marketable Securities	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Accounts Receivable	\$ -	\$ 5,510	\$ 11,985	\$ 18,445	\$ 19,245	\$ 20,405	\$ 21,205	\$ 22,365
Notes Receivable	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Inventory	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Prepayments	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Other Current Assets	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Total Current Assets	\$ (203,872)	\$ (372,897)	\$ (7,035)	\$ 597,609	\$ 1,282,363	\$ 2,010,121	\$ 2,764,711	\$ 3,561,743
Non-Current Assets								
Long-Term Investments	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Amortizable Asset (Net of Amortization)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Plant in Service	\$ -	\$ 12,110,859	\$ 12,110,859	\$ 12,110,859	\$ 12,110,859	\$ 12,110,859	\$ 12,110,859	\$ 12,110,859
Less: Accumulated Depreciation	\$ -	\$ 295,500	\$ 1,337,739	\$ 2,379,978	\$ 3,422,217	\$ 4,464,456	\$ 5,506,695	\$ 6,548,934
Net Plant	\$ -	\$ 11,815,359	\$ 10,773,120	\$ 9,730,881	\$ 8,688,642	\$ 7,646,403	\$ 6,604,164	\$ 5,561,925
Other	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Total Non-Current Assets	\$ -	\$ 11,815,359	\$ 10,773,120	\$ 9,730,881	\$ 8,688,642	\$ 7,646,403	\$ 6,604,164	\$ 5,561,925
Total Assets	\$ (203,872)	\$ 11,442,462	\$ 10,766,085	\$ 10,328,490	\$ 9,971,005	\$ 9,656,524	\$ 9,368,875	\$ 9,123,668
Liabilities and Owners' Equity								
Liabilities								
Current Liabilities								
Accounts Payable	\$ 5,228	\$ 6,281	\$ 1,582	\$ 1,673	\$ 1,770	\$ 1,873	\$ 1,983	\$ 2,101
Notes Payable	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Other Current Liabilities	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Total Current Liabilities	\$ 5,228	\$ 6,281	\$ 1,582	\$ 1,673	\$ 1,770	\$ 1,873	\$ 1,983	\$ 2,101
Long-Term Liabilities								
Long Term Notes Payable	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Other Long Term Liabilities	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Total Long-Term Liabilities	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Total Liabilities	\$ 5,228	\$ 6,281	\$ 1,582	\$ 1,673	\$ 1,770	\$ 1,873	\$ 1,983	\$ 2,101
Owner's Equity								
Capital Stock	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Additional Paid-In Capital	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Retained Earnings	\$ (209,100)	\$ 11,436,181	\$ 10,764,503	\$ 10,326,817	\$ 9,969,235	\$ 9,654,650	\$ 9,366,892	\$ 9,121,567
Total Equity	\$ (209,100)	\$ 11,436,181	\$ 10,764,503	\$ 10,326,817	\$ 9,969,235	\$ 9,654,650	\$ 9,366,892	\$ 9,121,567
Total Liabilities and Owner's Equity	\$ (203,872)	\$ 11,442,462	\$ 10,766,085	\$ 10,328,490	\$ 9,971,005	\$ 9,656,524	\$ 9,368,875	\$ 9,123,668

