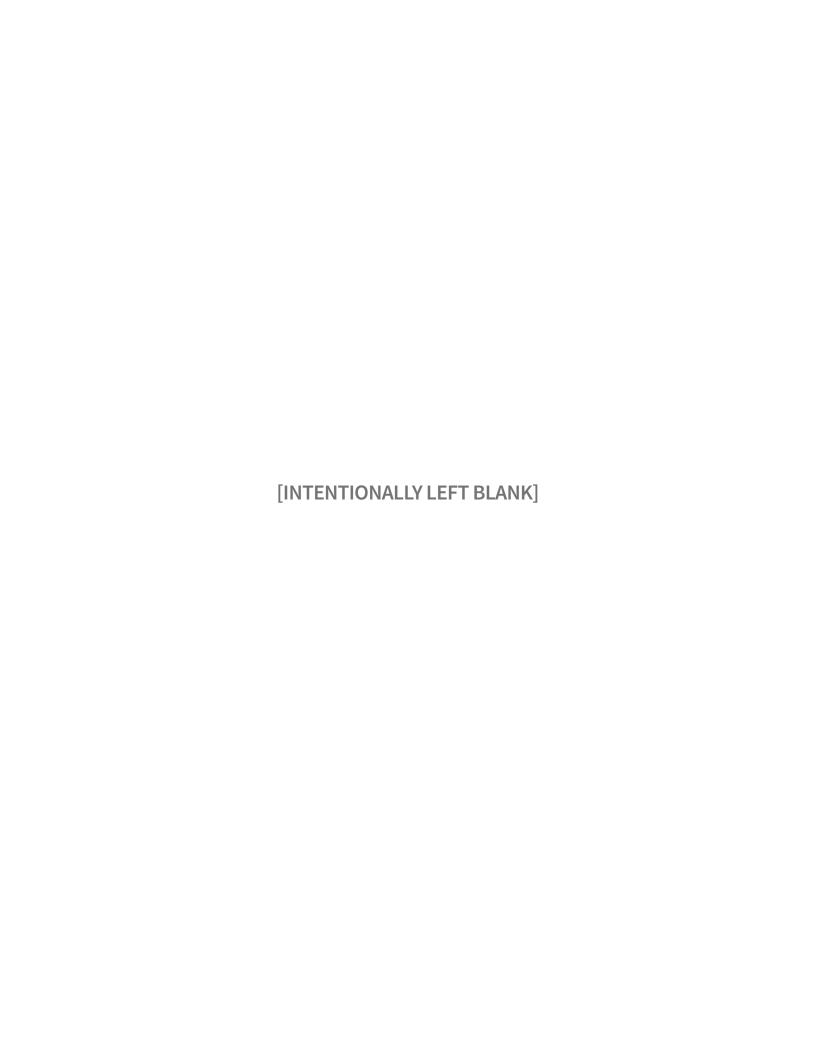


MILESTONES REPORT

FEBRUARY 2019





Mr. President -

Within every sector of our economy, emerging technologies are challenging pre-existing business models and creating unprecedented opportunities for the American people. Yet, due to costly regulatory barriers and cumbersome permitting processes, too many Americans are being excluded from these opportunities simply because they lack access to broadband.

This is more than a technology problem; without access to broadband, entire communities are increasingly left behind in today's information-driven economy. By connecting our communities, we are reconnecting Americans with one another and helping to ensure that everyone has the opportunity to benefit from this booming economy.

You have directed your Cabinet to use all possible policy tools to accelerate the deployment and adoption of affordable, secure, reliable, modern high-speed broadband connectivity. To be clear, while the government serves an important role, we strongly believe that nothing creates innovation more effectively than unleashing the free market economy from burdensome government regulations. Toward that end, the reforms outlined in this report are dedicated to removing regulatory barriers and expanding opportunities for successful private-sector capital investments.

From the beginning of your tenure in office, an interagency working group has assessed the situation, developed a cohesive government-wide strategy to reform broadband deployment, and will execute a vigorous implementation of this reform agenda. These important milestones are captured in the enclosed report, which fulfills the reporting requirements of Section 6214 of the Agricultural Improvement Act of 2018.

By empowering entrepreneurs, the American Broadband Initiative will strengthen our economy, make our country more competitive, and improve the quality of life for millions of newly connected American families – ultimately delivering the modern broadband infrastructure that every American deserves.

Sonny Perdue

Secretary of Agriculture

Wilbur Ross

Fudue Wilbur Von

Secretary of Commerce





EXECUTIVE SUMMARY

This report outlines a vision for how the Federal Government can increase broadband access and actions that Agencies are taking to increase private-sector investment in broadband. Previous attempts to expand broadband connectivity have made progress and provided valuable lessons that guide this Initiative. The report's recommendations are grouped into three categories: streamlining Federal permitting processes to speed broadband deployment, leveraging Federal assets to lower the cost of broadband buildouts, and maximizing the impact of Federal funding.

Highlights of Federal Agencies' actions include:

- 1. Launch and Effectively Execute \$600 million in New Federal Investment in Rural Broadband, Using Strategies to Spur Private-Sector Capital and Maximize the Value of Taxpayer Dollars.
 - The U.S. Department of Agriculture (USDA) is preparing to deploy a new congressional appropriation of \$600 million for an innovative broadband pilot program, based on modern, effective strategies that will catalyze increased private-sector investment in broadband infrastructure. These investments will prioritize projects that deploy broadband infrastructure in rural areas that are currently insufficiently connected, with the goal of increasing productivity and improving rural quality of life.
- 2. Leverage the Department of the Interior (DOI) Towers for Communications Use. Consistent with the Presidential Memorandum on "Supporting Broadband Tower Facilities in Rural America on Federal Properties Managed by the Department of the Interior," the DOI inventoried and mapped over 7,000 tower locations and will make that information publicly available via a Geographical Information System (GIS) mapping tool. These towers, primarily located in rural areas, will be available to service providers looking to locate equipment on Federal property as they expand wireless and wireline broadband networks.
- 3. Provide Tools for Expedited Access to Federal Assets in Priority Markets.
 - The General Services Administration (GSA) has solicited input from the public on priority markets and assets needed to expand mobile access in underserved markets. GSA will pair that input with new and existing data sources, such as the map of DOI-managed land and towers, to identify and visualize Federal assets which can be leveraged by service providers to expand build-outs in these markets. Additionally, GSA will work with other Federal Agencies to utilize existing statutory authorities to streamline commercial access to assets in these markets. The resulting tools will supply the broadband industry with a new powerful resource to incorporate Federal assets into their expansion plans.

4. Create One-Stop for Broadband Permitting Information.

The National Telecommunications and Information Administration (NTIA) will publish flow-charts reflecting current permitting workflows for the most common asset types providing a single location for information on Federal permitting of broadband infrastructure. This will include land managed by DOI's Bureau of Land Management (BLM) and USDA's Forest Service (Forest Service), buildings managed by GSA, and towers owned or managed by DOI. As processes are further streamlined, the BroadbandUSA website will be updated to reflect the latest process improvements.

5. Revise Common Application Form and Quarterly Metrics for Permit Requests.

Consistent with Executive Order 13821 "Streamlining and Expediting Requests to Locate Broadband Facilities in Rural America," GSA will revise the common application form for permit requests to be more responsive to stakeholder needs. Additionally, all land-managing agencies will provide GSA with quarterly reports on permitting applications, including the number of applications received, the number approved, the number rejected, the basis for any rejection, and the number of working days each application was pending before being approved or rejected. This data will provide transparency to the public and allow Agencies to continue to improve responsiveness.

These are just a few of the many commitments the Federal Government has made. This report details actions that will stimulate increased private-sector investment and drive additional broadband infrastructure deployment.

Taking these steps to strengthen and improve America's broadband infrastructure is vital to our country's competitiveness and quality of life. The Administration is committed to working with State, local, and Tribal governments, private-sectors companies, civic leaders, and broadband stakeholders to close America's digital divide and ensure that all Americans have access to high-speed broadband.



Contents

Transmittal Letter to the President • 3 **Executive Summary • 4** American Broadband Initiative • 9 Background • 9 Mission • 9 Broadband Deployment and Adoption in America • 11 Broadband Deployment in America • 11 Broadband Adoption in America • 12 Mobile Broadband Deployment and Adoption • 13 American Broadband Initiative - Workstreams • 14 Streamline Federal Permitting • 14 Leverage Federal Assets for Broadband Deployment • 19 Maximize the Impact of Federal Funding • 25 Additional Agency Actions in Support of the Initiative • 34 Next Steps • 35 Appendix A - American Broadband Initiative Timelines • 36 Appendix B - Additional Agency Actions in Support of the Initiative • 45 Appendix C - American Broadband Initiative Components • 51 Agriculture and Rural Prosperity Task Force • 51 National Telecommunications and Information Administration • 53 Department of the Interior: Leveraging Public Lands for Broadband Infrastructure • 54 Broadband Interagency Working Group • 56 Executive Actions • 56 2018 Consolidated Appropriations Act (Omnibus Budget) • 57 Appendix D - American Broadband Initiative Agency Participation • 58 Appendix E – American Broadband Initiative Agency Acronyms • 59

66 AMERICANS NEED ACCESS

to reliable, affordable broadband Internet service to succeed in today's information-driven, global economy.

