FINAL

ENVIRONMENTAL ASSESSMENT

OF THE PROPOSED

ONECOMMUNITY TRANSFORMING NORTHEAST OHIO PROJECT

NORTHEASTERN OHIO





onecommunity

connecting > enabling > transforming

ONECOMMUNITY

800 WEST ST. CLAIR STREET, SECOND FLOOR

CLEVELAND, OHIO 44113

PRIME CONSULTANT:



PlanIt², Inc. www.planit2.com

WITH TECHNICAL ASSISTANCE PROVIDED BY:





1 MARCH 2011

ENVIRONMENTAL ASSESSMENT SIGNATURE PAGE

FEDERAL LEAD AGENCY: National Telecommunications and Information Administration (NTIA) **COOPERATING AGENCIES:** None Transforming Northeast Ohio Project **TITLE OF PROPOSED ACTION: AFFECTED JURISDICTION:** Northeastern Ohio Dr. Frank J. Monteferrante, NTIA Environmental Compliance **POINT OF CONTACT:** Specialist, 1401 Constitution Ave. NW; Washington DC 20230; Comm. Tel.: (202) 482-4208 (fmonteferrante@ntia.doc.gov) **PROPONENT:** OneCommunity **REVIEWED BY: REVIEWED BY: REVIEWED BY:** Ms. Sarah Thompson Dr. Frank J. Monteferrante Ms. Genevieve Walker Environmental Compliance Environmental Review Specialist Environmental Compliance Specialist National Oceanic and Atmospheric Specialist NTIA Administration (NOAA) US Department of Commerce (DOC)

DOCUMENT DESIGNATION: Final Environmental Assessment

ABSTRACT: This Environmental Assessment (EA) evaluates the Proposed Action of OneCommunity to install and operate approximately 893 miles of telecommunications fiber in 22 counties in northeast Ohio. The Proposed Action is funded, in part, by a grant to OneCommunity under the American Recovery and Reinvestment Act (ARRA) of 2009 from the National Telecommunications and Information Administration (NTIA), a Federal agency. This EA has been prepared by OneCommunity for submittal to the NTIA for adoption and in support of the NTIA's decision-making concerning the ARRA funding of this Proposed Action.

This EA discusses two alternatives: the Preferred Action Alternative and the No Action Alternative. The Preferred Action Alternative includes installing fiber on up to 788.6 miles (88.3% of the 893mile total) of *existing* utility poles; within up to 83.3 miles (9.3%) of *new* underground conduit; within up to 10.9 miles (1.2%) of *existing* underground conduit; and on up to 21 *new* utility poles (0.6 mile, or 0.07%); and connecting to 9.7 miles (1.1%) of existing dark fiber. Up to 74 acres of ground would be disturbed during construction of the Preferred Action Alternative.

This EA evaluates possible effects to 11 technical resource areas: noise, air quality, geology and soils, water resources, biological resources, historic and cultural resources, aesthetic and visual resources, land use, infrastructure, socioeconomic resources, and human health and safety. The EA concludes there would be no significant impact, either individually or cumulatively, to the local environment or quality of life associated with implementing the Preferred Action Alternative, provided the EPMs, incorporated as part of the Proposed Action and specified in this EA, are implemented.

EXECUTIVE SUMMARY

This Environmental Assessment (EA) has been prepared to identify, analyze, and document the potential physical, environmental, cultural, and socioeconomic effects associated with OneCommunity's proposed installation and operation of approximately 893 miles¹ of telecommunications fiber throughout northeastern Ohio. The Proposed Action is funded, in part, by a grant to OneCommunity under the American Recovery and Reinvestment Act (ARRA) of 2009 from the National Telecommunications and Information Administration (NTIA). The NTIA is a branch of the Department of Commerce (DOC) and is a Federal agency. This EA has been prepared by OneCommunity for submittal to the NTIA for adoption and in support of the NTIA's Federal decision-making concerning the ARRA-funding of this Proposed Action. As the NTIA is the grantor to OneCommunity, the awarding of the ARRA-funded grant is a Federal Action.

