## **Summary**

Central Valley Independent Network (CVIN) applied to the Broadband Technology Opportunities Program (BTOP) for a grant to install approximately 817 miles of fiber optic cable, within 723 miles of newly constructed conduit and 94 miles of existing conduit. While the new network will be a hybrid of aerial and buried fiber, most of the fiber will be installed underground within existing road rights-of-way (ROWs) via plowing, trenching, and directional boring. A portion of the fiber will also be attached to bridges or installed aerially on existing poles, as required to cross water bodies and other sensitive features. CVIN will install cabinets along the fiber route to connect community anchor institutions (CAIs) and provide fiber connections to 19 existing cellular towers for fixed wireless broadband access to rural portions of Fresno, Tulare, Kings, and Kern Counties, California. The new fiber network will provide broadband service to CAIs, including county offices, community colleges, California State Universities, libraries, hospitals, public safety institutions, and other anchor institutions. The proposed action will connect 17 counties within central California, and is referred to as the Central Valley Next Generation Broadband Infrastructure Project (Project).

The National Telecommunications and Information Administration (NTIA) awarded this grant through BTOP, as part of the American Recovery and Reinvestment Act (ARRA). The funding must be obligated and the Project completed within three years. This timeline will comply with the laws and regulations governing the use of this ARRA grant funding.

BTOP supports the deployment of broadband infrastructure in unserved and underserved areas of the United States and its Territories. As a condition of receiving BTOP grant funding, recipients must comply with all relevant Federal legislation, including the National Environmental Policy Act of 1969 (NEPA). Specifically, NEPA limits the types of actions that the grantee can initiate prior to completing required environmental reviews. Some actions may be categorically excluded from further NEPA analyses based on the specific types and scope of work to be conducted. For projects that are not categorically excluded from further environmental review, the grant recipient must prepare an Environmental Assessment (EA) that meets the requirements of NEPA. After a sufficiency review, NTIA may adopt the EA, use it as the basis for finding that the project will not have a significant impact on the environment, and issue a finding of no significant impact (FONSI). Following such a finding, the BTOP grant recipient may then begin construction or other activities identified in the EA as the preferred alternative, in accordance with any special protocols or identified environmental protection measures.

CVIN completed an EA for this Project in September 2011. NTIA reviewed the EA, determined it is sufficient, and adopted it as part of the development of this FONSI.

## The Project includes:

- Installing a hybrid broadband network of buried and aerial fiber, with associated vaults, in existing ROWs throughout 17 counties within central California;
- Installing approximately 723 miles of fiber optic cable in new conduit within existing, previously disturbed ROWs, primarily by plowing, trenching or directional boring;
- Installing approximately 94 miles of fiber optic cable in existing conduit;
- Installing fiber connections to 19 existing cellular towers to provide fixed wireless broadband access:
- Attaching fiber to bridges within new or existing conduit or installing aerial fiber on existing utility poles for stream and river crossings; and
- Providing direct connection to up to 60 CAIs by providing lateral fiber connections between the primary fiber line and new equipment cabinets.

Based on a review of the analysis in the EA, NTIA has determined that the Project, implemented in accordance with the preferred alternative, and incorporating best management practices (BMPs) and protective measures identified in the EA, will not result in any significant environmental impacts. Therefore, the preparation of an EIS is not required. The basis for this determination is described in this FONSI.

Additional information and copies of the Executive Summary of the EA and FONSI are available to all interested persons and the public through the BTOP website (www2.ntia.doc.gov/) and the following contact:

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## **Purpose and Need**

The purpose of this Project is to bring affordable broadband service to unserved and underserved communities within central California and to connect various primary anchor and client institutions to the fiber network. Current broadband service in the area is inadequate or unaffordable for many residents and institutions, which are experiencing limited network speeds and a lack of cost-effective service. The planned Project will improve broadband service and

September 2011

internet access for approximately 1,973 communities including businesses, residences, and governmental agencies. The Project will provide connectivity for up to 60 CAIs, including county offices, community colleges, California State Universities, libraries, hospitals, public safety institutions, and other facilities.