Statement of Cash Flows

	Forecast Period							
	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8
Beginning Cash	\$ -	\$ (203,872)	\$ (378,407)	\$ (19,020)	\$ 579,164	\$ 1,263,118	\$ 1,989,716	\$ 2,743,506
CASH FLOWS FROM OPERATING ACTIVITIES:								
Net Income	2,006,282	9,848,099	(671,678)	(437,686)	(357,583)	(314,584)	(287,759)	(245,325)
<i>Adjustments to Reconcile Net Income to Net Cash Provided by Operating Activities</i>								
Add: Depreciation	-	295,500	1,042,239	1,042,239	1,042,239	1,042,239	1,042,239	1,042,239
Add: Amortization	-	-	-	-	-	-	-	-
<i>Changes in Current Assets and Liabilities:</i>								
Marketable Securities	-	-	-	-	-	-	-	-
Accounts Receivable	-	(5,510)	(6,475)	(6,460)	(800)	(1,160)	(800)	(1,160)
Inventory	-	-	-	-	-	-	-	-
Prepayments	-	-	-	-	-	-	-	-
Other Current Assets	-	-	-	-	-	-	-	-
Accounts Payable	5,228	1,053	(4,698)	91	97	103	110	117
Other Current Liabilities	-	-	-	-	-	-	-	-
Net Cash Provided (Used) by Operations	\$ 2,011,510	\$ 10,139,142	\$ 359,388	\$ 598,184	\$ 683,953	\$ 726,598	\$ 753,790	\$ 795,872
CASH FLOWS FROM INVESTING ACTIVITIES:								
Capital Expenditures	(2,215,382)	(10,313,677)	-	-	-	-	-	-
Amortizable Asset (Net of Amortization)	-	-	-	-	-	-	-	-
Long-Term Investments	-	-	-	-	-	-	-	-
Net Cash Used by Investing Activities	\$ (2,215,382)	\$ (10,313,677)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
CASH FLOWS FROM FINANCING ACTIVITIES:								
Notes Receivable	-	-	-	-	-	-	-	-
Notes Payable	-	-	-	-	-	-	-	-
Principal Payments	-	-	-	-	-	-	-	-
New Borrowing	-	-	-	-	-	-	-	-
Additional Paid-in Capital	-	-	-	-	-	-	-	-
Additions to Patronage Capital Credits	-	-	-	-	-	-	-	-
Payment of Dividends	-	-	-	-	-	-	-	-
Net Cash Used by Investing Activities	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Net Increase (Decrease) in Cash	\$ (203,872)	\$ (174,535)	\$ 359,388	\$ 598,184	\$ 683,953	\$ 726,598	\$ 753,790	\$ 795,872
Ending Cash	\$ (203,872)	\$ (378,407)	\$ (19,020)	\$ 579,164	\$ 1,263,118	\$ 1,989,716	\$ 2,743,506	\$ 3,539,378

NPV/IRR Table

	Net Present Value	Internal Rate of Return
Without BTOP Funding	-\$11,815,481	-14.37%
With BTOP Funding	\$2,451,865	89.53%

For NPV calc. assume 6% hurdle rate with no terminal value

With BTOP Funding		Forecast Period -- Incremental Investment							
	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	
Net Income (Including Grant Revenue)	\$ 2,006,282	\$ 9,848,099	\$ (671,678)	\$ (437,686)	\$ (357,583)	\$ (314,584)	\$ (287,759)	\$ (245,325)	
Depreciation	\$ -	\$ 295,500	\$ 1,042,239	\$ 1,042,239	\$ 1,042,239	\$ 1,042,239	\$ 1,042,239	\$ 1,042,239	
Changes in Current Assets and Liabilities	\$ 5,228	\$ (4,457)	\$ (11,173)	\$ (6,369)	\$ (703)	\$ (1,057)	\$ (690)	\$ (1,043)	
Capital Spending	\$ (2,215,382)	\$ (10,313,677)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Cash Flow for Investment Evaluation	\$ (203,872)	\$ (174,535)	\$ 359,388	\$ 598,184	\$ 683,953	\$ 726,598	\$ 753,790	\$ 795,872	Terminal Value 8 X EBITDA
									\$ 6,394,621

Investment Attractiveness

With BTOP Funding, at various hurdle rates

Project Attractiveness with BTOP funding, no terminal value, and 5-year evaluation period.

Hurdle rates	NPV
6%	\$ 2,451,865
9%	\$ 2,056,880
12%	\$ 1,733,421
15%	\$ 1,466,787
18%	\$ 1,245,633
21%	\$ 1,061,135
24%	\$ 906,376
27%	\$ 775,897
30%	\$ 665,359

Project Attractiveness with BTOP funding, 8X EBITDA terminal value, 5-year evaluation period.

Hurdle rates	NPV
6%	\$ 6,236,831
9%	\$ 5,001,141
12%	\$ 4,039,385
15%	\$ 3,284,537
18%	\$ 2,687,339
21%	\$ 2,211,263
24%	\$ 1,828,989
27%	\$ 1,519,912
30%	\$ 1,268,369

Without BTOP Funding (use 6% debt financing for 20 years)