As this is a Federal Action, preparation of this EA is required in accordance with the National Environmental Policy Act of 1969 ([NEPA]; 42 United States Code [USC] 4321 *et seq.*), the President's Council on Environmental Quality (CEQ) Regulations Implementing the Procedural Provisions of NEPA (40 Code of Federal Regulations [CFR] 1500-1508), and the DOC, Economic Development Administration, NEPA Implementing Regulations (48 FR 14734). The EA has been prepared in accordance with the requirements of the *Environmental Assessment Guidance for Broadband Technology Opportunities Program (BTOP) Award Recipients* (NTIA 2010). For this Proposed Action, OneCommunity is the NTIA BTOP Award Recipient and the proposed installer and operator of the Proposed Action.

PROPOSED ACTION

The Proposed Action is to install and operate approximately 893 miles of telecommunications fiber in 22 counties in Ohio (see **Figures 1** and **2**). OneCommunity would implement the Proposed Action. In accordance with the ARRA, OneCommunity established the size and location of this proposed fiber alignment based on: the number of un-served and under-served areas currently in need of low-cost, high-speed broadband services in northeastern Ohio, notably including critical community "anchor" institutions, including schools, government facilities, libraries, community colleges, and healthcare facilities; the availability of existing utility right-of-way (ROW) infrastructure (i.e., existing utility poles and underground conduit with sufficient capacity); the amount of Federal (i.e., ARRA) funding available; and the ability to interconnect with OneCommunity's existing fiber infrastructure in Ohio.

The Proposed Action would involve installing fiber on existing utility poles (788.6 miles), within existing underground conduits (10.9 miles), within new underground conduits (i.e., via trenching, plowing, or directional boring; 83.3 miles), and on a limited number of new utility poles (up to 21 new utility poles over a length of up to 0.6 mile). In addition, up to 9.7 miles of existing "dark fiber"² would be used in specific locations. The reader is referred to **Table 1** and **Figure 3** that provide details of all work proposed, by location. These data are based on detailed site engineering "walk-outs" performed in the field by qualified telecommunications engineering firms in October through December 2010. In total, approximately 74 acres of earth disturbance is proposed. All proposed earth disturbance would occur during construction; all work would occur within existing, maintained utility ROWs. New or replacement poles (installed by the utility owner) and new underground infrastructure (installed by OneCommunity) would be required in specific instances where existing utility poles are overloaded or utility poles or conduit are not available. No additional long-term maintenance of the existing utility ROW would be required.

¹ Under the Preferred Action Alternative, this total includes using 9.7 miles of existing dark fiber.

 $^{^{\}rm 2}$ Dark fiber refers to existing, in-place fiber that has sufficient capacity and would be used as part of the Proposed Action.

Hub sites would be sited in each community served, and would provide a location for system hardware in each community. Hub sites would be located on the premises of OneCommunity customers, as has been done with previous OneCommunity fiber projects. Wherever possible, hub sites would be located within critical community anchor institutions. Electronic hub equipment would be located near the customer's information technology equipment, and would require the space equivalent to a large filing cabinet. No interior or exterior structure renovation would be required; the hub equipment would be connected to the network via overhead lines similar to other existing electric and telephone lines, or would be placed within existing or new underground conduit. The hub sites would be selected based on customers with facilities that have 24-hour access and an existing, maintained backup generator for power during outages. The infrastructure (i.e., hub equipment and fiber lines) would be operational for at least 30 years, and would be regularly maintained by OneCommunity. A listing of proposed hub sites is provided in **Table 2**.

PURPOSE AND NEED

The **purpose** of the Proposed Action is to provide areas of northeastern Ohio that have high unemployment, high poverty rates, below average family incomes, and low population densities with high-speed, efficient, low-cost broadband infrastructure and service. The Proposed Action would result in the implementation and operation of a fiber network in these areas that provides sufficient, requisite, high-speed, electronic data and voice communication services capacity, notably to community anchor institutions. Businesses and residences also would be served by either incumbent providers or new ventures leveraging the new available capacity. This Proposed Action, funded by the ARRA, is part of an overall, national initiative to improve the connectivity of rural, economically challenged areas. The primary goals of the program are to provide improved communications connectivity to critical community anchor institutions, as well as to assist and enable improved economic growth and development of such areas, in part fostered by increased communications capability.