## **Project Description**

CVIN will install 817 miles of fiber, including 723 miles of fiber within conduit proposed for construction and 94 miles of fiber within existing conduit. The fiber network will also consist of lateral connections to existing cellular towers to provide fixed wireless broadband access within rural portions of Fresno, Tulare, Kings, and Kern Counties, California. A portion of the new network will connect to Corporation for Education Network Initiatives in California's (CENIC) existing network via new fiber conduit at seven locations between Colusa County and Bakersfield, California. The new network will provide broadband service to critical community facilities throughout 17 counties in central California. Construction will take place within existing ROWs along U.S. and state highways, county roads, and city streets, and on Federal land managed by the Department of the Interior (DOI) Bureau of Land Management (BLM). CVIN will install 3.2 miles of fiber across lands managed by the BLM, and approximately 8 miles of fiber through portions owned by the California State Parks.

Within non-urban areas, the majority of the fiber will be buried – installed 48-inches underground in existing ROWs by plowing. In areas where the ROW is very narrow or where sensitive biological or cultural resources must be avoided, trenches may be cut in the roadway and the conduits installed below the pavement. The trenching method may also be used where subsurface conditions preclude the use of the plow method. This method uses heavy equipment or hand digging to create the trench ranging in width from 9 to 18 inches wide and 48 inches deep, which is backfill with excavated soil.

Fiber installation within urban areas, consisting of approximately 250 miles, will primarily use directional boring techniques. The directional boring method uses a drill bit at both the entry and exit points, drilling a horizontal cable pathway between the points, installing conduit, and pulling the cable back through the conduit.

Fiber optic cable will be installed across streams and rivers either by aerial installation along existing bridges or utility poles. Where existing poles are not available, directional boring will be used to avoid selected sensitive ecological resources, such as wetlands, streams, rivers, irrigation canals, associated protective buffers, designated critical habitats, and construction-limited areas, such as roadways and railroad crossings. Directional boring will be initiated 100 feet from the water feature or sensitive resource, or at a distance approved by the appropriate regulatory agency, and the depth of the boring will be 15 feet below the streambed or resource. Along major state highways (SR 41, SR 99, SR 198) fiber will be installed using directional boring under the roadway or by attaching conduit to the bridge over the roadway. The method

September 2011

used will depend on the bridge's age and condition and on California Department of Transportation (Caltrans) preferences, if within Caltrans jurisdiction. Appropriate soil-erosion controls will be implemented following cable installation.

In areas where existing conduit would be used to install new fiber optic lines, microducts and fiber will be blown into the existing conduit at existing access locations. Installation of fiber into existing conduits using these methods will not require any new ground disturbance, only access to existing buried boxes.

Flush mount vaults will also be installed at intervals of not more than 3,000 feet along the new conduit route in previously disturbed portions of the ROWs. Each vault will measure either 36 inches by 60 inches or 24 inches by 36 inches and will extend to 48 inches below the existing ground surface. Vaults placed within Caltrans ROWs will receive prior approval and installed following procedures specified in the Caltrans *Draft Vault Criteria and Encroachment Permit General Provisions*.

Connection to CAIs will be provided at up to 60 locations by CVIN in partnership with CENIC. The connections will require minor structural attachments to buildings and approved entry into buildings. CVIN will construct 14 new equipment cabinets in previously disturbed areas at select CAI locations along the Project route. Cabinets will be located within a 10-foot by 12-foot fenced area within developed portions of the institution's property. Connections to CAIs will be accomplished by installing cabinets on the outside of the institution building and connecting the cabinets to the primary fiber line. Each cabinet facility will be powered by onsite available commercial electricity, with a hydrogen fuel cell providing backup power. No backup generators will be used. Cabinets have been designed to accommodate the future addition of card shelves. Future system upgrades will be accomplished by adding or replacing cards at cabinets to meet future capacity requirements. Interconnection points will also be provided at approximately 40 to 50 mile intervals along the Project route to allow for services to be extended to existing institutions and future connections.

