Implementing Executive Order 13616: Progress on Accelerating Broadband Infrastructure Deployment

A Progress Report to the Steering Committee on Federal Infrastructure Permitting
and Review Process Improvement

by the Broadband Deployment on Federal Property Working Group

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Introduction

Broadband access is essential to the Nation's global competitiveness. It drives job creation, promotes innovation, and expands markets for American businesses. Broadband also enhances public safety by providing improved interoperability and operational effectiveness of emergency communications. Today, too many communities across the country still lack adequate access to broadband; others require facilities upgrades to accommodate growing traffic volumes due to increased use of mobile devices, particularly for data transmission. Expanding access and upgrading services often require new infrastructure deployment. Federal departments and agencies are critical to the deployment of broadband infrastructure and have a significant opportunity to help expand broadband infrastructure, which consists of wireline connections deployed either underground or on poles, as well as wireless equipment mounted on towers, buildings, or other structures including transmission and reception equipment and facilities. The Federal Government owns or administers nearly 30 percent of all land in the United States, including thousands of buildings, and provides funding for state and local transportation infrastructure. The Federal Government holds in trust different categories of lands on behalf of, and administers various Federal trust responsibilities in coordination with, federally recognized Tribal Nations and their members. However, national incumbents and small competitive carriers currently face significant challenges when working to secure access to Federal rights of way (ROW) or buildings to deploy broadband infrastructure. Improved processes for providing access to Federal lands and buildings for broadband deployment would increase the number of critical middle-mile broadband facilities serving rural communities, improve services in urban areas, help increase competition between broadband providers, and multiply the public benefits of existing Federal infrastructure investments.

To promote broadband deployment as a high priority, President Barack Obama launched the National Wireless Initiative on February 10, 2011, to extend next-generation wireless coverage to 98 percent of the U.S. population and calling on Congress to support a wireless spectrum auction. In addition to congressional action[1], on June 14, 2012, President Obama issued Executive Order (E.O.) No. 13616, "Accelerating Broadband Infrastructure Deployment," to facilitate wired and wireless broadband infrastructure deployment on Federal lands, buildings, and ROW, federally assisted highways, and tribal and individual Indian trust lands, particularly in underserved communities. The E.O. established and charged the Broadband Deployment on Federal Property Working Group (Working Group) with ensuring a coordinated approach in implementing agency procedures, requirements, and policies related to these topics. The Working Group is composed of representatives from 14 Federal agencies and offices that have either significant Federal land ownership or management responsibilities or expertise relevant to broadband infrastructure deployment on Federal lands and buildings[2]. The Administrator of

[1] Public Law 112-96 Middle Class Tax Relief and Job Creation Act of 2012

[2]The Working Group members include: Department of Defense (DoD), Department of the Interior (DOI), United States Department of Agriculture (USDA), Department of Commerce (DOC), Department of Transportation (DOT), Department of Veteran Affairs (VA), United States Postal Service (USPS), Federal Communications Commission (FCC), Council on Environmental Quality (CEQ), Advisory Council on Historic Preservation (ACHP), National Security Staff, General Services Administration (GSA), Department of Homeland Security (DHS), and the Executive Office of the President (EOP). These members have property management or transportation funding responsibilities and serve on the Working Group because of their broadband or other related expertise.

General Services and the Secretary of Homeland Security designated representatives from their respective agencies to serve as Co-chairs of the Working Group. The Co-chairs work closely with the Office of Science and Technology Policy (OSTP) and the Chief Performance Officer in support of Working Group initiatives.

In accordance with the E.O., the Working Group delivered this progress report, on the first anniversary of the E.O.'s issuance, to the Steering Committee on Federal Infrastructure Permitting and Review Process Improvement formed under Executive Order 13604. This progress report details improvements made in the following areas: 1) coordinating consistent and efficient Federal broadband procedures, requirements, and policies; 2) improving efficiency by coordinating use of one or more uniform contract, application, and permit terms (related to broadband infrastructure deployment); and 3) fostering deployment of conduit for broadband facilities in conjunction with Federal or federally assisted highway construction (i.e., "Dig Once"[3]).

Broadband infrastructure deployment faces a number of challenges, including policy challenges (*e.g.*, inconsistent agency requirements), procedural challenges (*e.g.,* differing forms/applications and processes), physical challenges (*e.g.,* access to Federal lands and buildings), legal and regulatory restrictions (*e.g.,* laws requiring specific actions by agencies, considerations related to Tribal Nations, and environmental compliance), and technological challenges (*e.g.,* varying agency use of online tools). From June to December 2012, the Working Group hosted a number of workshops to identify key broadband infrastructure deployment challenges and potential solutions across a diverse set of issue areas. The Working Group also engaged the private sector/industry for its perspectives on Federal agency processes for deploying broadband infrastructure on Federal and Tribal lands[4]. In January 2013, the Working Group delivered to the Working Group Co-Chairs its initial strategy for facilitating timely and efficient deployment of broadband facilities on Federal lands, buildings, and ROW, federally assisted highways, and Tribal lands. The strategy included a way forward based on nearly 20 recommendations and proposed solutions discussed during the workshops. Since then, the Working Group has been working to implement a subset of those recommendations that would have the greatest positive impact for the largest number of stakeholders. Each of the key accomplishments discussed in this report demonstrates progress towards fulfilling these recommendations. The key accomplishments of the Working Group include:

1. Aggregating Data Sets on Federal Asset Locations
2. Developing General Services Administration (GSA) Common Forms and Templates
3. Developing an Online Platform for Common Applications and Forms
4. Ensuring Increased Accessibility and Usability of Federal Broadband Documentation
5. Establishing *Dig Once* Best Practices

[3] *Dig Once* requirements, as defined by the E.O., refer to "requirements designed to reduce the number and scale of repeated excavations for the installation and maintenance of broadband facilities in rights of way."
[4] Workshop participants included representatives from wireline and wireless provider companies, equipment vendors, a communications tower company, and service providers covering rural areas. The Working Group acknowledges that their feedback may not be representative of the larger industry community.