"

PRESIDENT DONALD J. TRUMP
 JANUARY 8, 2018

AMERICAN BROADBAND INITIATIVE

Background

With the rapid growth of the Internet starting in the mid-1990s, digital technologies have fundamentally impacted business models within every sector of our economy from agriculture to healthcare, education to energy, and manufacturing to the arts. Despite enormous private investment and dedicated Federal grant and loan programs, too many American citizens and businesses lack access to this basic tool of modern economic prosperity.

While the Federal Government owns or manages key assets that support telecommunications infrastructure, the bulk of America's telecommunications infrastructure is owned and managed by private-sector companies. This private market is a significant asset to our Nation's economy and has helped the United States innovate and lead the world in each wave of telecommunications technology.

Over the past several decades, Federal partnerships have been especially important for deployment in high-cost rural areas, where the unique challenges of geography, population density, and deployment costs may make it unprofitable to expand or operate networks – creating significant gaps in rural broadband coverage.

Mission

The American Broadband Initiative (Initiative) is the Administration's signature strategy to stimulate increased private investment in broadband infrastructure and services to fill broadband connectivity gaps in America. The Initiative will drive change across Federal Agencies to better leverage public assets and resources through partners to expand our Nation's broadband capacity. This mission is built on three core principles:

- Government processes should be clear, transparent, and responsive to stakeholders.
- Federal assets should provide the greatest possible benefit to stakeholders and the public.
- The Federal Government should be a good steward of taxpayer funds.

Drawing on these principles and the unique responsibilities of Federal Agencies, the Initiative will achieve its goals through three interagency workstreams:

- 1. Streamline Federal permitting processes to make it easier for network builders and service providers to access Federal assets and rights-of-way, reducing the regulatory burden and expediting the deployment of broadband networks.
- 2. Leverage Federal assets such as towers, buildings, and land to lower the cost of broadband buildouts and encourage private entities to expand telecommunications infrastructure, especially in rural America.
- 3. Maximize the impact of Federal funding to better target areas of need, improve consistency, and provide incentives for State/local policies that efficiently and effectively leverage Federal dollars.

These interagency workstreams are comprised of Administration officials from the Executive Office of the President, NTIA, USDA, DOI, and more than 20 other Federal Agencies that are responding to the President's challenge to remove barriers, streamline processes, and leverage Federal funds to improve broadband availability and access.

In addition, the Federal Communications Commission (FCC), which is an independent regulatory Agency, is a consulting member of the Initiative. Appendix D includes a list of participating Agencies.

The American Broadband Initiative:

- Implements the e-Connectivity "call to action" from the Report to the President of the United States from the Task Force on Agriculture and Rural Prosperity,¹
- Supports Agency activities to implement the President's broadband-related Executive actions.
- Builds on NTIA's mission as the Agency principally responsible for advising the Administration on telecommunications and information policy,
- Refocuses the work of the Broadband Interagency Working Group (BIWG), and
- Establishes a coordination vehicle for the broadband provisions in the Consolidated Budget Act of 2018.

Each of these important contributing components are described in more detail in Appendix C.

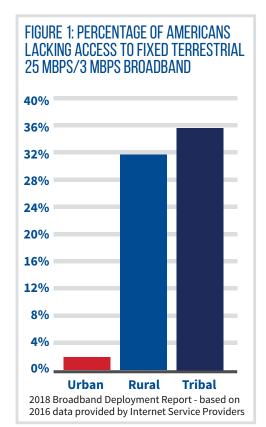
BROADBAND DEPLOYMENT AND ADOPTION IN AMERICA

Broadband Deployment in America

America's Internet Service Providers (ISPs) continue to upgrade our Nation's broadband infrastructure as new technologies are created and old ones are improved.² According to industry studies, United States telecommunications companies invest \$74 billion to \$78 billion each year in their broadband facilities nationwide.³ This includes investments in wireless 4G and 5G services, new satellite and fixed wireless services, and expanded fiber, cable, and upgraded DSL networks. The FCC's 2018 Broadband Deployment Report shows improvements in nearly every area of advanced telecommunications services but significant gaps remain.

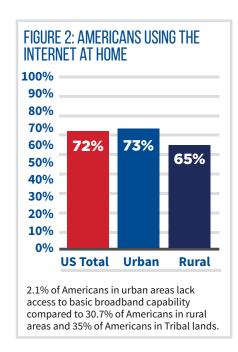


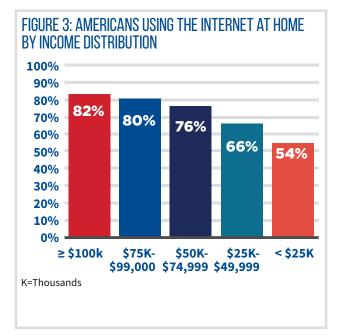
As of 2016, more than 92% of the U.S. population had access to fixed land-based broadband at speeds of 25 Mbps/3 Mbps. Nonetheless, the remaining 8% represents more than 24 million Americans who lack access to this basic service. Of those households, 80% live in rural communities.⁴ This is more people than live in the States of New York or Florida.



As shown in the figure at the left, the FCC found that about 2% of Americans in urban areas lack access to fixed land-based 25 Mbps/3 Mbps broadband. More than 30% of Americans in rural areas and more than 35% of residents in Tribal lands lack access to this basic broadband capability — a gap of roughly 30 percentage points.⁵

The disparity in broadband access in rural communities versus urban and suburban areas is caused by a multitude of factors. First, the lower density of homes and businesses in rural settings means that more infrastructure is necessary to provide high-speed Internet services, increasing the "unit cost," or cost per customer served. Additionally, the lower density means that more land is crossed to erect broadband infrastructure, increasing the acquisition, permitting, and easement requirements, especially in Western States. This dispersed development also means that each connected place bears a higher proportion of the ongoing operating costs. These factors increase costs for rural broadband construction and operation, resulting in higher service charges, and making broadband service less affordable for rural customers.





Source: D. Redl, New Data Show Substantial Gains and Evolution in Internet Use, National Telecommunications and Information Administration, June 6, 2018, with additional analysis from November 2017 dataset.

Broadband Adoption in America

America's digital divide goes beyond access and availability. The 2017 Computer and Internet Survey of over 123,000 Americans commissioned by NTIA and administered by the Census Bureau found that more than 65% of rural Americans use the Internet at home compared to almost 73% of urban residents, a gap that has remained fairly constant over the past 20 years.⁶

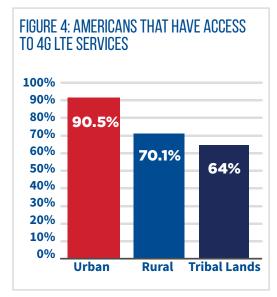


Income level also plays a role. Over 82% of Americans with family incomes of \$100,000 or more used the Internet at home but less than 54% of those with family incomes less than \$25,000 used the Internet from home. There has been progress in low-income home Internet adoption between 2015 and 2017 with home Internet adoption among persons in lowincome households jumping from 47 to 54%.7

There are additional broadband adoption inequities based on age, educational attainment, disability status, and race and ethnicity.

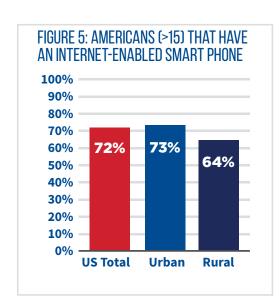
Mobile Broadband Deployment and Adoption

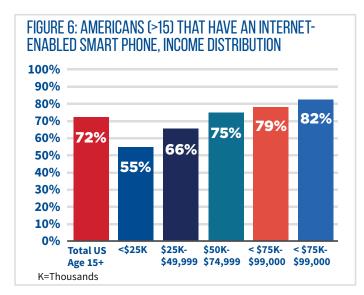
Mobile broadband deployment and adoption also lags in rural areas. The FCC's <u>2018 Broadband</u> <u>Deployment Report</u> found that 90.5% of Americans living in urban areas had access to 4G LTE services with a median speed of 10 Mbps/3 Mbps. Because of the challenges of providing coverage in rural areas, only 70% of rural Americans and less than 64% of residents in Tribal lands had access to 4G LTE, leaving approximately 15.2 million rural residents without access to mobile broadband services at speeds of 10 Mbps/3Mbps.⁸



While 72% of Americans ages 15 and older use an Internet-enabled smart phone – an increase of over 12 percentage points since 2015 - the urban/rural divide persists in mobile broadband. Less than 64% of rural Americans 15 and older use smart phones compared with 73% of urban Americans. Income again plays a role. As with wireline services, people with lower incomes are less likely to have smart phones with mobile data plans. Over 82% of persons ages 15 and older, with family incomes above \$100,000, have an Internet-enabled smart phone and less than 55% those with family incomes below \$25,000 have a smart phone.