CVIN will also extend lateral connections from the primary fiber line to equipment cabinets serving each of the 19 selected cellular towers. These connections will provide fixed wireless broadband access to unserved and underserved rural areas of Fresno, Tulare, Kings, and Kern Counties.

All construction activities conducted by CVIN and its contractors will take place within the disturbed road ROW or in areas that have been surveyed by a qualified biologist and qualified cultural resource specialist and have been found to be devoid of sensitive resources. Construction staging areas will be established within road ROWs or other disturbed areas along the Project route, and will not exceed an area greater than 200 feet by 200 feet. In areas with narrow ROWs or other constraints, staging and equipment lay-down areas will be located in paved or graveled yards or other disturbed areas as close to the construction areas as possible.

### **Alternatives**

The EA includes an analysis of the alternatives for implementing the Project to meet the purpose and need. NTIA also requires that an EA include a discussion of the no action alternative. The following summarizes the alternatives analyzed in the EA.

Hybrid Fiber and Wireless Network Technologies (Preferred Alternative). This alternative involves installing 817 miles of fiber optic cable, including 723 miles of fiber within new conduit and 94 miles of fiber within existing conduit. The new fiber optic cable will be buried via plowing, trenching, or directional boring; installed aerially; and attached to bridges. Lateral connections will also be provided to 19 existing towers in order to provide wireless broadband for rural portions of Fresno, Tulare, Kings, and Kern Counties, California.

No Action Alternative. No action was also considered. This alternative represents conditions as they currently exist in the Project area. Under the no action alternative, no new fiber-based or wireless infrastructure would be installed. As a result, the Project would not meet its intended purposes, including provision of enhanced broadband access to rural communities in the region. The EA examined this alternative as the baseline for evaluating impacts relative to other alternatives being considered.

Alternatives Considered But Not Carried Forward. In addition to the preferred alternative, CVIN considered limiting broadband connections to a single type of technology (i.e., using either fiber optic cable or wireless technology, but not both) or only aerial installation. These options were determined to be infeasible or impracticable. Limiting the network to wireless technology would not meet the goals of the Project, as wireless technology is unable to provide the capacity and the security needed for the essential services the installation is intended to supply. Use of aerial installation as the primary Project component was deemed infeasible due to the susceptibility to damage from severe weather and the requirement of frequent maintenance. Based on these assessments, only the preferred and no action alternatives were retained for full evaluation in the EA.

## **Findings and Conclusions**

The EA analyzed existing conditions and environmental consequences of the preferred alternative and the no action alternative in 11 major resource areas, including 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. Cumulative impacts were also evaluated.

5

### Noise

This Project will have short-term increases in ambient noise levels during the construction period. Noise created by machinery used during installation will be temporary and localized in nature. CVIN will comply with local and State noise ordinances to keep noise impacts to a minimum. CVIN will also implement environmental protection measures during construction to reduce temporary, short-term noise levels from on-site construction equipment, which include arranging construction equipment to minimize travel adjacent to noise-sensitive receptors, turning off construction equipment during prolonged periods of nonuse, and ensuring that construction equipment are properly maintained and equipped with noise control, such as mufflers, in accordance with manufacturers' specifications. Operation of the network will not increase long-term ambient noise levels. Based on these assessments, no significant noise impacts are expected to occur as a result of this Project.