This fiber network is **needed** to handle the increasing demand for broadband services by community anchor institutions, residents, and businesses of northeastern Ohio. These include areas most in need of high-speed, efficient, low-cost broadband infrastructure. Under current conditions, many of these areas lack sufficient communications connectivity (including voice and information technology), operate on dial-up networks, or lack these utilities entirely. These communication infrastructure shortfalls limit economic growth and development of currently rural, generally impoverished areas.

ALTERNATIVES

After identifying the above capability shortfall of the region, OneCommunity identified those portions of, and locations within, the region most in need of improved broadband services. Through a comprehensive and detailed screening process, OneCommunity narrowed the number of reasonable alternatives based on more refined analyses of: locations of critical community anchor institutions; discussions with local government officials; local economic conditions; current utility infrastructure availability; anticipated customer base and users; potential for future economic growth within this region; the ability to interconnect with existing fiber infrastructure; the requirement to provide a complete, redundant "ring" within the region to maximize efficiency and operability; and the amount of ARRA funding available. The value of this project is \$69 million.

Through this additional analysis, OneCommunity identified a single, suitable alternative that best met all of the screening criteria. This alternative provides the broadest possible coverage to the widest geographic array of community anchor institutions and other potential users within the region, within reasonable initial capital costs (i.e., within the scope of available ARRA funding). This alternative consists of installing and operating approximately 893 miles of fiber throughout northeastern Ohio along the route shown in **Figures 1**, **2**, and **3**. This alternative is considered within this EA as the Preferred Action Alternative.

This EA examines in-depth two alternatives, the Preferred Action Alternative and the No Action Alternative, defined as follows:

• **Preferred Action Alternative**: Install and operate approximately 893 miles of fiber within 22 counties in northeastern Ohio (see **Figures 1, 2,** and **3**). The Preferred Action Alternative includes installing fiber on up to 788.6 miles (88.3% of the 893-mile total) of *existing* utility poles; within up to 83.3 miles (9.3%) of *new* underground conduit; within up to 10.9 miles (1.2%) of *existing* underground conduit; and on up to 21 *new* utility poles (0.6 mile, or 0.07%); and connecting to 9.7 miles (1.1%) of existing dark fiber. Up to 74 acres of ground would be disturbed during construction of the Preferred Action Alternative. This network would provide additional broadband services to the maximum number of community anchor institutions, residents, and businesses of this region in need of these services, while minimizing capital investment costs and meeting the other screening criteria. The fiber network would be installed and operated by OneCommunity.

• **No Action Alternative**: Do not implement the Proposed Action as identified, and do not improve communications in the region. The level of service currently provided to the communities, residents, and businesses of northeastern Ohio would not improve.

The Preferred Action Alternative effectively provides the best broadband solution for the region, reaching the most facilities and citizens in need of such services. The No Action Alternative would not achieve the purpose of and need for the Proposed Action. However, the No Action Alternative is assessed in this EA to provide a comparative baseline analysis, as required under the CEQ Regulations (40 CFR 1502.14). The No Action Alternative reflects the *status quo* and serves as a benchmark against which the effects of the Proposed Action can be evaluated.

Other alternatives considered but dismissed by OneCommunity are discussed in **Section 2.3.3**. These include a *Wireless Alternative*, an *All-Underground Alternative*, an *All-Aerial Alternative*, and an *Other Route Alternative*. These alternatives would result in a less reliable system, higher costs, lower bandwidth availability to customers, and/or increased adverse environmental effects. For the reasons described in this EA, these alternatives were eliminated from further consideration early in the planning process.

