Broadband Technology Opportunities Program (BTOP)

NEPA ENVIRONMENTAL ASSESSMENT FOR

THE UTAH TELECOMMUNICATION OPEN INFRASTRUCTURE AGENCY (UTOPIA)
COMMUNITY PARTNERSHIP PROJECT
February 2011

Prepared for:

Frank Monteferrante, PhD
Environmental Compliance Specialist
National Telecommunication and Information Administration
Broadband Technology Opportunities Program
1401 Constitution Avenue NW
Washington, DC 20230

Prepared By



Table of Contents

Executive Summary	1
1.0 Purpose and Need	3
2.0 Description of Proposed Action and Alternatives	3
2.1 No Action Alternative	3
2.2 Proposed Action	3
2.3 Alternatives Considered But Eliminated from Further Discussion	5
3.0 Affected Environment	5
3.1 Noise	5
3.2 Air Quality	6
3.3 Geology and Soils	7
3.4 Water Resources	7
3.4.1 Surface Water	7
3.4.2 Groundwater	7
3.4.3 Floodplains	7
3.4.4 Wetlands	7
3.5 Biological Resources	8
3.5.1 Threatened and Endangered Species	8
3.5.2 State-Sensitive Wildlife Species	8
3.5.3 Vegetation	9
3.6 Historic and Cultural Resources	
3.6.1 Archaeological Resources	9
3.6.2 Architectural Resources	10
3.6.3 Native American Resources	11
3.7 Aesthetic and Visual Resources	11
3.8 Land Use	11
3.8.1 Zoning and Future Land Use	11
3.8.2 Land and Water Conservation Fund Program Resources	
3.9 Infrastructure	
3.10 Socioeconomic Resources	
3.11 Human Health and Safety	14
4.0 Environmental Impact Analysis	
4.1 Noise	
4.2 Air Quality	14
4.3 Geology and Soils	
4.4 Water Resources	15
4.5 Biological Resources	
4.6 Historic and Cultural Resources	16
4.6.1 Archaeological Resources	16
4.6.2 Architectural Resources	
4.6.3 Native American Resources	17
4.7 Aesthetic and Visual Resources	
4.8 Land Use	
4.9 Infrastructure	18

4.10 Socioeconomic Resources	
4.11 Human Health and Safety	19
4.12 Cumulative Impacts	
5.0 Applicable Environmental Permits and Regulatory Requirements	
6.0 List of Agencies and Persons Consulted	20
7.0 List of Preparers	
8.0 References	

•	• 4	e		1 1	
	ist	Λt		n	ΔC
ı	115t	VI.	1 0	עעו	

Table 1. Threatened and Endangered Species Listed by County	8
Table 2. Anchor Institutions that are Potentially Eligible for the NRHP	10
Table 3. Land and Water Conservation Fund Program Resources within the Project Area	
Table 4. Selected Demographic Characteristics of the Communities in the Project Area, the State	
and the United States	-
Table 5. Sampling of Major Economic Sectors for the Communities in the Project Area (Based or	n Sales
Numbers from the 2007 Economic Census).	

Figures 1 through 8

Figure 1 - Payson

Figure 2 - Orem

Figure 3 - Murray

Figure 4 - Midvale

Figure 5 - West Valley City

Figure 6 - Centerville

Figure 7 - Layton

Figure 8 - Perry

Appendix A

- Correspondence Sent / Received
 - o Informational Packet for Scoping of the Proposed Project dated October 13, 2010, including Example Scoping Letter and Agency Contact List
 - No Effect Concurrence Letter from Larry Crist, Field Supervisor with the USFWS dated October 19, 2010
 - O Notification of the Proposed Project to Native American Tribes by NTIA via the Tower Construction Notification System (TCNS) dated October 29, 2010
 - Memorandum of November 9, 2010 Telephone Conversation with Susan Zarekarizi of the Utah Parks and Recreation Department
 - Memorandum of November 15, 2010 Telephone Conversation with Mike Pectol of the USACE
 - o Letter from John Urbanic with the USACE dated November 18, 2010
 - Email from NTIA detailing received Native American responses to TCNS Notification dated January 6, 2011
 - o Letter from Ben Hart with Layton City dated December 22, 2010
 - o Memorandum of January 18, 2011 Telephone Conversation with Chuck Williamson with the Utah Department of Natural Resources, Division of Water Rights
 - Letter dated December 28, 2010 to the Utah State Historic Preservation Officer (signed on January 11, 2011

Appendix B

- *UTOPIA Waters of the U.S. and Wetland Inventory*
- Selective Reconnaissance Level Survey of Specific Historic Resources in Centerville and Layton, Davis County; Midvale, Murray, and West Valley City, Salt Lake County; Orem and Payson, Utah County; and Perry, Box Elder County
- A Class I Cultural Resources Inventory for the UTOPIA Community Partnership Project, Box Elder, Davis, Salt Lake, and Utah Counties, Utah
- Table of Leaking Underground Storage Tanks 2010