## Air Quality

During the construction phase of the Project, emissions will be generated by construction equipment, including vibratory plows and directional drilling equipment. Emissions from this construction equipment will be temporary, minor, and transitory as construction activities move along the installation route. Negligible fugitive dust emissions will also be generated during construction operations. CVIN will implement BMPs to limit fugitive dust emissions, including properly maintaining construction equipment, applying water to suppress dust, and preventing the burning of debris or vegetative material. CVIN and its construction contractors will implement all applicable emissions control measures for construction equipment, as required by law, whenever such equipment is operating. CVIN and its construction contractors will comply with the San Joaquin Valley APCD's Regulation VIII, Fugitive Dust PM<sub>10</sub> Prohibitions, and implement all applicable control measures. CVIN and/or its construction contractors will also implement the appropriate measures during construction within one-half mile of state-identified naturally occurring asbestos (NOA) areas, including complying with all requirements outlined in the California Air Resources Board (ARB) Asbestos Air Toxic Control Measures for Construction, Grading, Quarrying, and Surface Mining Operations to reduce potential effects from exposure to NOA to the maximum extent feasible. CVIN and/or its construction contractor(s) will prohibit open burning of vegetative waste within the Northern Sierra Air Quality Management District.

The Project will also result in short-term, minor increases in the use of fossil fuel and associated greenhouse (GHG) emissions during construction. Considering the nature and scope of the planned network expansion, CVIN estimates that the Project will result in the release of approximately 11,066 metric tons of carbon dioxide equivalent emissions. Thus, GHG emissions are expected to be well under the Council on Environmental Quality's presumptive effects threshold of 25,000 metric tons of carbon dioxide equivalent emissions from an action. CVIN will limit GHG emissions by using modern construction equipment and prohibiting excessive idling of equipment when not in use, in accordance with Federal guidance and policies Neither the placement nor operation of the buried fiber optic cable and wireless infrastructure

September 2011

Central Valley Independent Network
Central Valley Next Generation Broadband Infrastructure Project FONSI

will create any new, long-term sources of air emissions in the Project area. Based on implementation of BMPs, construction of the planned network is not expected to have significant adverse impacts on air quality.

### Geology and Soils

Fiber optic lines will be installed within existing road and state highway ROWs and cabinets will be constructed in previously disturbed areas. Areas requiring trenching will be backfilled with soils from the area of excavation and restored to their original condition. Installing fiber on utility poles and bridges should have negligible impacts on geology and soil. Implementation of a storm water pollution prevention plan (SWPPP) and associated BMPs will minimize sedimentation and erosion impacts on the Project area. Based on these assessments, the Project is not expected to result in significant adverse impacts on the geology or soil in the area.

## Water Resources

Project construction activities are not expected to impact to water resources. Although the fiber route intersects several streams and rivers, as well as adjacent wetlands, impacts to water resources will be avoided by installing the cable aerially on existing poles, installing the fiber using directional boring, or routing the cable through new or existing conduit currently attached to bridges.

CVIN has alerted the Army Corps of Engineers (USACE), Sacramento District, of all planned water crossings and is consulting with this office to obtain applicable Section 404 and Section 10 permits for all river and stream crossings. In a teleconference held May 5, 2011, the USACE Sacramento District confirmed their requirements for identifying waters of the United States and discussed the next steps in their permitting process. The USACE also confirmed that Water Quality Certification under Section 401 of the Clean Water Act will also be required from the Central Valley Regional Water Quality Control Board before the USACE can issue their permit. In a letter dated June 16<sup>th</sup>, 2011, the USACE designated the US Department of Commerce as the Lead Federal Agency under NEPA and authorizes DOC to act in their behalf to comply with Section 7 of the Endangered Species Act and Section 106 of the National Historic Preservation Act.

Most of the new fiber will be installed underground with existing ROWs via plowing, trenching or directional boring. The fiber will placed via plowing or trenching approximately 4 feet below the surface or installed at least 15 feet below the surface for directional boring. Fiber and cabinet installation will not result in substantial fills or other grading within floodplains. There is the potential for a temporary increase in stormwater discharge during construction. However, CVIN will prepare and implement SWPPPs to protect water quality, which will include a sediment and erosion control plan that complies with county and city grading and excavation requirements. The Project route will also cross the Tuolumne, Merced, and North Fork American Rivers, all designated as Wild and Scenic Rivers, through new or existing conduit attached to existing bridges along the river. 18 additional major water crossings are proposed utilizing new or

September 2011

Central Valley Independent Network
Central Valley Next Generation Broadband Infrastructure Project FONSI

existing conduit attached to existing bridges along the water body. One major water body, the Sacramento River, is proposed to be hydraulically drilled under.