AFFECTED ENVIRONMENT

The Preferred Action Alternative includes the installation of fiber to result in an operationally required, redundant fiber network ring around northeastern Ohio. The general project study area, or Region of Influence (ROI), includes approximately 11,000 square miles. The length of the proposed alignment is approximately 893 miles, and includes the counties of Trumbull, Geauga, Lake, Sandusky, Erie, Richland, Crawford, Marion, Delaware, Franklin, Stark, Summit, Mahoning, Medina, Ashland, Lorain, Cuyahoga, Wayne, Tuscarawas, Columbiana, Portage, and Ashtabula in Ohio. The proposed project area includes existing utility ROWs and limited work within and at proposed hub sites. These areas generally have been disturbed by past road and utility installation and consist of maintained grasslands, disturbed vegetation communities, and improved (developed) areas. Various surface waters, cultural resources features, and known special status species locations traverse or are located near the Preferred Action Alternative alignment. Please refer to **Section 3** of this EA for more information.

ENVIRONMENTAL IMPACTS

Both considered alternatives are evaluated in this EA to determine their potential direct or indirect effect(s) on the physical, environmental, cultural, and socioeconomic aspects of the Proposed Action's ROI. Technical areas evaluated include:

1.	Noise	7.	Aesthetic and Visual Resources
2.	Air Quality	8.	Land Use
3.	Geology and Soils	9.	Infrastructure
4.	Water Resources	10.	Socioeconomic Resources
5.	Biological Resources	11.	Human Health and Safety

6. Historic and Cultural Resources

Based on this EA's analysis, the Preferred Action Alternative would result in no effects to geology, aesthetic and visual resources, or land use. Short-term, less-than-significant adverse effects to the local noise environment, air quality, soils, water resources, biological resources, historic and cultural resources, infrastructure, and human health and safety would occur during construction, but would be minor and localized. In all cases, these effects would be maintained at acceptable levels through implementation of the Environmental Protection Measures (EPMs) specified in this EA, and incorporated as part of the Proposed Action. Long-term positive infrastructure (i.e., improved communications infrastructure) and historic resource (i.e., increased potential occupation, use, maintenance, and restoration of historic structures and districts connected to the proposed network) effects would be anticipated. Both short- and long-term positive socioeconomic effects, including Environmental Justice concerns, would occur. No significant effects are anticipated.

Under the No Action Alternative, the Proposed Action would not be implemented and no improvements to the current level of communications capabilities within the ROI would occur. No positive effects attributable to the Preferred Action Alternative would occur, and the ongoing adverse effect to the socioeconomic environment, including Environmental Justice concerns, would continue. This ongoing adverse socioeconomic effect is due to

the general lack of suitable communications infrastructure within the ROI, which limits the potential for economic growth and the ability of community facilities, including hospitals, schools, healthcare facilities, libraries, public safety entities, and critical community organizations, to function at optimum, modern levels.

The EA also examines the potential cumulative effects of implementing each of the considered alternatives. This analysis finds that implementation of the Preferred Action Alternative would not result in significant cumulative effects to onsite or regional natural or cultural resources, and would enhance the socioeconomic environment of the area through long-term provision of improved communications capabilities, fostering increased economic growth. The Preferred Action Alternative would improve the connectivity of community anchor institutions, providing a cumulative positive effect on community services, public health and safety, and education. The No Action Alternative would not produce these potential positive socioeconomic gains, and would continue to contribute to the less-than-ideal socioeconomic conditions of the ROI. However, these effects would not be cumulatively significant.

AGENCY AND NATIVE AMERICAN INVOLVEMENT

Agencies consulted for this EA include: the US Fish and Wildlife Service (USFWS); US Army Corps of Engineers (USACE); Ohio Department of Natural Resources (ODNR); Ohio Environmental Protection Agency (OEPA) Northwest, Central, and Northeast Districts; and the Ohio Historic Preservation Office (i.e., State Historic Preservation Officer, or SHPO). Agency information and comments have been incorporated into this EA. Copies of relevant correspondence can be found in **Appendix A**. Please refer to **Section 1.5.1** of this EA for more information concerning the agency consultation conducted as part of this NEPA process.