6. Improving Section 106 and National Environmental Policy Act (NEPA) Efficiency Measures
7. Increasing Coordination with Tribal Nations for Permitting and Environmental Reviews

Key Accomplishments

For each of the seven key accomplishments, this section discusses the significant challenges addressed, the Working Group's solution and actions taken, and next steps. Moving forward, the Working Group will continue to collaborate closely on implementing the actions mandated by the E.O.

Aggregating Data Sets on Federal Asset Locations

Although the Federal Government owns or administers nearly 30 percent of all land in the United States and owns thousands of buildings, information about Federal assets and administered lands is not readily available. Data on Federal asset locations and relevant Federal points of contact are not centralized, and in certain cases are not available to the public. As a result, the wireless industry and other relevant entities are not readily able to identify potential opportunities to access Federal lands or buildings for the deployment of wireline, wireless, and satellite broadband facilities. Access to geographic information and faster initial consultation with relevant Federal agencies would assist interested industry providers in determining where they could leverage existing contracts or establish new leases, licenses, or permits. This would allow providers to more quickly expand broadband access for citizens nationwide.

To make this possible, Federal agencies are collaborating to identify Federal assets (including location and point of contact information) and to display this aggregated data on a map. GSA currently uses an online tool, ARC geographic information system (GIS), to display its Government-owned inventory. Although the tool's primary purpose is to help the wireless industry identify Federal rooftops where a commercial antenna installation could be sited or areas that are ineligible for siting, it also contains several layers of data useful to broadband deployment. The tool allows a user to quickly identify relevant Federal points of contact to obtain further information regarding a particular location or asset. For example, the tool offers visibility into the location of National park units, protected wilderness areas, and Tribal lands where antennae arrays could be challenging to locate. During the planning phase, these data can help the wireless industry make more informed project implementation and scheduling projections.

The Working Group is also coordinating with the Department of Defense (DoD), Veterans Affairs (VA), U.S. Department of Agriculture (USDA), and the Department of the Interior (DOI), along with their relevant components, and the U.S. Postal Service, to obtain additional Federal asset information for the GSA map, including: Federal buildings with existing cell sites, Federal buildings that could offer rooftop leases, and infrastructure corridors that could support broadband fiber deployments. For example, DoD operates over 500 installations worldwide, the vast majority of which are within the United States, and envisions that some of its installations and assonated lands may be in locations that could significantly accelerate commercial

broadband access across the country. The Department has established a geospatial dataset available to the industry at https://explore.data.gov/National-Security-and-Veterans-Affairs/Military-Installations-Ranges-and-Training-Areas/wcc7-57p3. These data may be used to identify DoD installations that maybe near areas where the industry desires to install new broadband capability. DoD is collaborating with GSA mapping experts to analyze potential options for broadband tower locations on DoD installations. Additionally, the Department is starting to identify best DoD practices in order to establish more standardized and streamlined broadband access permitting procedures within the Department. A DoD-wide contact email address was created (DoDBroadbandTaskForce@osd.mil) to assist industry contacting the local installations near areas they wish to develop new broadband capability. CEQ has also identified and shared relevant data sets from its GIS Inventory for Environmental Professionals system. This system pulls from 165 Federal databases to create maps that display areas of potential environmental risk or asset deployment. While the goal is for the map to be as comprehensive as possible, certain types of information about, or access to, critical infrastructure at defense, military, and intelligence facilities will be excluded due to national security and confidentiality concerns.

In August 2013, the Working Group transitioned the GSA map with the aggregated Federal asset data onto the Department of Transportation's (DOT)-sponsored Federal Infrastructure Projects Permitting Dashboard (Dashboard), where it is now publicly viewable. The Working Group will continue to update the map as agency data are collected. There are also plans to overlay the National Broadband Map on the GSA map to display where broadband projects are planned and have been deployed, particularly in underserved areas. This will provide even greater transparency to potential industry providers and the public regarding Federal lands or buildings that may be available for the deployment of wireline, wireless, and satellite broadband facilities. The Working Group is also leveraging the Federal Infrastructure Projects Permitting Dashboard to track and expedite high-priority broadband projects that qualify as projects of regional and national significance. Currently, if a wireless-industry vendor is required to obtain multiple Federal permits from different agencies, the vendor must complete all agency-specific permitting and environmental processes separately or coordinate with agencies to facilitate a joint process. The Dashboard allows the vendor a starting point to coordinate and undergo a long-term planning process with all of the required parties through a single interface, with the goal of speeding up the overall project schedule. OSTP has coordinated with USDA and DOI to feature key broadband projects on the Dashboard. DOT continues to enhance the Dashboard's capabilities and increase its potential with the goal of being able to host and expedite numerous broadband infrastructure projects, further providing transparency and incentivizing a more coordinated and efficient process that will contribute to expanding broadband access across the Nation.