By avoiding construction through waterways and implementing erosion and sediment control BMPs, CVIN will be able to construct the network with no significant adverse impacts on water resources.

## **Biological Resources**

The preferred alternative will result in minor impacts on biological resources. Ground surface will be disturbed along the approximately 720 miles of buried cable and at the equipment-cabinet sites in the previously disturbed areas.

CVIN assessed the Project area for the presence of critical habitat suitable for Federally listed threatened and endangered species protected under the Endangered Species Act (ESA) of 1973, as amended (16 U.S.C. 1531 et seq.). Based on information collected by CVIN through the U.S. Fish and Wildlife Service (USFWS) and California Department of Fish and Game (DFG) database, 36 special-status plant and wildlife species have the potential to occur in the proximity of the proposed construction area.

CVIN consulted with the USFWS and DFG regarding potential Project impacts on biological resources. In two separate meetings held with the USFWS on February 9, 2011 and June 9, 2011, CVIN provided project information and protection measures to avoid impacts to the 14 federally listed species potentially occurring along the Project route. In a response letter dated September 14, 2011, the USFWS concluded that, based on the information and protective measures provided by CVIN, the Project is not likely to adversely affect the 14 federally listed species known to occur within the Project area. The USFWS confirmed that unless new information is provided that may affect listed species in a manner or to an extent not considered, or the Project is modified in a manner that causes an effect to the listed species that was not considered, or a new critical habitat is designated that may be affected, no further consultation is required under Section 7 of the Endangered Species Act (ESA).

In a letter dated June 2, 2011, the DFG provided comments on potential impacts on State-listed rare, threatened, and endangered species within the Project area and recommendations to minimize and avoid impacts. CVIN has incorporated these comments, as appropriate, into the biological protection measures for the Project. CVIN will follow permitting and regulatory requirements outlined by the USFWS and DFG for all Project activities. CVIN will also consult with the BLM to minimize potential impacts to local wildlife and species of concern identified on Federal lands.

In addition to considering potential impacts on listed species, CVIN evaluated potential impacts on migratory birds and other wildlife. To reduce the potential impacts on avian species protected under the Endangered Species Act, Bald and Golden Eagle Protection Act, and the Migratory

September 2011

Bird Treaty Act, an USFWS-approved biologist will conduct nest surveys prior to commencement of construction activities between February 1 and September 15 within all portions of the Project ROW that could potentially support nesting birds.

Based on this analysis and implementation of the recommended protective measures, CVIN will be able to construct the fiber network with no significant adverse impacts on biological resources.

## Historic and Cultural Resources

In September 2010, NTIA initiated consultation, on behalf of CVIN, with the California Department of Parks and Recreation, Office of Historic Preservation (State Historic Preservation Office [SHPO]). In this correspondence, NTIA provided the SHPO with a project description and an associated map of the Project area. Following the initiation letter, CVIN engaged qualified staff at AECOM to analyze the archaeological and architectural resources within the Project's area of potential effect (APE). A records check was conducted, and a letter clarifying the Project description and discussing identification efforts for historic properties in the APE was submitted to the SHPO on February 23, 2011.

In a letter dated March 28, 2011, the SHPO provided concurrence with the proposed APE and requested further consultation and the results of the cultural resources identification and evaluation. The SHPO also requested to see any comments received from the Tribes.

A records check and windshield surveys identified 51 known cultural resources within the APE of the proposed Project area. A cultural resources report summarizing the findings of the cultural resources review, including an Archaeological Monitoring Plan, was submitted to the SHPO on May 27, 2011 requesting concurrence with the findings of the report and the determination that the Project will have No Adverse Effect on Historic Properties based on the recommendations outlined in the report.