The NTIA utilizes the Federal Communications Commission (FCC) automated Tower Construction Notification System to notify federally recognized Native American tribes of proposed projects that have received grant awards. This system is designed for identification of, and early communication with, all federally recognized Native American tribes, including Alaska Native Villages, Native Hawaiian Organizations, and Tribal Historic Preservation Officers (THPOs). Each tribe in this system has previously identified their geographic area(s) of interest, and therefore receives only those notices of proposed projects that fall within that specified area. For this project, the NTIA entered the proposed project description into the FCC's automated system. If notified tribes are interested in receiving more information on a specific proposed project, they respond via e-mail. If this occurs, the NTIA, through established government-to-government protocol, puts the Award Recipient (i.e., OneCommunity) in touch with the tribe that has requested more information to complete the consultation process. This process is fully compliant with the requirements of 36 CFR 800.2 and Executive Order (EO) 13175. Nine (9) responses have been received from the federally recognized tribes notified through the Tower Construction Notification System (see **Appendix A**). OneCommunity has consulted with each tribe that expressed interest, and each consultation process is complete. Please refer to **Section 1.5.2** of this EA for more information.

The NTIA, as the Federal agency, will consider the input provided by regulatory agencies and federally recognized Native American tribes, as well as the findings of this EA, in their decision-making concerning this Proposed Action. Based on this consideration, the NTIA will prepare a Finding of No Significant Impact (FONSI) if there are no substantive comments or issues and if the EA's analysis supports a FONSI pursuant to the above-referenced regulations.

CONCLUSIONS

The analysis performed in this EA concludes there would be no significant impact, either individually or cumulatively, to the local environment or quality of life associated with implementation of the Preferred Action Alternative, provided the EPMs, incorporated into the Proposed Action and described in this EA, are implemented.

TABLE OF CONTENTS

SECTION	<u>PAGE</u>
EXECUTIVE SUMMARY	ES-1
LIST OF ACRONYMS AND ABBREVIATIONS	<u>vi</u>
1. PURPOSE AND NEED	1
1.1 INTRODUCTION	1
1.2 PURPOSE AND NEED	1
1.3 BACKGROUND	4
1.4 DECISION-MAKING	4
1.5 AGENCY AND NATIVE AMERICAN INVOLVEMENT	4
1.5.1 AGENCY COORDINATION	4
1.5.2 NATIVE AMERICAN CONSULTATION	8
2. DESCRIPTION OF THE PROPOSED ACTION AND ALTERNATIVES	10
2.1 INTRODUCTION	10
	10
2.2.1 AERIAL INSTALLATION	28
2.2.2 UNDERGROUND INSTALLATION	31
2.2.3 DARK FIBER UTILIZATION	32
2.2.4 HUB SITES	32
2.2.5 PROJECT PHASING	35
2.2.6 ENVIRONMENTAL PROTECTION MEASURES	36
2.3 ALTERNATIVES ANALYSIS	43
2.3.1 ALTERNATIVES DEVELOPMENT (SCREENING CRITERIA)	43
2.3.2 EVALUATED ALTERNATIVES	<u>45</u>
2.3.2.1 PREFERRED ACTION ALTERNATIVE	45
2.3.2.2 NO ACTION ALTERNATIVE	45
2.3.3 ALTERNATIVES ELIMINATED FROM FURTHER CONSIDERATION	45
2.3.3.1 WIRELESS ALTERNATIVE	<u> </u>
2.3.3.2 ALL-UNDERGROUND ALTERNATIVE	
2.3.3.3 ALL-AERIAL ALTERNATIVE	
2.3.3.4 OTHER ROUTE ALTERNATIVE	46
3. DESCRIPTION OF THE AFFECTED ENVIRONMENT	47
3.1 INTRODUCTION	47
3.2 NOISE	<u> </u>
3.3 AIR QUALITY 3.4 GEOLOGY	<u>49</u>
3.4 GEOLOGY	51
3.4.1 GEOLOGY	51
3.4.2 SOILS	53
3.5 WATER RESOURCES	53
3.5.1 SURFACE WATERS	59
3.5.2 GROUNDWATER	66
3.5.3 COASTAL ZONES	
3.5.4 FLOODPLAINS	66
3.5.5 WILD AND SCENIC RIVERS	67
3.6 BIOLOGICAL RESOURCES	68
3.6.1 WILDLIFE	69
3.6.2 VEGETATION	69
3.6.3 THREATENED AND ENDANGERED SPECIES	69
3.6.4 WETLAND HABITAT	78

TABLE OF CONTENTS (CONT.)