Federal Infrastructure Projects Permitting Dashboard

The Permitting Dashboard is an open source site that tracks selected ongoing projects and provides information on key dates, contacts, and information. The Dashboard was developed the in response to E.O. 13604 on Improving Performance of Federal Permitting and Review of Infrastructure Projects and the Presidential Memorandum of August 31, 2011 on Speeding Infrastructure Development Through More Efficient and Effective Permitting and Environmental Review. It is maintained by the Department of Transportation. E.O. 13604 created an inter-agency initiative, spearheaded by the Chief Performance Officer in close coordination with Council on Environmental Quality (CEQ) to institutionalize best practices to reduce the amount of time required to make permitting and review decisions while improving environmental and community outcomes.

Developing GSA Common Forms and Templates

Another challenge impeding broadband deployment in the United States is the wide variety of applications, forms, and lease agreements across Federal agencies. The myriad of forms and varying documentation requirements puts a tremendous burden on applicants and leads to project delays and increased costs. The Federal Government recognizes this challenge. Public Law 112-96, section 6409 in the Middle Class Tax Relief and Job Creation Act of 2012 (Jobs Act) contains provisions relating to agencies' processes for the deployment of wireless broadband facilities on Federal property, including requirements for GSA to develop common application forms, master contracts, and fees for such access. In addition, the E.O. states that, to the extent not otherwise addressed by the Jobs Act, each Broadband Member Agency with responsibility for managing Federal lands, buildings, or ROW shall, in coordination with the Working Group, develop and use one or more templates for uniform contract, application, and permit terms and fees. During a Working Group-sponsored Industry Day conference (December 2012), wireless industry representatives also recognized this as a significant challenge and cited the lack of a common permitting template across Federal agencies, including the Bureau of Indian Affairs, National Park Service (NPS), VA, and DoD. While some permitting applications are uniform (*e.g.* application and authorization applications between the Bureau of Land Management [BLM] and the United States Forest Service [USFS]), there remains an opportunity for improved coordination and streamlining across Federal agencies that would improve the industry application process.

To address this challenge and meet the Jobs Act and E.O. requirements, GSA, working closely with other Federal agencies and the Working Group, developed a common master application, an antenna lessee checklist, master contracts, lease forms, and license forms. The GSA templates, as appropriate, will provide multiple broadband service providers and public-safety entities streamlined business documents for the deployment of wireline and wireless facilities on Federal property. GSA hosted workshop webinars in November 2012 and April 2013 to present the forms to the Working Group and provide guidance on the forms' use. GSA determined that the form currently used by USFS to authorize the use and occupancy of Federal buildings and lands USFS manages, is compliant under Section 6409 of the Middle Class Tax Relief and Jobs Creation Act. Efforts are currently underway to ascertain if the same determination can be made for the forms and applications used by DOI for broadband deployment purposes. These agencies will consult with GSA when updates to the forms are required in order to ensure continuity and compliance with the master contracts and forms mandated by Section 6409 of the Middle Class Tax Relief and Jobs Act. In addition, the Working Group members identified land-management agencies' requirements for putting broadband infrastructure on undeveloped or protected lands. Those agencies' regulations governing access to and uses of protected lands preclude, in many instances, placing broadband infrastructure on protected lands. Working group agencies will be responsible for establishing rental fees for the use and occupancy of Federal buildings and lands they manage, in accordance with their laws, regulations, and policies.

In the immediate future GSA is updating the language regarding antenna outleasing in the Federal Management Regulations (FMR) to reflect the new requirement for use of the GSA master contracts and forms by the executive agencies. These will address the use of the master contracts and forms that are currently under development for inclusion in the update of the FMR

Part 102-80. An internal GSA memo directing use of the Master templates and applications is also under review. GSA also plans to submit the wireless industry application form to the Office of Management and Budget (OMB) for Paperwork Reduction Act review and approval. GSA plans to host a third transactional process training session in September 2013 to assist Federal agencies that are prepared to implement these forms.

Developing an Online Platform for Common Applications and Forms

In addition to the lack of uniform broadband-related applications and forms, there is a lack of integrated support services and processes relating to permitting, funding, and other broadband deployment activities across the Federal Government. In addition to the Federal agencies using a variety of different applications and forms, they also collect applicant information through diverse methods (*e.g.*, hard copy mail, email, fax, electronic systems). Although some differences are justified by the Federal agencies' differing regulations and mandates, this lack of application/form and process uniformity across agencies creates confusion and puts additional burden on applicants to learn agency-specific requirements. For a single applicant or project, navigating multiple agency-specific permitting processes to obtain project approval is both complex and time-consuming. While there have been some efforts to coordinate common use of forms (*e.g.,* BLM and USFS applications and authorization forms), greater coordination across the Federal agencies is still needed in order to accelerate broadband deployment throughout the country.