Acronyms

APE Area of Potential Effects
BMP Best Management Practices
CAAA Clean Air Act Amendments

CERCLA Comprehensive Environmental Response, Compensation, and Liability Act

DERR Division of Environmental Response and Remediation

EMS Emergency Medical Service EPA Environmental Protection Agency

ESA Endangered Species Act GHG Greenhouse Gases

LWCF Land and Water Conservation Fund LUST Leaking Underground Storage Tanks

Mbps Megabits per second

NAAQS National Ambient Air Quality Standards NEPA National Environmental Policy Act

NOI Notice of Intent

NPL National Priorities List

NRHP National Register of Historic Places

NTIA National Telecommunications Information Agency OSHA Occupational Safety and Health Administration $PM_{2.5}$ Particulate matter smaller than 2.5 microns PM_{10} Particulate matter smaller than ten microns

RLS Reconnaissance Level Survey SIP State Implementation Plan

SHPO State Historic Preservation Office

SWPPP Storm Water Pollution Prevention Program TCNS Tower Construction Notification System

TCP Traditional Cultural Property
UDAQ Utah Department of Air Quality
UDOT Utah Department of Transportation
UDWQ Utah Department of Water Quality
USFWS United States Fish and Wildlife Service
UPDES Utah Pollution Discharge Elimination System
USACE United States Army Corps of Engineers

UTOPIA Utah Telecommunication Open Infrastructure Agency

Executive Summary

The Utah Telecommunication Open Infrastructure Agency (UTOPIA) Community Partnership Project proposes to construct a fiber-optic broadband network to provide services to 395 anchor institutions, government facilities, and other critical community-support organizations within the proposed network boundaries. The purpose of this project is to extend broadband connectivity in eight municipalities that are part of the UTOPIA consortium along the Wasatch Front, including Payson and Orem in Utah County; Murray, Midvale, and West Valley City in Salt Lake County; Centerville and Layton in Davis County; and Perry in Box Elder County.

The Proposed Action consists of the construction of approximately 254 total miles of middle-mile fiber-optic cable facilities (middle mile distribution rings and middle mile laterals both underground and overhead on existing power poles) in the UTOPIA consortium communities. The project will also provide high-speed broadband service connections through multiple service providers at 10 Mbps and higher to various anchor institutions, including:

- 39 kindergarten-12 grade schools
- 1 library
- 55 medical or healthcare provider facilities
- 161 public safety sites
- 3 community college campus locations
- 13 public housing complexes
- 12 institutions of higher learning other than community colleges
- 7 other community support organizations
- 104 other government facilities

Proposed construction is characterized as an urban overbuild upon already developed land. The proposed utility lines will utilize existing distribution facilities where possible. Where existing overhead lines are not available or underground installation is required, construction would occur within existing utility easements within roadway rights-of-way in order to minimize environmental disturbance. The proposed project would also include the construction of approximately 80 10-foot by 10-foot pre-fabricated structures ("huts") with concrete slab foundations for the deployment of the fiber optic network to the anchor institutions, as well as future last mile deployments. All of these structures would be located on previously disturbed land parcels located within municipal city limits.

During the development of the Proposed Action for this project, various alternatives for the cable installation were looked at, including alternatives that would utilize only aerial installation or only underground installation for the proposed cable routes. However, it was determined that the best approach was a hybrid of both aerial and underground installation in order to best utilize existing utility corridors and to avoid unnecessary installation of additional poles in the case of an all-aerial option or unnecessary trenching for an all-underground option. Therefore, both options were eliminated from further discussion.

A summary of the environmental impacts from the project is as follows:

- **Noise:** The project would have temporary construction-related noise impacts.
- Air Quality: The project would have temporary construction-related air quality impacts.
- **Geology and Soils:** The project would have temporary construction-related impacts related to ground disturbance but no permanent impacts on soils or geologic features.

- Water Resources: No impacts to water resources are anticipated from the project; however, if impacts to wetlands are required, a Section 404 Permit will be obtained from the U.S. Army Corps of Engineers.
- **Biological Resources:** The project has been determined by the U.S. Fish and Wildlife Service to have no effect on Threatened and Endangered Species listed under the Endangered Species Act; the project would also have no impact on state-sensitive species.
- **Historic and Cultural Resources:** The project has been determined to have No Adverse Effect on historic and cultural resources and the Utah State Historic Preservation Officer has concurred with this determination.
- **Aesthetic and Visual Resources:** The project would have temporary construction-related impacts and minimal permanent impacts on visual resources.
- Land Use: The project would not substantially alter land usage in the project area; however, it would involve impacts to resources subject to the Land and Water Conservation Fund Act requiring mitigation.
- **Infrastructure:** The project would have temporary construction-related impacts to local roadways and would provide beneficial impacts in the form of increased broadband services and capability for previously unserved or underserved areas.
- **Socioeconomics:** The project would have beneficial impacts in the form of increased broadband services and capability for previously unserved or underserved areas.
- **Human Health and Safety:** The project would have no adverse impacts to human health and safety.