SECTION	PAGE
3.7 HISTORIC AND CULTURAL RESOURCES	78
3.7.1 ARCHEOLOGICAL RESOURCES	
3.7.2 ARCHITECTURAL RESOURCES	83
3.7.3 NATIVE AMERICAN RESOURCES	02 87
3.8 AESTHETIC AND VISUAL RESOURCES	<u>87</u>
3.9 LAND USE	
3.10 INFRASTRUCTURE	88
3.10.1 UTILITIES	88
3.10.2 TRANSPORTATION NETWORK	88
3.11 SOCIOECONOMIC RESOURCES	89
3.12 HUMAN HEALTH AND SAFETY	89
	89
	91
4. ANALYSIS OF ENVIRONMENTAL IMPACTS	93
4.1 INTRODUCTION	93
4.1.1 IMPACT ANALYSIS OVERVIEW	93
4.1.2 DEFINITION OF SIGNIFICANCE	<u> </u>
4.1.3 REGION OF INFLUENCE	93
4.1.4 IMPACT ASSESSMENT METHODOLOGY	93
4.2 NOISE	94
4.2.1 EFFECTS OF THE PREFERRED ACTION ALTERNATIVE	94
4.2.2 EFFECTS OF THE NO ACTION ALTNERNATIVE	111
4.2.3 MITIGATION	111
4.3 AIR QUALITY	111
4.3.1 EFFECTS OF THE PREFERRED ACTION ALTERNATIVE	111
4.3.2 EFFECTS OF THE NO ACTION ALTERNATIVE	
	112
4.4 GEOLOGY AND SOILS	112
4.4.1 EITECTS OF THE FREE ERRED ACTION ALTERNATIVE	112
4.4.2 EFFECTS OF THE NO ACTION ALTERNATIVE	
4.4.3 MITIGATION	
4.5 WATER RESOURCES	113
4.5.1 EFFECTS OF THE PREFERRED ACTION ALTERNATIVE	113
4.5.2 EFFECTS OF THE NO ACTION ALTERNATIVE	119
4.5.3 MITIGATION	
4.6 BIOLOGICAL RESOURCES	119
4.6.1 EFFECTS OF THE PREFERRED ACTION ALTERNATIVE	119
4.6.2 EFFECTS OF THE NO ACTION ALTERNATIVE	132
4.6.3 MITIGATION	
4.7 HISTORIC AND CULTURAL RESOURCES	132
4.7.1 EFFECTS OF THE PREFERRED ACTION ALTERNATIVE	132
4.7.2 EFFECTS OF THE NO ACTION ALTERNATIVE	
4.7.3 MITIGATION	
4.8 AESTHETIC AND VISUAL RESOURCES	136
4.8.1 EFFECTS OF THE PREFERRED ACTION ALTERNATIVE	
4.8.2 EFFECTS OF THE NO ACTION ALTERNATIVE	
4.8.3 MITIGATION	
4.9 LAND USE	137
4.9.1 EFFECTS OF THE PREFERRED ACTION ALTERNATIVE	
4.9.2 EFFECTS OF THE NO ACTION ALTERNATIVE	
4.9.3 MITIGATION	137

TABLE OF CONTENTS (CONT.)

SECTION	<u>PAGE</u>
4.10 INFRASTRUCTURE	137
4.10.1 EFFECTS OF THE PREFERRED ACTION ALTERNATIVE	137
4.10.2 EFFECTS OF THE NO ACTION ALTERNATIVE	140
4.10.3 MITIGATION	140
4 11 SOCIOECONOMIC RESOURCES	142
4.11.1 EFFECTS OF THE PREFERRED ACTION ALTERNATIVE	142
4.11.2 EFFECTS OF THE NO ACTION ALTERNATIVE	142
4.11.3 MITIGATION	142
4.12 HUMAN HEALTH AND SAFETY	142
4.12.1 EFFECTS OF THE PREFERRED ACTION ALTERNATIVE	
4.12.2 EFFECTS OF THE NO ACTION ALTERNATIVE	144
4.12.3 MITIGATION	144
4.13 CUMULATIVE EFFECTS	144
4.14 SUMMARY OF ENVIRONMENTAL PROTECTION MEASURES	146
5. APPLICABLE ENVIRONMENTAL PERMITS AND REGULATORY REQUIREMENTS	147
6. LIST OF AGENCIES AND PERSONS CONSULTED	<u>149</u>
7. REFERENCES	<u>151</u>
8. LIST OF PREPARERS	155