To help alleviate these challenges, USDA Rural Utilities Services (RUS) is designing and piloting a common application system that would be the first of its kind to integrate RUS funding opportunities for broadband, water and waste, and electric projects (and associated environmental reviews) across the three programs for entities seeking grants from RUS. Ultimately, modules will be developed interfacing with other government agencies that are involved in the grant and permitting review processes. The project information collected from the applicant through a user-friendly interface would feed into both processes, eliminating unnecessary duplication. By using an electronic intake process, applicants will benefit by receiving loan eligibility decisions sooner. The automated process will also help ensure that RUS applies its program requirements for funding more uniformly and is expected to reduce the time that it takes to perform Federal financial, technical, permitting, and related reviews. RUS estimates that the new system will save the agency 1770 hours of work per year (assuming an average workload of 30 loan applications annually). USDA is coordinating with Working Group members from DOI and the Department of Energy (DOE) to determine whether those two departments can integrate their forms and processes into this pilot system. The Working Group is coordinating closely with OMB and CEQ regarding the potential integration of this tool with other broadband and E.O. 13604 efforts.

Rural Utilities Service Application Intake Module for Broadband

RUS Broadband is currently developing a user-friendly electronic application intake module for RUS broadband projects, that will allow external customers to enter application data on-line and will feature:

- *Edits and checks and balances to ensure all required documentation has been provided;*
- *Allows upload of associated documents into an on-line loan application package;*
- *Interfaces with other Rural Development systems to process application data; and*
- *Pre-populates application forms and other pertinent forms for RUS Broadband.*

The prototype is planned for completion by December 2013.

To assist with the design phase, the Working Group member agencies created an analysis tool that compiles the relevant agency permitting forms, identifies each individual form's associated data fields, and captures the mechanism by which the requests are currently submitted (*e.g.,* online system, mail, fax). The analysis also allows a side-by-side form comparison to identify commonalities (*e.g.,* contact information, project description/purpose) and unique differences (data requested that is specific to a given form only). Once RUS stands up the system for its programs, currently scheduled for the end of calendar year 2013, the identification of commonalities will facilitate integrating Federal processes into the system. USDA will use the unique differences to create supplemental application fields. As the Federal agencies move towards a common application platform, the Working Group member agencies will continue to accommodate the needs of applicants in underserved or unserved areas to ensure access to information.

Ensuring Increased Accessibility and Usability of Federal Broadband Documentation

Exacerbating the inconsistent processes among agencies for gaining access to Federal lands and buildings is the lack of *published* processes across and within individual agencies. Currently, Federal broadband deployment applications, forms, lease agreements, review procedures, and process documents are not centralized across or within agencies. Depending on the agency, the relevant applications/forms may be housed on an agency-specific website, provided to applicants after they initiate an inquiry, or provided after applicants take part in a pre-application meeting with appropriate inter-agency representatives. The E.O. highlighted this challenge and directed the development of a solution (see text box).

Increased Access and Use of Broadband Documentation

E.O Section 3 (ii): "provide comprehensive and current information on accessing Federal lands, buildings, and rights of way, federally assisted highways, and tribal lands for the deployment of broadband facilities, and develop strategies to increase the usefulness and accessibility of this information, including ensuring such information is available online and in a format that is compatible with appropriate Government websites…"

To address this challenge the Working Group first conducted a data call amongst the Working Group member departments and agencies to collect comprehensive and current information on Federal broadband applications and processes. The purpose of the data call was two-fold: 1) to catalogue the applications and processes and understand the scope of available information on accessing Federal lands, buildings, ROW, federally assisted highways, and Tribal lands for the deployment of broadband facilities; and 2) to develop a strategy to increase the usefulness and accessibility of this information.

To assist with cataloguing and understanding the scope of current agency broadband information, 10 Working Group member agencies contributed their respective applications, forms and processes for analysis, which resulted in a document inventory. The Working Group discovered that 92 percent of the applications and forms collected are currently available to the public on an agency website. In addition, USDA and DOI have the majority of applications and processes related to broadband deployment procedures on Federal lands and buildings. Therefore, the Working Group is exploring opportunities (including coordination with the Steering Committee) to develop more efficient and expeditious broadband deployment application and review processes across Federal agencies in USDA (USFS) and DOI (Bureau of Indian Affairs [BIA], BLM, and NPS).

As part of its strategy for increasing the usefulness and accessibility of agency broadband information, the Working Group has worked closely with DOT to host its document inventory on the Dashboard (in addition to GSA's map and featured broadband projects, as discussed previously).

As part of its cataloguing and information analysis effort, the Working Group sorted the documentation using two basic filters (*e.g.,* resource type [tools/templates, case studies, policies/ procedures] and topic area [permitting, licensing, leasing, funding]). In the longer term, the Working Group may wish to re-design the existing inventory page to include additional filters and categories, or the Working Group may look to develop a separate tool or public-facing site to support this added complexity. These detailed filters would ultimately help users find what they are looking for more quickly and efficiently. The Working Group will continue to explore additional information-centralization strategies over the course of the next year.

Establishing *Dig Once* Best Practices

In many cases, the largest cost element of projects that involve the placement of below-ground fiber optic cable is the excavation and repair of the roadway. *Dig Once*, as defined by the E.O., refers to "requirements designed to reduce the number and scale of repeated excavations for the installation and maintenance of broadband facilities in ROW." Coordinating highway construction projects with the installation of broadband infrastructure can reduce costs, especially in areas where the entire ROW is paved or developed and the only option for installing cable is below ground. Coordination also helps to reduce deployment time by avoiding the need for duplicative Federal reviews and permits for work done at the same location.