Without BTOP Funding (use 6% debt financing for 20 years)		Forecast Period -- Incremental Investment							
	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	
Net Income	\$ (960,842)	\$ (1,196,884)	\$ (1,381,322)	\$ (1,124,368)	\$ (1,019,926)	\$ (951,128)	\$ (896,954)	\$ (825,532)	
Depreciation	\$ -	\$ 295,500	\$ 1,042,239	\$ 1,042,239	\$ 1,042,239	\$ 1,042,239	\$ 1,042,239	\$ 1,042,239	
Changes in Current Assets and Liabilities	\$ 5,228	\$ (4,457)	\$ (11,173)	\$ (6,369)	\$ (703)	\$ (1,057)	\$ (690)	\$ (1,043)	
Impact to Cash Flow for Principal Pmts	\$ (340,596)	\$ (361,032)	\$ (382,694)	\$ (405,655)	\$ (429,995)	\$ (455,794)	\$ (483,142)	\$ (512,131)	
Capital Spending	\$ (2,215,382)	\$ (10,313,677)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Cash Flow for Investment Evaluation	\$ (3,511,592)	\$ (11,580,550)	\$ (732,950)	\$ (494,154)	\$ (408,385)	\$ (365,740)	\$ (338,548)	\$ (296,466)	Terminal Value 8 X EBITDA
									\$ 6,394,621

Investment Attractiveness

Without BTOP Funding

Assume MBC would finance the project 100% with debt at 6% interest financed over a 20 yr period

Project Attractiveness without BTOP funding, no terminal value, and 5-year evaluation period.

Hurdle rates	NPV
6%	\$ (15,600,447)
9%	\$ (14,702,288)
12%	\$ (13,892,940)
15%	\$ (13,159,925)
18%	\$ (12,493,011)
21%	\$ (11,883,727)
24%	\$ (11,324,999)
27%	\$ (10,810,876)
30%	\$ (10,336,311)

Project Attractiveness without BTOP funding, 8X EBITDA terminal value, 5-year evaluation period.

Hurdle rates	NPV
6%	\$ (11,815,481)
9%	\$ (11,758,028)
12%	\$ (11,586,975)
15%	\$ (11,342,175)
18%	\$ (11,051,305)
21%	\$ (10,733,598)
24%	\$ (10,402,386)
27%	\$ (10,066,862)
30%	\$ (9,733,301)

Revenue Assumptions	
Factor	Specific Metric Used in Analysis
Customers Passed	
Anchor Institutions - Segment A	14
Anchor Institutions - Segment B	7
Anchor Institutions - Segment C	7
Businesses	
Households	
Last Mile Providers	
Other	
Take Rate (should likely vary across 8-Year Forecast)	
Anchor Institutions - Segment A	100%
Anchor Institutions - Segment B	100
Anchor Institutions - Segment C	100
Businesses	
Households	
Last Mile Providers	
Direct Customer Connections	
Customer Segment A	14
Customer Segment B	7
Anchor Institutions - Segment C	7
Other	
Average Revenue per User (may vary across 8-year forecast)	
Anchor Institutions - Segment A	Year 4 ARPU = \$28,363; Year 8 ARPU= \$37,440
Anchor Institutions - Segment B	Year 4 ARPU = \$23,635; Year 8 ARPU= \$31,200
Anchor Institutions - Segment C	Year 4 ARPU = \$4,727; Year 8 ARPU=\$6,240
Businesses	
Households	
Last Mile Providers	
Other	

Expense Assumptions

Factor	Specific Metric Used in Analysis
Network Expenses	
Backhaul	
Maintenance	Pole attachment: \$8.52/month per route mile X 170 miles Collocation: \$2000/month with Cox Norfolk Pole Transfers, non-billable fiber cuts: \$500/month
Utilities	\$325/location - 4 locations
Leasing	
Depreciation	Generators: 120 months; Aerial Fiber: 180 months; Buried Fiber: 180 months; Nodes/Shelters: 180 months; Long Haul Equipment: 84 months, Regional Equipment: 84 months
Other	
Sales & Marketing	
Advertising	
Commissions	
Salaries	
Other	
Customer Care & Billing	
Systems	
Personnel	
Other	
General & Administrative	
Professional Services	
Insurance	
Non-Network Utilities	
Travel	
Supplies	
Miscellaneous	Legal Expenses: 100 hours @ \$400/hr Grant Administration: 3120 hrs @ \$30/hour Project Management 6240 hrs @ \$40/hour Grant Prep: \$15,000 conceptual, \$10,000 mapping, \$10,000 administration time,
Interest Expenses	
Debt Instrument A	
Debt Instrument B	

Taxes	
Federal Tax Rate	
Other Tax Rates	

Rationale (Cite Basis)

All figures based on MBC Historical data

4 shelter locations historical data averages \$325 utilities per month

Based on industry standards

No increase in staffing will be required to manage this project outside of the grant period

No increase in billing software will be required to manage this project

No increase in staffing will be required to manage this project outside of the grant period

Increase will be nominal and will be cared by MBC through general insurance

Administrative and legal expenses directly related to grant administration

No Debt

No Debt

Tax Exempt
Tax Exempt