While many Americans benefit from high capacity wireline and mobile broadband, the digital divides that exist leave individuals and communities further behind. High capacity broadband may not be the only key to American prosperity, but it is a critical ingredient – one worth our collective focus and investment.





Source: D. Redl, New Data Show Substantial Gains and Evolution in Internet Use, National Telecommunications and Information Administration, June 6, 2018, with additional analysis from November 2017 dataset.

AMERICAN BROADBAND **INITIATIVE - WORKSTREAMS**

The following sections describe each workstream's goals, objectives, and approach. Appendix A provides a timeline for major workstream deliverables.

Streamline Federal Permitting

Objective

A streamlined Federal permitting process will make it easier for network builders and service providers to access Federal assets and rights-of-way, reducing the regulatory burden and simplifying the deployment of broadband networks.

Background

The Federal Government owns or manages nearly 30% of the land in the United States⁹ with the majority concentrated in rural areas and much of it managed by the Departments of the Interior, Transportation, Defense, and Agriculture. Federal lands and assets play an important role in telecommunications networks – through access to rights-of-way (ROW) and siting equipment on lands and buildings, but the permitting process for gaining access to those assets can sometimes be cumbersome, confusing, and slow. By streamlining permitting processes, privatesector companies can better use these physical assets and rights-of-way to support broadband infrastructure deployments. The goal is to reduce the burden on applicants, spur private investment, decrease costs, and speed construction.

Streamlining Federal Permitting Workstream Members						
CHAIRS:	Department of Agriculture	General Services Administration	Office of Management and Budget			
Department of Homeland Security	Department of Commerce (NTIA)	Council on Environmental Quality	Department of Veterans Affairs			
	Department of Defense	Advisory Council on Historic Preservation				
Department of the Interior	Department of Transportation	Federal Communications Commission				

Workstream Members

Under DOI and DHS leadership, the permitting workstream includes representation from all major land-managing Agencies in the Federal Government. The workstream also benefits from the FCC's Broadband Deployment Advisory Committee (BDAC) Federal Siting Working Group, which offered potential solutions in its Final Report.¹⁰

Challenges and Barriers

Over the past several years, Federal Departments and Agencies have taken steps toward streamlining permitting processes within their own organizations. However, there are opportunities to further streamline permitting processes within and across Federal Agencies.

A service provider deploying or expanding a wireline or wireless network in rural America may need to work with multiple Federal and State Agencies to secure the permits needed to deploy additional telecommunications infrastructure. Various laws, policies, and regulations impact how Federal assets can be used, resulting in differing policies, delayed approvals, and cumbersome processes. Although a common application form is available, it is not yet applied consistently across agencies and response times can be long or uncertain, making it difficult for service providers to develop and maintain construction schedules.

On average, it takes nearly a year to complete the process for authorizing a communications use. 11 When conducting the required analysis under the National Environmental Policy Act (NEPA), many Agencies may use Categorical Exclusions (CatEx) for "actions which do not individually or cumulatively have a significant effect on the human environment and which have been found to have no such effect in procedures adopted by a Federal Agency in implementation of these regulations (§1507.3) and for which, therefore, neither an environmental assessment nor an environmental impact statement is required."12 While each Agency has flexibility in implementing their own Categorical Exclusions, the CatEx vary greatly among Agencies, making the permitting on broadband uses on the public lands easier for some Agencies and more difficult for others. 13 Better aligning and using CatEx, and utilizing programmatic Environmental Assessments when permitting on Federal land, could reduce permitting time and cost while creating consistency for industry and maintaining appropriate environmental review.

Streamline Federal Permitting Workstream Action Plan and Key Milestones

The following Agency actions will be implemented (see Appendix A for a timeline):

1. Develop a Common Application Form

Provide support to GSA as it revises the common application form that the Federal Agencies use to evaluate requests to site communications facilities on Federal property as outlined in Executive Order 13821, "Streamlining and Expediting Requests to Locate Broadband Facilities in Rural America."14

Common Application Form and Quarterly Metrics GSA has collaborated with the USDA, DOI, DOT, DHS and NTIA to revise the current SF299 Application for Transportation and Utility Systems and Facilities on Federal Lands to expand its use to include wired and wireless antenna installations and to be more responsive to stakeholder needs. When the revised SF-299 is approved for official use, it will replace the GSA common application

form for telecommunication permit requests. By April 2019, after the revised form is cleared, all land-managing Agencies will use the revised form for telecommunication permitting projects. Starting October 2018, all propertymanaging Agencies will provide GSA with quarterly reports on permitting applications, including the number of applications received, the number approved, the number rejected, the basis for any rejection, and the number of working days each application was pending before being approved or rejected. This data will allow Agencies to work with stakeholders to continue to improve Agency responsiveness.

2. Create One-Stop for Broadband Permitting Information

Consolidate permitting information and create a one-stop location for information about Federal permitting of broadband infrastructure on NTIA's BroadbandUSA website, updating that site as improvements are made across all Agencies and processes.

Broadband Permitting Workflows

By March 2019, NTIA will publish flow-charts reflecting current permitting workflows for most common asset types on the BroadbandUSA website. This will include land managed by DOI's BLM, buildings managed by GSA, and towers owned or managed by DOI.

One-Stop Shop for Permitting Information

By January 2020, NTIA will update permitting information on BroadbandUSA website to reflect results of workstream activities.

3. Harmonize and Streamline Regulations and Policies

Identify opportunities to modify laws, regulations, and policies governing the permitting process for the siting of telecommunications facilities on Federal lands that reduce the regulatory burden on applicants, speed deployment, decrease costs, and provide incentives for broadband investment.

Cross-Agency Analysis and Changes to Streamline Policies

By summer 2019, the workstream will complete its cross-Agency analysis of processes, fees, regulations, and rules. While some actions may be implemented immediately, others will be implemented over time in accordance with Department policies and existing statutes. Agencies will convey updated process information to NTIA for display on the BroadbandUSA website.

Streamline CEQ Environmental Reviews

By June 2019, CEQ, working with the OMB, and in consultation with the Federal Permitting Improvement Steering Council (FPISC) and other Federal Agencies, will implement a One Federal Decision process to coordinate the environmental review of major infrastructure projects.

Ensure Fee Transparency and Consistency

By summer 2019, the workstream will complete its cross-Agency analysis of processes, fees, regulations, and rules. Where possible, Agencies will harmonize or standardize fees associated with telecommunications facilities permitting including: fees related to application processing, security deposits, performance bonds, and rents. Agencies will identify actions needed to retain collected fees to improve the Federal permitting process and will improve transparency by making fee and process information available on Agency websites.

Streamline Permitting on DoD Lands

By November 2019, DoD will streamline its permitting processes and timelines to incent and inform private-sector deployment of broadband on DoD properties across all Military Departments. While security constraints limit access to some assets, DoD maintains a significant real estate footprint in each State with control over 85,000 buildings and 6 million acres of land at over 1,000 locations.

Streamline Application Processing on DOI/BLM Lands

By February 2019, the BLM will publish a proposed rule updating and streamlining the application process regulations. The proposed rule would establish new customer service standards (processing times), establish a standard authorization period, simplify cost recovery for larger scale projects, and allow for automatic renewals and assignments for existing authorizations.

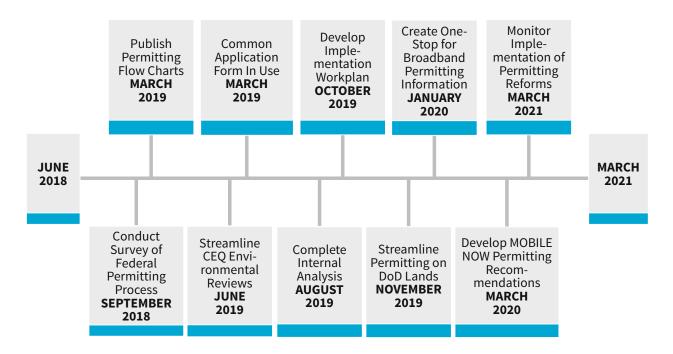
4. Implement Provisions in MOBILE NOW Act

Facilitate Agency support and implementation of Federal permitting requirements in the MOBILE NOW Act including: (1) collaborating with GSA to create uniform forms across Agencies; (2) amplifying best practices for Agency implementation of the 270-day application response; and (3) supporting provisions to streamline broadband facility applications.