Coordinating the timing of construction projects with utility installations can be challenging because it requires a concerted effort to share information on policies and processes among all parties involved. In an effort to improve coordination, some state and local planning or transportation agencies have engaged in joint-trench agreements (a.k.a. "joint use" or "joint build") with telecommunication providers when plans are made for opening the ground. Joint use means requiring that all providers of broadband services (in some cases, all utilities) install their infrastructure at the same time, in the same trench, or in the same conduit and, in most cases, share the cost of installing the infrastructure. Joint-use agreements may also require the lead company (i.e., the entity that coordinates the installation) to install additional conduit, which may be leased out or occupied by other entities.

Many state and local stakeholders have recognized the value of *Dig Once* policies for expediting the deployment of fiber along main highway routes. Very few states, however, have implemented statewide *Dig Once* policies. Implementation is more common at the local level. In addition, some localities have instituted moratori on street excavation to preserve new roadway construction, while others allow multiple excavations as long as benefits can be achieved, such as repairing the street or obtaining additional fiber. In general, state and local agencies favor approaches that encourage cooperation, but do not prevent multiple excavations.

Many states have noted the difficulty of drawing telecommunications carriers to underserved areas due to a lack of both market for services and resources to underwrite incentives. Better use of ROW can lower these hurdles, but some states are currently unable to take advantage of this approach. Barter arrangements, for example, which involve a state trading the use of highway ROW and/or conduit for telecommunications services, are prohibited in some states by statute. Certain states also have utility accommodation policies that discourage the longitudinal installation of utilities in controlled-access highway ROW for safety reasons and to limit the amount of construction that occurs along the highway.

Promotion of State Economic Growth through Broadband Deployment

The Utah DOT (UDOT) has been successful in facilitating the expansion of broadband infrastructure in remote areas of the State where highway ROWs are open at all times, allowing for easy access to complete continuous build-outs. The state also installs empty conduit during highway construction. They found that if the state installs small sections of conduit, telecoms have cooperated in helping to extend the infrastructure and provide services to rural communities. By using this approach, the state has been able to provide most of its regions with a connection. In addition, UDOT has been able to leverage their infrastructure by trading it for fiber that has been used to connect state-operated facilities and Intelligent Transportation Systems (ITS). UDOT also helps communities understand how to attract telecoms by working with them to learn how to install their own conduit, providing construction standards and contact information. UDOT's efforts to deploy broadband has advanced state ITS initiatives, and helped to promote economic growth in both urban and rural areas.

Jurisdictional issues also arise. DOT defines ROW as highway agency-owned or -leased land that is primarily used to create a clear zone or travel lane within the roadway. Federal-Aid Highway Program (FAHP) funds can be used only for highway-eligible activities (Title 23-Highways); however, an exception can be made by DOT to approve the ROW for other uses, as long as those uses are determined to be in the public interest and will not interfere with highway operations or impair roadway safety. Any use of Federal land within the ROW, other than that of highway usage, requires an authorization from the responsible Federal agency.

Section Five of the E.O. identifies DOT as the lead agency for addressing *Dig Once* requirements on state- and locally-owned ROW. Over the past year, the DOT's Federal Highway Administration (FHWA) has been active in coordinating, communicating, identifying and promoting successful state and local policies and practices that facilitate the deployment of broadband at the state and local levels. In February 2013, FHWA held a workshop with state and local stakeholders to discuss successful practices as well as barriers to deploying broadband in highway ROW (see text boxes). Based on this workshop, FHWA developed a summary paper, entitled *Successful Practices of Broadband Deployment in Highway Rights of Way* to provide stakeholders with information on various approaches to deploying broadband. FHWA also developed an additional summary paper—*USDOT-FHWA Background Paper and Work Plan Strategy*—which provides an overview of Federal and state policies and examples of utility accommodation, coordination of

Boston Dig Once Case Study

In an effort to minimize excavations on the busy streets of Boston, the City adopted a policy in 1994 that mandated all telecoms to install their underground conduits "in the same trench, at the same time on a shared-cost basis." The "joint build" policy that was created put the local telecoms in a leading role for planning and providing telecommunication services for the City. Under this policy, a "lead company" is established. The lead company is any company (telecom provider, or not) that approaches the City first for a build-out request and takes the lead in coordinating the construction. The lead company and participating telecoms work together to draft the engineering plans, estimate construction costs and submit the built-out application to the City's Public Improvement Commission, the body that reviews and approves the application.

telecommunications installations with state Intelligent Transportation Systems infrastructure, and determinations of fair market value of ROW access.

In accordance with the E.O., DOT has made information available on state utility accommodation laws and state joint-occupancy agreements on a public site. DOT, in coordination with the Working Group, will continue to explore other platforms to facilitate the deployment of broadband and practices to minimize excavation at the state and local level.