In a July 29, 2011 letter, the SHPO provided comments and questions regarding the identification efforts and avoidance measures proposed in the report. The SHPO concluded that they could not concur with the findings that the Project will result in No Adverse Effect to Historic Properties until the identification and any further evaluation and analysis was complete.

In a letter dated August 26, 2011, AECOM provided the SHPO with a revised cultural resources report that addressed the comments stated in the July 29, 2011 letter. The revised report included a reevaluation of inventory techniques and changes and clarifications to avoidance measures, as requested. AECOM also requested concurrence with the findings of the revised report and the determination that the Project will have No Adverse Effect on Historic Properties based on the revised recommendations outlined in the report.

In an August 30, 2011 letter, the SHPO concurred that the Project will result in No Adverse Effect to Historic Properties provided that the conditions stated in the revised cultural resources report are satisfied. Additional comments provided by the SHPO include:

- Concurrence with avoidance measures for CA-AMA-414H, CULT-CAL-23, CULT-CAL-28, CULT-CAL-29, CA-CAL-1838/H, CULT-CAL-33, CULT-CAL-35, CULT-CAL-504, CA-ELD-2370/H, CA-ELD-433, P-9-4463, CULT-ELD-12, CULT-ELD-13, CULT-ELD-14, CULT-ELD-18, P-58-1351H, CA-NEV-188H, CULT-NEV-502, CULT-NEV-1000, CA-NEV-286H (CULT-NEV-1001/1002), CA-NEV-1613H, CULT-NEV-1508, CULT-NEV-1510, CULT-NEV-1513, CULT-NEV-1514, CULT-NEV-1515, CULT-NEV-1519, CA-NEV-1846, P-29-2197, CULT-PLA-6, CULT-PLA-503, P-50-4447, CA-STA-398, CA-SUT-147H, CA-TUL-2878H, CULT-TUL-1579, CULT-TUL-1593, CULT-TUO-1539, CA-TUO-4156H, CA-TUO-4506H, CULT-TUO-1551, CULT-YUB-1505, CULT-YUB-1506
- Concurrence with avoidance of site CA-STA-69 by boring at a minimum of 20 feet below the surface. All boring receiving pits will occur outside the site boundary with as much of a buffer as possible.
- Further delineating areas of site CULT-TUO-41, a historic road, that retain some integrity with orange ESA fencing to ensure avoidance.
- Concurrence with avoidance of site CA-NEV-549/H by boring at a minimum of 20 feet below the surface on the opposite side of the road from the site boundaries.
- Concurrence with avoidance of site CA-STA-163 by boring at a minimum of 20 feet below the site and below the current level of Rock Creek. Extreme caution will be used while working in the vicinity of the site as the full extent is unknown and there may be cultural constituents associated with the suspected rock shelter in the west end of the site.
- Concurrence with avoidance of site P-50-001802 (CULT-STA-1557) by boring at a minimum 20 feet below the site.

On October 8, 2010, NTIA notified 27 Native American Tribes of the Project through the Federal Communication Commission's Tower Construction Notification System (TCNS). NTIA provided an additional follow-up letter on January 11, 2011 to 78 Tribes and organizations, which included both federally recognized tribes that have indicated a preference for further consultation via TCNS and organizations and individuals identified by the California Native American Heritage Commission (NAHC) as interested parties. The January 11, 2011 letter included a detailed project description, a project route map, and a request for the identification of interest or concern regarding the Project.

Four Tribes did not respond within 30 days after the TCNS notification. Sixteen Tribes responded (via letter and email) that they have no interest in the Project, but requested notification in the event of unanticipated discoveries.

Tuolumne Band of Me-Wuk and Colusa Indian Community Council requested additional detailed mapping. AECOM provided additional mapping to the Tribes in February 2011. As of September 19, 2011, no comments have been received from the either Tribe.