Streamline MOBILE NOW Permitting

By March 2020, NTIA will collaborate with Federal Agencies (DOI, USDA, DOD, DOT, OMB, and GSA) working to implement the Streamlining Broadband Facility Applications section of the MOBILE NOW Act which will include: procedures for tracking applications; speeding application reviews and approvals; expediting renewals; and prioritizing or streamlining permits for construction in a previously disturbed right-of-way.

STREAMLINE FEDERAL PERMITTING | MILESTONES



Complementary Actions (completed)

Streamline Historic Preservation Reviews

In May 2017, the ACHP issued a program alternative developed and requested by the DHS and other property-managing Agencies to streamline procedures for carrying out historic preservation reviews regarding permitting and approval of next-generation technology/5G projects on Federal lands and properties. The alternative provides measures that will expedite and improve the consistency of reviews these Agencies carry out pursuant to Section 106 of the National Historic Preservation Act.

Policy Guidance on Highway ROW

In June 2017, the Federal Highway Administration (FHWA) issued guidance on Utility Accommodation and Other Uses of Highway Right-of-Way which builds on the December 2012 guidance on Accelerating Broadband Infrastructure Deployment. DOT's guidance includes best practices for use of ROW for utilities, Dig Once, and Fair Market Value of ROW. The guidance encourages States to leverage Intelligent Transportation Systems (ITS) projects to advance broadband infrastructure partnerships.

National Billing Team for DOI/BLM Facilities

In 2015, the DOI/BLM implemented a National Billing Team for communications (wireless) uses. This team will continue to create efficiencies for all billing related processes for approximately 3,800, providing lease/permit holders with a single point-of-contact for the Agency and streamlining the billing process for the Agency and partners.

National Billing Team for Communications Use Authorizations on National Forest System Lands

In October 2017, the Forest Service implemented a National Billing Team for communications (wireless) uses. This team handles all billing-related processes for approximately 3,900 wireless authorizations, providing lease/permit holders with a single point-of-contact for the entire Agency and streamlining the billing process for the Agency and partners.

Streamline RD Environmental Reviews

In July 2018, USDA Rural Development (RD) finalized and executed a Nationwide Programmatic Agreement intended to streamline the environmental review process for RD-funded broadband projects.

USFS Implements MOBILE NOW Act

In August 2018, the Forest Service issued an amendment to Forest Service Handbook (FSH 2709.11, Chapter 90) that implements section 6409 of the Middle Class Tax Relief and Job Creation Act of 2012 (47 U.S.C. 1455), as amended by section 606(a), division P, Consolidated Appropriations Act, 2018 (Pub. L. No. 115-141, 132 Stat. 1011).

Streamline Historic Preservation and Environmental Review of Communications **Facilities on Non-Federal and Non-Tribal Lands**

In March 2018, the FCC adopted new rules streamlining the environmental and historic preservation review processes to facilitate the deployment of next-generation wireless facilities. The FCC's action focused on ensuring that its rules properly address the differences between large and small wireless facilities.

Leverage Federal Assets for Broadband Deployment

Objective

Federal assets such as tower facilities, buildings, and land should be made available for use in deploying broadband infrastructure as much as possible to lower the cost of broadband buildouts and encourage private-sector companies to expand telecommunications infrastructure, especially in rural America.

Background

Our Nation's telecommunications infrastructure is made of networks of cables, fibers and wires, cell towers, routers, switches, and satellites. While the bulk of these assets are privately owned, public sector support can bolster broadband deployment and continued innovation.

Wireless services use Federally licensed and unlicensed radio spectrum. Fiber optic and coaxial cables traverse public rights-of-way, connect to poles, or ride through conduit along streets

and highways. In addition to the Federal Government's critical role in freeing up spectrum for commercial use and providing rights-of-way on Federally-managed property, other Federal assets could be of more use for network builders and service providers. Assets that could be leveraged include "asset classes" such as towers, poles, buildings, land, and rights-of-way.

GSA owns or leases over 8,300 assets (buildings, land and structures) in more than 8,000 cities nationwide. DOI manages approximately 500 million acres of land and over 7,000 towers. Over a dozen other agencies own or manage assets that could be leveraged to improve our Nation's telecommunications infrastructure. With increased demand for wireless 5G, pointto-point wireless, and fiber-to-the-home, carriers need more access to more assets and consistency in how they locate, permit, and manage those assets.

Leverage Federal Assets Workstream Members						
211112	Department of Agriculture	Department of Energy	Environmental Protection Agency			
CHAIRS: Department of the Interior	Department of Commerce (NTIA)	Department of Homeland Security	Department of Veterans Affairs			
General Services	Department of Defense	Department of Housing and Urban Development	National Aeronautics and Space Administration			
Administration	Department of Transportation	Office of Management & Budget				

Workstream Members

Under leadership from DOI and GSA, the leverage Federal assets workstream includes representation from all major asset-holding Agencies in the Federal Government and from additional supportive Agencies.

Challenges and Barriers

The more common Federal assets of roads and land are regularly leveraged to support commercial network deployments, but nontraditional resources can also be used. While the Federal Real Property Council (FRPC) provides policy oversight and guidance on Federal real property management and maintains a database of real property under the custody and control of Executive Branch Agencies, the rules and regulations that promote commercial use differ from Agency to Agency and across the asset classes. Some of the newer network technologies require increased equipment density so carriers are looking for more access, coordinated rights-of-way, fair fees, and fast approvals.

Agencies must also consider applicable laws, regulations, and policies related to national security, critical infrastructure, the environment, and historic preservation when determining the use of assets for commercial use.

Existing land patterns and land use planning can also be an obstacle to rural broadband development. Much of the public lands administered by the Federal Government are available for broadband infrastructure development unless there is a designation restricting the development (primarily wilderness and wilderness study areas, where development is precluded). Other land use designations, such as wilderness areas, national monuments, areas of critical environmental concern (ACECs), and other surface-limiting stipulations or buffer zones, can make development and permitting cumbersome. Incorporating broadband uses in land use planning could prevent restrictive designations while balancing the overall needs of multiple use and conservation stewardship.¹⁵

Leverage Federal Assets Workstream Action Plan and Key Milestones

The following Agency actions will be implemented (see Appendix A for a timeline):

- 1. Make DOI-Managed Towers Available for Broadband
 - An important first step towards achieving the goals of this workstream is reflected in DOI's report to the President delivered on July 06, 2018, to comply with the Presidential Memorandum: "Supporting Broadband Tower Facilities in Rural America on Federal Properties Managed by the Department of the Interior." ¹⁶ In the report, DOI analyzed the assets within its purview (Federal lands and towers owned/managed by the Agency) and developed a map to depict those assets. DOI will amplify and communicate the report findings, inventory, and map to constituents and, as co-chair of the Leverage Federal Assets workstream, will lead interagency efforts to leverage this report to drive additional policy changes.
 - **Publish Map of DOI Towers Available for Commercial Use** Concurrent with the release of this report, DOI is publishing a new mapping tool - the Joint Overview -Established Locations (JOEL) map - with over 7,000 tower site locations included. These towers, primarily located in rural areas, will be visible to service providers looking to locate equipment on Federal property as they expand wireless and wireline broadband networks.
 - Establish a Workstream Subgroup to Expand Data Availability on the **JOEL Portal**

Building on the success of JOEL, the workstream will lead efforts to set data standards for Federal assets that the private sector can leverage and publish them in a single, easy-to-use portal. As part of this effort, in November 2018, GSA provided published public data set from the Federal Real Property Profile (FRPP) management system for integration into JOEL. A data portal subgroup, led by DOI, will oversee an evolving process that will shape the data provided to the private sector based on continuous industry engagement to ensure pertinent Federal data is provided in a timely manner to assist with broadband deployment.

2. Identify Additional Federal Assets

Engage stakeholders and Agencies to identify the types of Federal assets or classes of assets that private-sector companies could use to expand broadband infrastructure in America.

 Cross-Agency Assessment of Potential Assets for Telecommunications In September 2018, the Leverage Federal Assets workstream completed the cross-Agency survey of assets managed by DOI, DoD, GSA, USDA, NASA, VA, and DOE and identified additional asset classes that could be leveraged to further support telecommunications networks.

Assess Viability of Leasing DOE Dark Fiber

By April 2019, the Western Area Power Administration (WAPA) and Southwestern Area Power Administration (SWPA) in consultation with the DOE of Electricity, will complete a feasibility assessment plan to determine if WAPA and SWPA excess fiber can be leased to their customers and broadband service providers. By December 2019, WAPA and SWPA will complete the feasibility assessment.

3. Harmonize and Streamline Regulations and Policies

For each type of asset, identify the laws, regulations, and policies that govern commercial use of those assets. Where barriers do not exist, make assets easily available for telecommunications use. If laws, regulations, or policies inhibit public and/or commercial use, Agencies will develop recommendations to modify as appropriate.

Recommendations to Harmonize Policies That Govern Access to Assets By August 2019, the workstream will recommend any rule, regulation, and/ or policy changes that facilitate increased private use of Federal assets for telecommunications, including those assets managed by DOI, DoD, GSA, USDA, NASA, DOE, and VA.