Improving Section 106 and National Environmental Policy Act Efficiency Measures

As with other Federal actions, all broadband deployment projects that involve Federal funding, permits, or access to property must comply with numerous environmental requirements designed to protect environmental resources and values. Federal agencies design their environmental review processes to fulfill their NEPA and National Historic Preservation Act (NHPA) responsibilities, including Section 106 consultation. Before deploying broadband equipment and facilities on Federal lands and buildings or Tribal lands, private industry providers must first undergo these environmental review processes. Depending on the level of potential impact to natural, cultural, and socioeconomic resources, the environmental review processes can take months or years to complete. The applicant interacts with the relevant Federal land-managing agency and/or (in the case of Federal grants or loans) funding agency to complete the required environmental and historic preservation reviews. Applicants must provide adequate documentation (*e.g.,* studies, photos, maps) so the relevant Federal agency can make a determination about potential environmental consequences of the project, including impacts to cultural and historical resources. As a result of agencies' and bureaus' different missions, applicants must often contend with varying documentation requirements and review criteria across Federal departments and/or agencies, or between a single agency's regional offices and its headquarters[5]. For example, some Federal agencies have determined that laying fiber in an existing previously disturbed ROW would not normally have the potential for significant or adverse impacts to the environment, while other Federal agencies require extensive surveys for natural and archaeological resources in advance of beginning work, even in such previously disturbed areas.

Envirotracker

Envirotracker is an example of a broadband related streamlining effort underway at one of the Working Group agencies. Envirotracker is an internal, collaborative Microsoft SharePoint site to collect, organize, and facilitate the environmental review processes for RUS's Electric and Telecommunication Programs' projects. EnviroTracker will be used by environmental staff to process and track the environmental review process for every project submitted to RUS as a request for financial assistance. Project information and status of a project's environmental review process will be accessible to all non-environmental RUS staff as a read-only access. As of June 2013, over 90 percent of development was complete and final upgrades and procedures for submitting information are underway.

To address these challenges, the Working Group is developing mechanisms to streamline environmental and historic preservation review processes, drive additional consistency, and lessen the time and costs associated with the reviews, where appropriate. First, the Working Group is collaborating on a set of inter-agency streamlining measures for Section 106 review

[5] DOI, the largest Federal land managing department, is responsible for the management of 500 million acres across such diverse agencies as the Bureau of Land Management, the National Park Service, and the Bureau of Indian Affairs.

(*e.g.,* a programmatic agreement, program comment, exemption, or standard treatment) that will include a list of broadband activities to be exempted from Section 106 consultation. Exempting certain activities when appropriate, such as the installation of new aerial fiber on existing poles, would allow projects to move forward without first undergoing Section 106 review. By regulation, consulting parties are afforded up to 30 days to review a Federal agency's historic properties findings for a proposed project. In cases where Federal agencies failed to provide adequate documentation specified in 36 CFR section 800.11, the consulting party may request the agency to provide additional information (*e.g.,* written documentation/ photos/maps or historic property surveys) before reviewing on the agency's findings. These requests for additional information often result in an additional 30-day review period.

For undertakings involving adverse effects on historic properties, consultation with the State Historic Preservation Offices (SHPO), Indian tribes, and local historic preservation groups may involve considerable coordination among the Federal agency and the other consulting parties that are involved in the Section 106 review. Similarly, projects having adverse effects on historic properties may result in considerable review times when disagreements arise about how best to mitigate the effects. While such scenarios are not typically the case, the time required to complete the required Section 106 review may nevertheless place a tremendous burden on both applicants and Federal agencies tasked with, or assisting with, broadband implementation. Agency collaboration is ongoing as the Working Group determines which types of broadband activities have minimal potential to affect historic properties and can reasonably be exempt from Section 106 review. After the agencies come to a consensus on the exempted activities, they will consult with other parties such as the Advisory Council on Historic Preservation (ACHP), the National Conference of State Historic Preservation Officers, and federally recognized Tribal Nations, to implement an appropriate agreement.

On March 5, 2013, CEQ and ACHP released their *Handbook for Integrating NEPA and Section 106*, which provides advice to Federal agencies, applicants, project sponsors, and consultants on how to take advantage of existing regulatory provisions to align the NEPA and NHPA Section 106 review processes. For many projects, agencies can use the procedures and documentation required by NEPA to comply with NHPA Section 106, instead of undertaking a separate process. Integrating NEPA and NHPA reviews will help Federal agencies improve efficiency, maximize staff resources, and reduce costs. It will also allow them to avoid duplicative or inconsistent processes and facilitate quicker, more informed decision-making. Many Federal agencies are already implementing this integrated NEPA and Section 106 best practice. The Working Group is encouraging Federal agencies to coordinate these two review processes for broadband projects so that each one helps inform decision makers at critical phases throughout the review process.

The Working Group is also working to increase the appropriate consistency and standard use of categorical exclusions (CATEX) from NEPA review for broadband projects that would not normally result in significant environmental effects. Where appropriate, CATEX have been proven to expedite environmental reviews for select projects. For example, broadband stimulus programs funded by RUS under the American Recovery and Reinvestment Act of 2009 (ARRA) successfully used CATEX to provide efficient and effective environmental reviews. The use of CATEX reduced the amount of review time needed for projects on Federal and private lands in the absence of extraordinary circumstances such as historic properties, Tribal Nations' sacred

sites, endangered species, or wetlands. The Working Group proposes to work with CEQ and other relevant parties (*e.g.,* for rule-making), as needed, to identify and eventually recommend reasonable types of common categorical exclusions that could be adopted by agencies across the Federal Government.