The United Auburn Indian Community, Yoche Dehe Wintun Nation, Shingle Springs Rancheria, North Fork Rancheria, and Enterprise Rancheria requested a copy of the cultural resource report. Copies of the report were distributed to the Tribes on June 7, 2011. As of September 19, 2011, no comments have been received from the Shingle Springs Ranchera, Enterprise Rancheria, and North Fork Rancheria Tribes.

In a letter dated July 6, 2011, the United Auburn Indian Community concurred with the avoidance measures outlined in the report; however, they would like to provide monitors when working at or near sites CA-ELD0433 and CA-NEV-549/H. In an August 5, 2011 email, the Tribe also requested a copy of the monitoring and treatment plan, if available, and any other documents that have been or plan to be written.

In an email dated July 7, 2011, the Yoche Dehe Wintun Nation requested a formal consultation to discuss the possible resources located in Colusa County at site COL-245. NTIA contacted the Tribe, discussed the resources, and closed the consultation.

If Project construction activities uncover cultural materials (e.g., structural remains, historic artifacts, or prehistoric artifacts), CVIN will stop all construction work and immediately notify interested Tribal Nations, the SHPO, and NTIA. If earth-disturbing activities uncover human remains, all work will cease immediately, in accordance with the Native American Graves Protection and Repatriation Act of 1990 (NAGPRA) and relevant State statutes. The area around the discovery will be secured and appropriate law enforcement personnel and NTIA will be notified immediately.

Based on these consultations, the Project is not expected to have significant adverse impacts on historic and cultural resources.

## Aesthetic and Visual Resources

The Project will involve construction adjacent to agricultural fields, natural areas, and urban streetscapes. Aesthetic disruptions for most areas will be limited to the short-term presence of construction equipment. Permanent aesthetic impacts will also be limited. New fiber will be installed along bridges that cross a number of waterways that could be considered or are designated as scenic, such as the Sacramento, Feather, American, Tuolumne, and Merced Rivers.

Two cabinet sites, in Fresno (near California State University [CSU] Fresno near East Barstow and Campus Drive) and Madera (near the Madera County Office of Education near the intersection of Road 28 and East Olive Avenue), were assessed to determine the historical significance of adjacent buildings or structures. The Madera campus buildings were constructed

September 2011

post-1966 and are less than 45 years in age. On the CSU Fresno campus, buildings located near the cabinet site were also constructed post-1966. Based on this investigation, no proposed cabinets will be situated adjacent to buildings or structures 45 years or more in age. In addition, the new cabinets will be small and generally consistent with existing aboveground utilities typical at these locations.

CVIN will either avoid or substantially reduce the potential permanent aesthetic effects on scenic waterways, historic bridges, and historical buildings adjacent to cabinet locations by ensuring that the visual character of the waterway, bridge, or building in question is not altered by implementation of the Project. For aerial fiber installation, CVIN will use existing utility poles to avoid creating new visual impacts.

CVIN will continue working with the BLM and the California State Parks, as applicable, to determine the potential for visual resource impacts from route segments proposed on lands managed by those agencies. Based on the analysis and consultations, the Project is not expected to have a significant adverse impact on aesthetic and visual resources in the Project area.

### Land Use

Fiber will be installed in existing ROWs and new cabinets will be constructed in previously disturbed areas near existing CAIs. Minimal temporary impacts may occur on land uses immediately adjacent to the proposed route during conduit installation due to the presence of heavy equipment and work crews within the road or state highway ROWs. However, there will be no change in the existing land use due to the underground fiber installation, the addition of new fiber on existing poles or bridges, or the placement of new equipment cabinets.

CVIN has contacted the BLM and California State Parks to determine the appropriate permits and approvals required to construct and operate the proposed Project within their jurisdictions. Through the respective agency permitting processes, the BLM and California State Parks will analyze potential land use impacts and determine whether the Project is consistent with their respective land and resource management plans. CVIN has agreed to comply with all permit conditions issued by the respective Federal and State agencies. Based on these consultations, the Project will have no significant adverse impact on land use.