LIST OF TABLES

TABLE		PAGE
Table 1.	Proposed Ground Disturbance Locations	11
Table 1a.	Summary of Proposed Project Activities	19
Table 2.	Proposed Hub Site Locations – New and Existing	33
Table 3.	Sensitive Receptors, by County	48
Table 4.	Soil Series Within the Proposed Action's Region of Influence	54
Table 5.	Streams Crossed by the Proposed Alignment, by County	60
Table 6.	303(d)-Listed Impaired Streams Crossed by the Proposed Alignment	65
Table 7.	Federal-Listed and Candidate Species, by County	70
Table 8.	Descriptions of Federal-Listed and Candidate Species	71
Table 9.	Ohio-Listed Species, by County	73
Table 10.	Summary of Documented Cultural Resources in the APE and Vicinity	79

LIST OF TABLES (CONT.)

PAGE

Table 11.	Ohio Archeological Inventory Sites Within the APE	_83
Table 12.	Summary of OHI-Listed Structures Within the APE, by County	_84
Table 13.	NRHP-Listed Properties Within the APE	_85
Table 14.	NRHP Districts Within the APE	_86
Table 15.	Hazardous Materials and Waste Sites, by County	_92
Table 16.	Preferred Action Alternative Proposed Disturbance Areas – Summary of Potential Effects	_95
Table 17.	Potential Effects to Water Resources	_114
Table 18.	Potential Effects to Federal-Listed Species	_122
Table 18a.	ODNR Special Status Species Concerns – Analysis of Potential Effects	_123
Table 19.	Potential Effects to Traffic and Transportation – Proposed Aerial Crossings	_141

LIST OF FIGURES

FIGURE		PAGE
Figure 1.	Regional Map with Proposed OneCommunity Fiber Alignment	2
Figure 2.	Location of Proposed OneCommunity Fiber Alignment	3
Figure 3-1.	Proposed OneCommunity Fiber Alignment - Inset 1	20
Figure 3-2.	Proposed OneCommunity Fiber Alignment - Inset 2	21
Figure 3-3.	Proposed OneCommunity Fiber Alignment - Inset 3	22
Figure 3-4.	Proposed OneCommunity Fiber Alignment - Inset 4	23
Figure 3-5.	Proposed OneCommunity Fiber Alignment - Inset 5	24
Figure 3-6.	Proposed OneCommunity Fiber Alignment - Inset 6	25
Figure 3-7.	Proposed OneCommunity Fiber Alignment - Inset 7	26
Figure 3-8.	Proposed OneCommunity Fiber Alignment - Inset 8	27
Figure 4-1.	Water Resources in the Vicinity of the Proposed Fiber Alignment	56
Figure 4-2.	Water Resources in the Vicinity of the Proposed Fiber Alignment	57
Figure 4-3.	Water Resources in the Vicinity of the Proposed Fiber Alignment	58
Figure 5.	Special Status Species in the Vicinity of the Proposed Fiber Alignment	74
Figure 6-1.	Cultural Resources in the Vicinity of the Proposed Fiber Alignment	80
Figure 6-2.	Cultural Resources in the Vicinity of the Proposed Fiber Alignment	81
Figure 6-3.	Cultural Resources in the Vicinity of the Proposed Fiber Alignment	82

TABLE

LIST OF APPENDICES

- **APPENDIX A** Consultation Documents
- **APPENDIX B** Cultural Resources Data for the Area of Potential Effect (OHPO)
- APPENDIX C Additional Cultural Resources Data Since the Draft EA