Increasing Coordination with Tribal Nations for Permitting and Environmental Reviews

The Federal Communications Commission (FCC) is leading an effort to facilitate broadband deployment by improving coordination with Tribal Nations for broadband permitting and environmental reviews. The Federal Government has a historic legal trust relationship with 566 federally recognized Tribal Nations, which requires Federal agencies to adhere to certain fiduciary standards when interacting with them or administering trust assets, including land assets. Each executive branch agency is required to implement E.O. 13175, *Consultation and Coordination with Indian Tribal Governments,* and establish its own policies and procedures for interacting with Tribal Nations. As an independent agency of the Federal Government, the FCC adopted its own *Tribal Policy Statement*, 16 FCC Rcd 4078 (2000), which substantially mirrors E.O. 13175. In addition, Section Three of E.O. 13616 requires Federal Working Group members to develop and implement a strategy to facilitate the timely and efficient deployment of broadband facilities on Tribal lands. E.O. 13616 also requires that deployment of broadband service to those living on Tribal lands be consistent with existing statutes, treaties, and trust responsibilities, and where beneficial and appropriate, include procedures for coordination with Tribal governments. These authorities, along with of Section 106 of the NHPA, necessitate that broadband deployment projects with a Federal nexus be coordinated with Tribal Nations with regard to their interests both within current existing boundaries of Tribal lands, and within their ancestral homelands. Under Section 106, specifically, Federal agencies must contact the appropriate Tribal Nations for project consultation and assist Tribal Nations with reviews of projects both on and off Tribal lands by enhancing their familiarity with relevant regulations and Federal procedures. However, some Federal agencies are unsure of which Tribal Nations to contact and Tribal Nations have expressed frustration about their lack of participation in project reviews. Industry representatives have also voiced concerns about project delays related to Section 106 consultation with Tribal Nations and other information requests by Tribal Nations. Unnecessary delays could inhibit progress with broadband deployment.

In response to these challenges and requirements under E.O. 13616, the Working Group is working closely with the FCC toward expanding usage of its electronic Section 106 (E106) and Tower Construction Notification System (TCNS) for proposed wireless projects (including broadband deployment projects) on federally administered lands and buildings (see text box). Member Agencies in addition to FCC would use the TCNS with the

E106 System

The E106 system was developed to automate the exchange of information as part of the review process under Section 106 of the National Historic Preservation Act (Section 106). The E106 System enables users to submit FCC forms 620 and 621 electronically and then sends alerts to participating SHPO and Tribal Historic Preservation Offices (THPO or cultural preservation officers). Once received, they can then electronically provide their input and comments on the proposed project. Click here for a demo.

TCNS

TCNS automatically notifies federally recognized Tribal Nations of a proposed tower project. Once a project is entered into the system, the tool identifies those Tribal Nations whose areas of interest may be impacted, based on geographic information provided by the Tribal Nations. Tribal Nations receive information on the tower project that they can review and indicate the need for further action if necessary. The FCC then works with each Tribal Nation as necessary to determine if further consultation on Section 106 is required.

** The systems currently handle 10,000 to 12,000 applications on an annual basis.*

consent of Tribal Nations. Such use would occur under conditions that maintain the integrity of the system for its primary purpose, and ensure that both the FCC and Member Agencies fulfill their trust responsibilities, including the FCC's responsibility to protect the confidentiality of the geographic area information that Tribal Nations have provided to the system. TCNS facilitates proposed tower construction by identifying potentially affected Tribal Nations and enabling automated interaction between constructors and Tribal Nations at a very early stage in the siting process. Tribal Nations have favored TCNS because it facilitates constructors' compliance with Section 106 review for all tower constructions, not just those on reservation land but also those in areas where Tribal Nations have ancestral or historic cultural interests. Tribal Nations have also particularly favored the system's ability to maintain the confidential nature of their areas of interest. Industry participants and tower constructors also favor this system because proprietary information regarding proposed site locations is currently viewable only by the intended recipient.

The E106 system enables automated communications among Federal, state, local and industry partners. While the Tribal Nations have not to date extensively used E106, the system has yielded important efficiencies in interacting with SHPOs and could become a useful tool for the Tribal Nations as well. Broadening usage of E106 would create more efficient, timely, and cost-effective processes for Section 106 reviews.

In the past, the FCC has successfully worked with National Telecommunications and Information Administration (NTIA) and the RUS at USDA to enable their use of FCC processes, including the E106 and TCNS systems. ARRA directed RUS and NTIA to fund broadband projects. As many of those projects involved construction of wireless infrastructure related to FCC licenses, RUS and NTIA asked the ACHP for a program comment that would enable their grant recipients to take advantage of the existing efficiencies in the FCC's Section 106 process. This program comment significantly reduced the amount of review time needed for projects on private lands. Other projects funded under ARRA involved fiber deployment, which is not related to an FCC license or otherwise reviewed by the FCC. For these projects, the agencies reached an agreement allowing RUS and NTIA Headquarters staff to access the FCC's TCNS so that Tribal Nations with an interest in these projects could be properly notified and invited to participate in the Section 106 process.