4. Create Inventory of Federal Assets

Build an inventory of Federal assets that are potentially available for public and/or commercial use to support broadband deployment. Inventory should include asset type, geo-location, owner, and links to processes for gaining authorization. This strategy requires coordination with the Permitting Workstream.

Best Practices for Asset Inventory Mapping

By March 2019, DOI will leverage the JOEL platform and lessons learned to develop and share best practices on asset inventory mapping and management with workstream members.

Mechanism in Place to Update DOI Maps

By June 2019, DOI will develop a mechanism to allow other agencies to provide updates to the DOI map.

Standardized Process for Cross-Agency Asset Inventory

By August 2019, the workstream will complete the cross-Agency inventory study that includes assets managed by DOI, DoD, GSA, USDA, NASA, VA and DOE; develop recommendations for creating a standardized process to make information about Federal assets accessible for public and/or commercial use; and publish final recommendations.

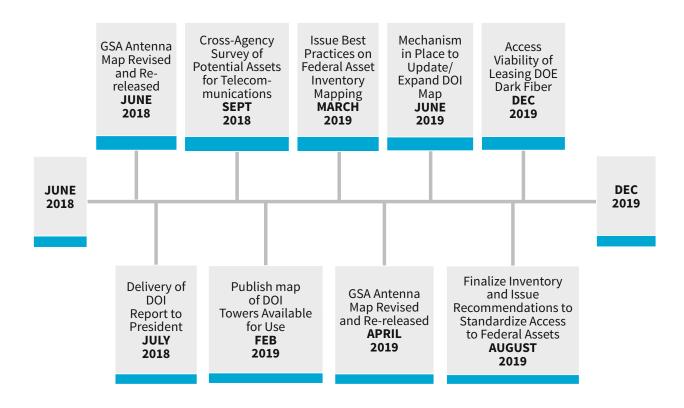
5. Make Information Publicly Available

Make Federal asset inventory information available to the public and/or commercial providers where feasible. This may include using geo-spatial data to map assets, expanding on the DOI GIS mapping tool, providing an Application Programming Interface (API), or making available via **Data.gov**.

GSA Makes MOBILE NOW Asset Inventories Publicly Available

Agencies will report new data elements to the FRPP database in January 2019, in accordance with the MOBILE NOW Act. By April 2019, GSA will publish this information. This will provide greater visibility to those assets so that service providers can better ascertain their capability for telecommunications uses.

LEVERAGE FEDERAL ASSETS | KEY MILESTONES



Complementary Actions (completed)

- **GSA Buildings and Antenna Sites Map Revised and Re-released** On June 7, 2018, GSA updated and re-released a map of GSA buildings and antenna sites. The map displays all GSA-owned buildings and lands where a commercial antenna installation might be sited. It also contains Agency points-of-contact and several layers of data useful to broadband deployment. For example, it offers visibility into the location of national parks, protected wilderness areas, and lands of Tribal significance.
- **RFC on MOBILE NOW Asset Interests for Communications Facilities** On July 6, 2018, GSA issued a Request For Comment on New Federal Real Property Profile Information for Communications Facility Installation, in accordance with section 608 of the MOBILE NOW ACT, asking stakeholders to identify the criteria that make Federal real property capable of supporting communication facility installations; the types of data that should be submitted to the Federal Real Property database; and locations that may be a higher priority based on market needs or gaps in various communication services, such as broadband or cellular services. GSA, in collaboration with Agencies and the private sector, reviewed the comments received and developed reporting guidance that was issued in October 2018.

Maximize the Impact of Federal Funding

Objective

Federal funding for broadband should target areas of need, be simple for broadband project sponsors to identify funding opportunities, and leverage State/local policies and programs to make better and more efficient use of Federal dollars.

Background

With increased demand for broadband and improvements in technology, large and small telecommunications and electric companies, cooperatives, and governments are investing in broadband infrastructure. While the bulk of this investment comes from private capital, there are occasions where Federal sources are needed to solidify the business case for private-sector expenditures. These Federal incentives are especially important in high-cost rural areas where it is difficult for carriers to build a sustainable case for capital expenditures and ongoing operations. Federal funding for broadband comes from a range of sources; for example, the Universal Service Fund, a fee-based fund administered by the FCC (an independent regulatory Agency) and USAC, a nonprofit corporation.

Universal Service Fund

The largest and most sustained Federal funding for broadband is managed through the Universal Service Fund (USF) – a multi-billion-dollar annual program that assesses fees on certain telecommunications providers (and their customers) to subsidize telephone service to low-income households and high-cost areas. The Telecommunications Act of 1996 expanded the traditional goal of universal service – affordable, nationwide telephone service to include broadband Internet access. It also expanded the program to include funding for rural healthcare providers and eligible schools and libraries. The FCC has continued to modernize funding rules to support rural broadband, WiFi in schools and libraries, and cellular services. In August 2018, it completed an auction to award \$1.49 billion over 10 years to provide fixed broadband and voice services to over 700,000 locations in eligible high cost areas. In December 2018, the FCC provided additional funding to expand broadband deployment and make broadband service more affordable in rural areas at faster speeds that will better meet the needs of consumers and businesses. In 2017, the Universal Service Administrative Company (USAC) which administers the USF distributed almost \$9 billion including: almost \$4.7 billion to carriers serving rural or 'high cost' areas of the country, \$1.3 billion for lifeline services supporting low-income people, \$2.6 billion in subsidies for schools and libraries, and \$571 million supporting rural healthcare (https://www.fcc.gov/document/fcc-increasesfunding-rural-telehealth).

Within the Executive Branch, USDA's Rural Development (RD) manages the primary loan and grant programs that support rural broadband deployment. USDA RD provided \$506 million to broadband projects in FY 2017, which leveraged an additional \$254 million in private-sector investment.

Other Agencies have also made broadband an allowable expense within their current funding streams. Funding for broadband infrastructure may be supported by block and formula grants provided through programs managed by HUD and the DOE. The Economic Development Administration (EDA), Appalachian Regional Commission (ARC), and DRA have identified broadband as an eligible expense and a priority for economic development. These funding streams are critical. They can catalyze private investment and ensure that services are sustained and upgraded over time.

These broadband investments, designated critical infrastructure of the United States, should be designed with stronger security measures. The American public will increasingly rely on broadband networks to protect their sensitive personal, financial and health information; therefore, it should be a priority to build security into these new broadband infrastructure from the beginning – rather than later retrofitting them at greater risk and cost.

Workstream Members

Under leadership from the Departments of Agriculture and Commerce's NTIA, the Federal Funding Workstream includes representation from all major grant and loan-making Agencies in the Executive Branch as well as the Federal Communications Commission.

Federal Funding Workstream Members							
	Appalachian Regional Commission	Federal Communications Commission	Institute of Museum & Library Services	Office of Management and Budget			
Chairs: Department	Delta Regional Authority	Department of Health & Human Services	Department of the Interior	Department of Treasury			
of Agriculture Department of Commerce	Department of Education	Department of Homeland Security	Department of Labor	Department of Veterans Affairs			
(NTIA)	Environmental Protection Agency	Department of Housing & Urban Development	National Science Foundation				

Challenges and Barriers

It is vital that programs and agencies leverage the limited Federal funding for broadband to stimulate private-sector investments. These funding programs face three challenges:

Imprecise Broadband Availability Data

Many Federal and State grant and loan programs base program eligibility on the FCC Form 477 data submitted twice yearly by service providers. While this is a valuable dataset, more comprehensive and granular data would provide an improved foundation upon which to base program decisions.¹⁷ For example, existing reporting definitions consider a census block served if a single household or business can be served. If carrier deployment data overstates availability, that could limit funding eligibility for those areas. This is most likely to affect large rural census blocks where population is sparse and additional funding is most needed. With limited funding available, getting better data to target investments to under and unserved areas remains a high priority across Federal and State Agencies.

- In an ongoing rulemaking proceeding, the FCC is currently evaluating options for collecting more granular fixed deployment data and more precisely defined mobile deployment data. In addition, in the context of refining the areas eligible for its Mobility Fund II auction, the FCC conducted a one-time collection of standardized, up-to-date 4G LTE coverage data from mobile wireless providers, and is carrying out a challenge process, all of which will inform the FCC's efforts to revise its collection of mobile broadband deployment data in the longer term.
- **Limited Coordination Across Federal Programs and With State/Local Governments** Given that programmatic objectives are closely aligned, especially in trying to expand broadband to unserved and underserved areas of the country, there is an opportunity to better leverage the strengths and resources of various Federal Agencies to expand broadband deployment. For example, since the FCC and USDA manage the most significant ongoing grant, loan, and subsidy programs supporting broadband infrastructure, coordination is critical to ensure that investments are not only complementary, but also that they maximize the impact of limited Federal funds.