## Infrastructure

Various levels of infrastructure services (e.g., roadways, telephone lines, natural gas, and electric lines) are in place throughout the Project area. The Project's fiber route will be primarily buried in existing ROWs. Prior to construction, CVIN will verify utility locations, coordinate with utility providers, prepare and implement a response plan, and conduct worker training with respect to accidental utility damage.

There will be minor, short-term construction impacts on roadways and traffic flow during fiber installation. CVIN will implement traffic control measures that will follow an approved traffic

September 2011

plan. Specific measures that will be implemented include detour routing, flagging, alternate routing of delivery/haul trucks to minimize temporary and short-term construction-related traffic effects to commuter vehicles. Overall, this Project is expected to have a positive impact on infrastructure, and is not anticipated to result in significant adverse impacts on infrastructure.

### Socioeconomic Resources

The Project will provide enhanced broadband access to users throughout 17 counties in the northern Sacramento Valley, northern Sierra Nevada foothills, and northern and southern San Joaquin Valleys in California. Implementation of the Project will provide enhanced broadband services to county offices, community colleges, California State Universities, libraries, hospitals, and public safety institutions. The network will help to provide access to educational resources and job training, and provide better access to comprehensive health services. Additionally, the Project will result in short-term temporary construction jobs. The Project will not disproportionately affect minority and low-income populations. Overall, this Project is expected to have a positive impact on socioeconomics in the planned service area, and is not anticipated to result in significant adverse impacts on socioeconomic resources.

## Human Health and Safety

Ten sites of potential environmental concern have been identified within one-quarter mile of the Project area. However, as the fiber will be buried in conduit approximately four feet deep in previously disturbed ROWs, it is unlikely that hazardous wastes will be encountered. Therefore, no impacts are anticipated along the fiber route. Nevertheless, if contaminated soils are unexpectedly encountered during construction, work will cease in the area of concern and the appropriate state and local authorities will be contacted. In addition, CVIN will prepare and implement a spill prevention plan, and an environmental training and awareness program will be conducted to educate workers on procedures to follow in the event of an accidental spill or leak. The spill prevention plan will also include procedures for handling hazardous materials to reduce the potential for a spill during construction and identify areas where refueling and vehicle maintenance activities and storage of hazardous materials, if any, will be permitted to reduce potential locations for a spill to occur.

The Project is not expected to have direct impacts on human health and safety during normal operation. However, human health and safety concerns may arise during construction when such activities occur in close proximity to traffic along roadways. BMPs for workplace safety will be implemented to protect workers and the public along the Project route. Contractors will be required to develop and implement a detailed Traffic Safety Plan in accordance with local permits and construction requirements. CVIN will coordinate with Caltrans and local agencies for any necessary and temporary road closures, especially for those portions of the proposed route that will cross or may impede emergency access routes or services. In order to reduce the potential for effects related to potential wildfire hazards, CVIN or its construction contractor will prepare and implement a fire risk management plan, which would require on-site training of construction workers regarding fire prevention and procedures to be taken in the event of a fire

September 2011

on-site. With implementation of these protection measures, the Project will not generate any significant adverse worker or traffic-related health or safety issues.

## **Cumulative Impacts**

As described above, the Project will not have significant adverse impacts on any of the environmental resource areas evaluated in the EA. With Project construction occurring along existing ROWs, there is potential for overlap between the planned installation and future improvements. CVIN will work with other utilities, and federal, state and local governments to coordinate scheduling details to avoid construction conflicts, including traffic safety and access issues. As such, no cumulative impacts on the environment are anticipated.

## Decision

Based on the above analysis, NTIA concludes that constructing and operating the Project as defined by the preferred alternative, identified BMPs, and protective measures, will not require additional mitigation. A separate mitigation plan is not required for the Project. The analyses indicate that the proposed action is not a major Federal action that will significantly affect the quality of the human environment. NTIA has determined that preparation of an EIS is not required.

Issued:

Chief Administrative Officer

Office of Telecommunications and Information Applications National Telecommunications and Information Administration