Based on this past success with NTIA and RUS, the FCC is working with Member Agencies to formalize processes to support the use of these tools by those agencies. First, the FCC has identified specific factors to evaluate for agencies interested in joining the systems for Section 106 reviews and Tribal notification and participation. Member agencies desiring to use either system (or both) would review and adapt their own internal Section 106 processes and procedures to ensure the suitability of these systems to their processes and procedures. Member agencies will also identify their specific requirements for use of the systems, and then FCC would work with Federal agencies interested in utilizing the E106 and TCNS systems to discuss system requirements and their suitability for meeting other agencies' needs. Currently, DOI's BIA and NPS have expressed preliminary interest in incorporating these systems into their procedures, and the FCC is prepared to examine feasibility upon the provision of additional information. When another Federal agency's suitability for leveraging the TCNS program is determined to be

sufficient, the FCC and that agency will engage in government-to-government consultation with Tribal Nations, about expanding the use of TCNS to that specific Federal agency. Finally, the FCC will compile unique system requirements for each Federal agency and will develop E106 and TCNS use authorizations for approved agencies at the agencies' expense. Greater access to these two systems will increase coordination between the Tribal Nations and Member Agencies for broadband project reviews and reduce the potential of broadband implementation delays.

Future Plans for Continued Collaboration

The Working Group is committed to facilitating broadband deployment and has made significant progress across a diverse set of issue areas including, as outlined in this report, Federal lands and buildings, consultation with Tribal Nations, environmental compliance, and online tools. Below is a summary of next steps, which the Working Group will continue to work towards implementing.

Future Plans to Accelerate Implementation of Broadband Deployment

Next Step	Responsible Party	Estimated Implementation
1. Continue to add Federal asset data to the aggregated GSA map on the Federal Infrastructure Projects Permitting Dashboard	GSA, DOT	Summer 2013
2. Add broadband pilot projects to the permitting dashboard	EO 13604 Steering Committee, DOI, USDA, DOT	Summer 2013
3. Develop new regulations mandating the use of the GSA contracts and forms and hold transactional Federal agency training	GSA	September 2013
4. Design Common Application System pilot	USDA/RUS	December 2013
5. Upload E.O. document inventory to Federal Infrastructure Projects Permitting Dashboard and explore future information centralization strategies	DHS, OSTP, DOT	Summer 2013, On-going
6. Work with stakeholders to incorporate *Dig-Once*-related best practices and policies into broadband projects using highway rights-of-way	DOT, DOI, USDA	On-going
7. Work with other agencies to implement inter-agency Section 106 streamlining measures and identify and apply common categorical exclusions	Land Management Agencies	December 2013
8. Expand access to TCNS and E106 systems	FCC	On-going

As the Working Group continues to work towards uniform processes and procedures, it will develop public-facing toolkits and/or online webinars to advise and educate stakeholders (within government, private industry, and the public) on the new requirements. Per the E.O., these trainings will help ensure consistent interpretation and application of all procedures, requirements, and policies. In addition, stakeholder feedback on the revised forms, policies, and/or procedures will help the Working Group further refine and improve its approach.

The Working Group is committed to working collaboratively across the Federal Government to support and promote broadband infrastructure projects in the years ahead. First, the Working Group will continue to leverage intersections with other relevant Federal efforts, such as E.O. 13604 on Improving Performance of Federal Permitting and Review of Infrastructure Projects and the Presidential Memorandum on Modernizing Federal Infrastructure Review and Permitting Regulations, Policies, and Procedures (*e.g.,* Dashboard and online tools). Continued collaboration with this effort will be important as it is developing solutions for closely related challenges (*e.g.,* inter-agency coordination on federal agency permitting, review, and consultation schedules and processes and improved alignment of Federal, State, local, and tribal government processes for siting and permitting projects). Second, the Working Group plans to share relevant information and best practices with FirstNet, an independent authority within NTIA (created by The Middle Class Tax Relief and Job Creation Act of 2012) that has responsibility for establishing a Nationwide Public Safety Broadband Network. FirstNet may be able to leverage the Working Group's aggregated Federal asset map, expeditious procedures for broadband deployment on Federal lands, and common CATEX.

While much work remains ahead, the Working Group is confident that close coordination across all levels of government and with the private sector and general public will help accelerate broadband deployment and result in meaningful community outcomes.

Appendix A: Abbreviations and Acronyms

ACHP	Advisory Council on Historic Preservation
ARRA	American Recovery and Reinvestment Act
BIA	Bureau of Indian Affairs
BLM	Bureau of Land Management
CATEX	Categorical Exclusion
CEQ	Council on Environmental Quality
DOC	Department of Commerce
DoD	Department of Defense
DOE	Department of Energy
DHS	Department of Homeland Security
DOI	Department of the Interior
DOT	Department of Transportation
VA	Department of Veteran Affairs
EOP	Executive Office of the President
E.O.	Executive Order
FAHP	Federal-Aid Highway Program
FCC	Federal Communications Commission
FHWA	Federal Highway Administration
FMR	Federal Management Regulations
GSA	General Services Administration
GIS	Geographic Information System
NEPA	National Environmental Policy Act
NHPA	National Historic Preservation Act
NPS	National Park Service
NTIA	National Telecommunications & Information Administration
OMB	Office of Management and Budget
OSTP	Office of Science and Technology Policy
ROW	Right of way
RUS	Rural Utilities Services
SHPO	State Historic Preservation Office
TCNS	Tower Construction Notification System
THPO	Tribal Historic Preservation Office
USDA	United States Department of Agriculture
USFS	United States Forest Service
USPS	United States Postal Service