USDA Grants and Loans Focus on Capital for Deployment

While USF Connect America funding provides subsidies for ongoing operations in addition to deployment; correspondingly, the availability of USF funding can support the business case of a USDA loan applicant. The FCC has shared input with USDA on FCC performance standards and CAF auction results to support the design of USDA's pilot program and has made information about specific locations served through the CAF program publicly available. 18 These types of activities could be further institutionalized and expanded to promote similar coordination with additional Federal Agencies, within the statutory limits that the FCC may face as an independent Federal Agency.

Perhaps the largest challenge and opportunity for coordination is between evolving State and Federal programs. While not all States have broadband programs, more than two-thirds of the States have dedicated employees focused on broadband. Federal and State programs have different requirements, rules, and funding levels. Federal program officers would benefit from local insights provided by State leaders. Since lead times for State grants can be shorter than Federal programs, States can sometimes provide bridge funding or fund services and equipment that are outside of the scope of Federal funds. Given that State and Federal Agencies each have limited funds to invest, all parties have an interest in improving communication and coordination. However, there are no formal mechanisms in place to promote this objective.

Inconsistent Accountability Measures for Recipients of Investments

Part of the Federal stewardship responsibility is to invest dollars wisely and ensure that private partners deliver contracted or committed services to communities that would otherwise not have sufficient broadband access. Performance metrics vary across programs and too few of the programs measure the direct service outcomes such as the number of miles of fiber constructed, number of access points installed, build-out speeds, household/businesses passed, community anchors connected, implementation timeline, and take-rate. Better accountability is needed to ensure that Agency owners, partners, and the public experience the results of these investments.

Federal Funding Workstream Action Plan and Key Milestones

The following Agency actions will be implemented (see Appendix A for a timeline):

- 1. Provide One-Stop for Broadband Funding Information
 - Provide Agency content to NTIA's BroadbandUSA website to promote public access to Federal broadband information and improved interagency coordination of resources.
 - **NTIA Updates Website With Latest Federal Funding Information** By March 2019, NTIA will update the BroadbandUSA website to represent the latest information on broadband funding, as provided by Agencies by September 2018 through the workstream survey.

2. Improve Broadband Availability Data

Recognizing the importance of robust and accurate broadband availability data, Congress directed NTIA to augment the national broadband map with additional information on broadband availability gathered by States and third parties. This will support efforts to target and coordinate Federal investment to areas of greatest need.

- **Data Acquisition and Platform Development** Starting in February 2019, NTIA will acquire the mapping platform, technologies, and geospatial services for the broadband availability map.
- **Pilot Broadband Mapping Tool to Better Target Funding** By September 2019, NTIA will introduce a broadband mapping tool that uses additional data sets, beyond the FCC 477 data.

3. Improve Efficacy and Reach of Federal Broadband Funds

Use the USDA RD broadband loan and grant programs and other programs, such as ARC, DRA, EDA, and other Executive Branch agencies' funding, to develop and pilot policies and coordination strategies that increase the efficacy and reach of Federal funds.

USDA Grant and Loan Pilot

USDA is currently developing guidelines for the Rural e-Connectivity Pilot Program (the ReConnect Program)¹⁸ that will catalyze private investment and bring broadband to unserved rural areas of the country. The new program provides a unique opportunity to develop new methods to leverage Federal funds to increase private investment in broadband services to as many rural American homes, businesses, farms, schools and health care facilities as possible. USDA sought input from stakeholders through a Federal Register Notice of Inquiry for Public Comment and meetings with stakeholders. USDA received over 280 comments from the public through a Notice of Inquiry. USDA is also participating in listening sessions in rural communities and partnering with NTIA to host regional meetings related to the pilot. USDA expects to start accepting applications in the Spring of 2019, with distribution of grants and loans beginning in the second half of 2019.

Improve Coordination among Federal Broadband programs Building on existing coordination mechanisms between FCC and USDA, a workstream subgroup will explore opportunities to institutionalize the exchange of programmatic and policy information between the FCC, USDA, NTIA, ARC, DRA, EDA and additional Federal Agencies that support broadband programs.

4. Strengthen Program Consistency and Collaboration

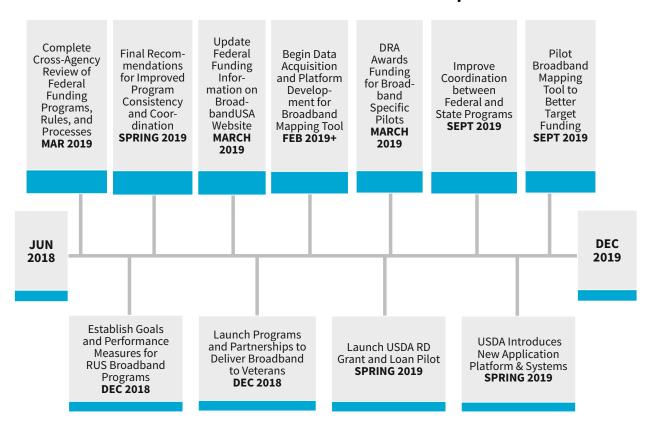
Survey Federal Agencies to understand the scope and nature of broadband funding programs. Identify funding criteria, potential synergies, points of coordination, and accountability measures. Understand current limitations (e.g., statutory or regulatory) on coordination and collaboration of Federal broadband programs and recommend changes to promote consistency in program criteria and reporting requirements for transparency and coordination and ease of use.

- **Complete Cross-Agency Review of Funding Programs, Rules and Processes** By March 2019, the workstream will complete an initial analysis of broadband funding sources including: funding parameters, program coordination options, and other statutory and regulatory requirements.
- **Recommendations for Improved Program Consistency and Coordination** By Spring of 2019, the workstream will complete its analysis and develop policy recommendations for improving cross-Agency coordination on broadband funding. Program changes and implementation will occur throughout 2019.

- 5. Modernize Accountability Measures to better track the impact and value of investments This may include considering outcome-based measurements, collecting longitudinal data, and/or developing consistent measures across programs.
 - **Establish Goals and Performance Measures for Rural Utilities Service Broadband Programs** USDA has established concrete goals across RUS infrastructure programs that reflect the role of the Federal Government in facilitating private investment in broadband infrastructure. By December 2018, the Agency will assess its current evaluation methods to determine additional performance metrics to align to its program goals. These new goals and metrics will ensure that Federal funds provide the greatest possible benefit to taxpayers and rural communities.
 - **USDA Introduces New Application Platform and Systems** By the Spring of 2019, USDA RD will complete a full assessment of customerfacing systems and launch new application and processing systems designed to improve responsiveness and customer support.
- 6. Engage Private Sector, State, Local, and Tribal Partners to identify successful models to leverage Federal funding, incentivize private investment, and create stronger public-private partnerships.
 - **Improve Coordination Between Federal and State Programs** Through its work with the State Broadband Leaders Network (SBLN), NTIA facilitates coordination between State-level officials who support programs that promote broadband planning and deployment in unserved and underserved areas of their States. These State broadband leaders experience the need for increased coordination and information sharing with Federal funders. NTIA will convene discussions with State and Federal funding entities to identify opportunities for program alignment and coordination, and will issue recommendations by September 2019.
 - **Host Summit to Improve Broadband Connectivity on Tribal Lands** By Spring 2019, the DOI Bureau of Indian Affairs, the U.S. Department of Education (ED), and the Institute of Museum and Library Services will work with Native American communities and other Federal Agencies to develop and convene a Tribal Broadband Summit. The Tribal Broadband Summit will connect community leaders with information, resources, and supports and identify opportunities to leverage public and private sector commitments to close the connectivity gap in schools and libraries on Tribal lands.
 - **FCC Collaborative Plan to Improve Broadband in Tribal Lands** By Spring 2019, in conjunction with the Tribes, the FCC will submit a report evaluating broadband coverage in Indian Country and on land held by a Native Corporation pursuant to the Alaska Native Claims Settlement Act. The FCC must complete a rulemaking to address unserved areas identified in the report by September 2020.

- **New Partnerships to Promote Broadband Access for Veterans** By December 2018, the VA will announce partnership commitments with the private sector to expand home broadband access and adoption for veterans.
- **FCC Report to Congress on Broadband Access for Veterans** By Spring 2019, the FCC will prepare and submit a report to Congress on promoting broadband Internet access for veterans, especially low-income veterans and veterans residing in rural areas.

MAXIMIZE IMPACT OF FEDERAL FUNDING | MILESTONES



Complementary Actions (completed)

Promoting Broadband Research

In January 2017, NSF and NTIA published the National Broadband Research Agenda (NBRA), identifying research priorities and opportunities for greater cross-Agency coordination on broadband-related research. As a result, the Networking & Information Technology Research & Development (NITRD) program created a multi-Agency task force to continue to coordinate and advance Federal research on broadband. The task force is currently developing a resource guide that will catalog all broadband-related Federal R&D programs.

- **Clarifying Broadband Funding Eligibility Within DOL Programs** In January 2017, to ensure that American Job Centers have the broadband connectivity required to support clients with online job research, networking, training, and applications, DOL issued clarification that broadband services are allowable administrative expenses when deployed within One Stops and American Job Centers. Guidance issued via two Training and Employment Guidance Letters (TEGL) (Infrastructure Funding of the One-Stop Delivery System and One Stop Operating Guidance) as well as supplemented with staff webinars and "Questions and Answers" posted on the Workforce Innovation and Opportunity Act Resources webpage.
- **USDA RD Grant and Loan Programs Changes to Stimulate Private Investment** In March 2018, USDA RD completed a review of all broadband-related grant and loan programs and instituted changes to stimulate private investment. Initial results are promising. In FY 2017, USDA Rural Development received 48 applications for \$90 million for the Community Connect Grant Program. After changing the eligibility speed, in FY 2018, USDA received 124 applications for \$224 million.
- BroadbandUSA Provides a One-Stop Shop for Federal Information on Broadband Launched in April 2018, the new **BroadbandUSA** provides a portal for industry, government, nonprofits, businesses, and consumers to access information about Federal broadband programs and services to search for funding by Agency and by recipient type.
- **Stakeholder Outreach on Broadband Availability Mapping** In May 2018, NTIA issued a Request for Comment (RFC) in the Federal Register to better understand what resources and datasets could be used to improve broadband availability data and mapping. All comments received through July 2018, along with input from States, carriers, nonprofits, and trade associations, will be used to create a broadband mapping tool that uses additional data sets to target and coordinate Federal investments to areas of greatest need.
- **Promoting Broadband in New Markets Tax Credit Program** In June 2018, Treasury reinforced broadband eligibility guidance in application materials for the New Markets Tax Credit Program, building on initial guidance issued in 2015.
- Forest Service Collaborates to Expand Rural Broadband In June 2018, Forest Service partnered with the Lyndon B. Johnson Job Corps Civilian Conservation Center, managed by the Forest Service in Franklin, North Carolina, to fund a broadband project that will deliver broadband to both the Job Corps Center and the local community. This project is a good example of a coordinated effort and shared financial commitment by local governments, local businesses, and the Forest Service.

USDA Engages Stakeholders to Design \$600M ReConnect Program

In August 2018, USDA RD published a Notice of Inquiry requesting input on the new \$600 million broadband grant and loan pilot program. The public comments, totaling over 280, were considered in the development of the pilot program. The program is designed to support the expansion and modernization of broadband in unserved areas of America by private-sector carriers. It will utilize the authorities Congress provided when establishing the program to complement traditional RUS programs with more novel approaches to support broadband deployment.

USDA Toolkit and Cross-Program Funding Guide

In February 2019, the USDA published a "customer toolkit" of USDA resources that support e-Connectivity to help stakeholders identify the USDA resources that best support their project needs in research, planning, construction, equipment, and use of broadband. This content will also be accessible via the BroadbandUSA website.

ARC Awards Grants in Coal-Impacted Counties

In September 2018, ARC awarded grants for broadband deployment in distressed counties in Central Appalachia that are negatively impacted by the downtown in the coal industry. ARC continues to consider broadband as an eligible expense across all ARC grant programs (totaling over \$100 million in FY 2018).

Broadband Is Eligible Expense in FY18 EDA Programs

Commerce's EDA, in recognition of the criticality and potential benefits of greater Internet access, has amended its Federal funding guidance to include broadband projects as an eligible expense. This will immediately apply to the \$184.5 million EDA was appropriated in 2018 to provide economically distressed communities and regions with comprehensive and flexible resources to address a wide variety of economic needs. In addition, EDA has ensured that broadband is an eligible expense for the \$587 million in grants EDA will award to eligible entities to address economic challenges in disasterimpacted areas. Through this program, EDA can support disaster recovery planning strategies as well as the implementation of disaster recovery projects. Broadband is a possible project activity for economic recovery or resiliency under the Economic Adjustment Assistance (EAA) program.

Additional Agency Actions in Support of the Initiative

Beyond the three workstreams that are the focus of this report, Agencies across the Federal Government continue to integrate broadband into their programs and projects in furtherance of the mission of the Initiative. These Agency commitments are summarized in Appendix B with a few highlighted here:

- NTIA and the U.S. Census Bureau are introducing new detailed information on computer and Internet use across the country with detailed information at the neighborhood level, as well as demographic analysis and trend data.
- NSF continues to champion Internet innovation through the U.S. Ignite application summit and the new NSF Wireless Innovation Networked Society (NSF WINS) challenge.
- ED is expanding its national survey to measure progress on the effective use of technology to improve learning and to better understand how digital access influences equity and civil rights.
- USDA is conducting a new study on the economic benefits of precision agriculture and the DOL is conducting new research to help better leverage technology-based learning in their service portfolio.
- A number of Agencies are collaborating to improve access to telemedicine, leverage Federal funds to improve connectivity at health clinics, and map the relationship between broadband access and health outcomes.
- HUD continues to work with partners to promote broadband access through the ConnectHOME program while IMLS works with libraries and Tribes to create a "Digital Literacy Corps."
- FCC is creating a Connected Care Pilot Program to support the delivery of telehealth services to low-income Americans.

NEXT STEPS

Taking steps to strengthen and improve America's broadband infrastructure is vital to our country's competitiveness and quality of life. We must make it easier for local leaders and businesses to work with Federal Agencies. We need to free up resources and encourage private investment across all sectors of the economy. This Administration believes that focus, commitment, and alignment across Agencies will deliver results. This report is the roadmap for that action and shows how Federal Agencies are working together and with partners to improve broadband in America.

The Administration will maintain our focus on America's broadband infrastructure to:

- Monitor the implementation of these commitments and share the results publicly with stakeholders,
- Continue to look for additional actions that can be taken to streamline Government processes, free up resources, and improve the impact of Federal investments.
- Continue to engage with and listen to the American people to ensure that our country is more connected and more competitive.

The Initiative will issue periodic updates, indicating what actions have been completed, new actions taken, and where changes have been made. If new legislation is needed, the White House will work with Congress to propose those changes. In doing so, the process improvements we describe in this report will bring "government by the people, of the people, for the people" into the 21st century as we work together to bring robust and faster broadband to every person and business across America.

APPENDIX A -AMERICAN BROADBAND INITIATIVE TIMELINES

Streamlining Federal Permitting Workstream

Streamlining Agency permitting processes and driving towards consistent, investment-friendly policies to spur greater deployment

ITEM NO.	RESPONSIBLE AGENCY/ AGENCIES	AGENCY ACTION	COMPLETION TIMELINE
1	DOI and DHS (as workstream leads)	Conduct Survey of Federal Permitting Processes: develop, issue, and complete analysis of a cross-Agency survey regarding the processes and statutes affecting telecommunications permitting on Federal property.	September 2018 (completed)
2	USDA	Streamline USDA Broadband Project Reviews: USDA's Rural Development (RD) will issue program guidance to further streamline broadband project reviews while maintaining compliance with the National Environmental Policy Act and the National Historic Preservation Act.	November 2018 (completed)
3	NTIA	Publish Permitting Flow-Charts: NTIA will publish flow-charts reflecting current permitting workflows for most common asset types on BroadbandUSA website as an initial release of one-stop shop for permitting information. This will include land managed by DOI's BLM, buildings managed by GSA, and towers owned or managed by DOI.	March 2019

	Strean	nlining Federal Permitting Workstream	
ITEM NO.	RESPONSIBLE AGENCY/ AGENCIES	AGENCY ACTION	COMPLETION TIMELINE
4	GSA	Develop Common Application Form and Produce Metrics on Use: In accordance with Executive Order 13821, "Streamlining and Expediting Requests to Locate Broadband Facilities in Rural America," GSA is leading efforts to revise the current SF299 Application for Transportation and Utility Systems and Facilities on Federal Lands to expand its use to include wired and wireless antenna installation, thereby enhancing the usefulness of the form. All land managing agencies will provide GSA with quarterly reports on permitting applications, including the number of applications received, the number approved, the number rejected, the basis for any rejection, and the number of working days each application was pending before being approved or rejected.	March 2019
5	CEQ	Streamline Environmental Reviews: In consultation with OMB, the Federal Permitting Improvement Steering Council (Permitting Council) and other Federal Agencies, CEQ will finalize a "One Federal Decision Process" to coordinate the environmental review of major infrastructure projects.	June 2019
6	USDA, DOI, DoD, DHS, DOT, GSA, FCC, DOC	Based on Cross-Agency Survey, Complete Internal Process Analysis and Identify Potential Changes to Processes, Fees, Regulations, and Rules: Begin implementation of process changes that do not require statutory fixes.	August 2019
7	NTIA (lead), in collaboration with DOI, USDA, DoD, DOT, GSA, OMB	Develop workplan and milestones for Agency implementation of broadband permitting reforms (per MOBILE NOW statute)	October 2019

	Strean	nlining Federal Permitting Workstream	
ITEM NO.	RESPONSIBLE AGENCY/ AGENCIES	AGENCY ACTION	COMPLETION TIMELINE
8	DoD	Streamline permitting on DoD lands: DoD will streamline its permitting processes to identify potential real property assets and standardize best DoD business processes across all military departments to ensure a targeted 270 day standard for industry-installation engagements. The process will result in revised permitting standards and issuance of guidance.	November 2019
9	NTIA	Create One-Stop for Broadband Permitting Information to minimize Government hurdles in permitting. Agencies will convey process and fee information to NTIA for display on the BroadbandUSA website.	January 2020
10	NTIA (lead), in collaboration with DOI, USDA, DoD, DOT, GSA, OMB	Develop Recommendations to Streamline Application Processes (per MOBILE NOW statute)	March 2020
11	NTIA (lead), in collaboration with DOI, USDA, DOD, DOT, GSA, OMB	Monitor Implementation and Assess Effectiveness of Recommended Actions to Streamline Application Processes. (per MOBILE NOW statute)	March 2021

Leverage Federal Assets Workstream

Identifying federal assets and making them available to the private sector to deploy broadband in an easier and more cost-effective manner

ITEN NO.	RESPONSIBLE AGENCY/ AGENCIES	AGENCY ACTION	COMPLETION TIMELINE
1	DOI and GSA (as workstream leads)	Conduct Cross-Agency Survey of Potential Assets for Telecommunications: The workstream will issue and agencies will complete a cross-Agency survey of assets managed by DOI, DoD, GSA, USDA, NASA, VA, and DOE to identify additional asset classes that could be leveraged to further support telecommunications networks.	September 2018 (completed)
2	GSA	Augment JOEL Map With Additional Federal Data: GSA will provide published public data set from the FRPP management system to DOI for integration into JOEL map.	November 2018 (completed)
3	DOI	Publish Map of DOI Towers Available for Commercial Use: DOI will publish a new mapping tool – the Joint Overview -Established Locations (JOEL) map – with over 7,000 tower site locations included.	February 2019
4	DOI	Best Practices for Asset Inventory Mapping: DOI will develop and share best practices on asset inventory mapping and management with workstream members to encourage use of JOEL platform.	March 2019
5	GSA	GSA Will Publish MOBILE NOW Asset Inventories: By April 2019, GSA will publish the information that Agencies will report to the FRPP database in January 2019, in accordance with the MOBILE NOW Act. This will provide greater visibility to those assets so that service providers can better ascertain their capability for telecommunications uses.	April 2019

	Le	everage Federal Assets Workstream	
ITEM NO.	RESPONSIBLE AGENCY/ AGENCIES	AGENCY ACTION	COMPLETION TIMELINE
6	DOI	Develop Mechanism to Provide Interagency Content to DOI Map: DOI will develop a mechanism to allow other agencies to provide updates to the DOI map.	June 2019
7	DOI and GSA (as workstream co-chairs)	Finalize Inventory and Issue Recommendations to Create a Standardized Process and Increase Access to Federal Assets: The inventory will include asset type, geo-location, owner, and links to processes for gaining authorization. This cross-Agency effort will expand the available inventory and information on Federal assets that are potentially available for public and/or commercial use to support broadband deployment. The workstream will also recommend rule, regulation, and/or policy changes that facilitate increased private use of Federal assets for telecommunications.	August 2019
8	DOE	Assess Viability of Leasing DOE Dark Fiber: By April 2019, the Western Area Power Administration (WAPA) and Southwestern Area Power Administration (SWPA) in consultation with the Department of Energy Office of Electricity, will complete a feasibility assessment plan to determine if WAPA and SWPA excess fiber can be leased to their customers and broadband service providers. By December 2019, WAPA and SWPA will complete the feasibility assessment.	December 2019

	Maximizing the i	Federal Funding Workstream impact of Federal broadband funds through inter	agency
		coordination and policy changes	
ITEM NO.	RESPONSIBLE AGENCY/ AGENCIES	AGENCY ACTION	COMPLETION TIMELINE
1	USDA	Establish Goals and Performance Measures for Rural Utilities Service Broadband Programs: USDA has established concrete goals across RUS infrastructure programs that reflect the role of the Federal Government in facilitating private investment in broadband infrastructure. By December 2018, the Agency will assess its current evaluation methods to determine additional performance metrics to align to its program goals. These new goals and metrics will ensure that Federal funds provide the greatest possible benefit to taxpayers and rural communities.	December 2018 (completed)
2	VA	Launch Pilot Program to Deliver Rural Telehealth to Veterans: The Department of Veterans Affairs' Veterans Health Administration (VHA) is working with Microsoft to pilot new technology that delivers broadband Internet access to more rural places. There are now 12 pilot sites in rural areas across the United States. VHA is preparing rural veteran distribution maps to allow targeting of rural veteran populations.	December 2018
3	VA	New Partnerships to Promote Broadband Access for Veterans: The VA will lead efforts to create partnerships with Federal Agencies, philanthropic organizations, the FCC, and the private sector to expand broadband access and adoption for veterans. VA will host a telehealth summit to broaden veteran Internet access and announce partnership commitments.	December 2018
4	NTIA	Begin Data Acquisition and Platform Development: NTIA will begin to acquire the mapping platform, technologies, and geospatial services for the broadband availability map.	February 2019

		Federal Funding Workstream	
ITEM NO.	RESPONSIBLE AGENCY/ AGENCIES	AGENCY ACTION	COMPLETION TIMELINE
5	USDA and NTIA (as workstream co-chairs)	Complete Cross-Agency Review of Funding Programs, Rules, Processes: The Federal Funding workstream will develop, issue, and complete an analysis of broadband funding sources including: funding parameters, program coordination options, and other statutory and regulatory requirements. The workstream will use the information to develop policy recommendations to better target Federal awards and communicate program details to the public and private sectors.	March 2019
6	NTIA	NTIA Will Update Website with Latest Federal Funding Information: NTIA will update the BroadbandUSA website to represent the latest information on broadband funding, as provided by Agencies through the Federal Funding Workstream survey.	March 2019
7	DRA	Issue Broadband-Specific Funding for Delta Region: This program will be designed to provide both technical assistance to local communities and actual broadband infrastructure deployment. When designing this program, DRA will look to partner with larger Federal partners to identify ways to collaborate and leverage additional dollars for broadband in the region.	March 2019
8	USDA and NTIA (as workstream co-chairs)	Recommendations for Improved Program Consistency and Coordination: By Spring of 2019, the Federal Funding Workstream will complete its analysis and develop policy recommendations for improving cross-Agency coordination on broadband funding. Program changes and implementation will occur throughout 2019 and beyond.	Spring 2019

		Federal Funding Workstream	
ITEM NO.	RESPONSIBLE AGENCY/ AGENCIES	AGENCY ACTION	COMPLETION TIMELINE
9	USDA	Launch USDA Grant and Loan Pilot: Establish a responsive, customer-friendly rural broadband pilot program of loans and grants to expand rural broadband in underserved rural and Tribal areas with a population of 20,000 or less. Rural areas without current internet service speeds of 10 megabits per second (Mbps) download and 1 Mbps upload at the household will be eligible to apply for the pilot program funds. This program will help build modern broadband infrastructure for as many rural American homes, businesses, farms, schools and health care facilities as possible – resulting in improved effectiveness of Federal funds. USDA expects to start accepting applications in the Spring of 2019.	Spring 2019
10	USDA	Launch New Application Platform and Systems: By the Spring of FY 2019, USDA RD will complete a full assessment of customer-facing systems and launch new application and processing systems designed to improve responsiveness and customer support.	Spring 2019
11	DOI, IMLS and ED	The DOI's BIA, IMLS and ED will work with Native American communities and other Federal Agencies to develop and convene a Tribal Broadband Summit.	Spring 2019
12	FCC	FCC Plan to Improve Broadband in Tribal Lands: In conjunction with the tribes, the FCC will submit a report evaluating broadband coverage in Indian country and on land held by a Native Corporation pursuant to the Alaska Native Claims Settlement Act. The FCC must complete rulemaking to address unserved areas identified in the report by September 2020.	Spring 2019

		Federal Funding Workstream	
ITEM NO.	RESPONSIBLE AGENCY/ AGENCIES	AGENCY ACTION	COMPLETION TIMELINE
13	FCC	FCC Report to Congress on Broadband Access for Veterans: FCC Report to Congress on Broadband Access for Veterans: The FCC will prepare and submit a report to Congress to promote broadband Internet access for veterans, especially low-income veterans and veterans residing in rural areas.	Spring 2019
14	NTIA	Launch Pilot of Broadband Mapping Tool to Better Target Funding: By September 2019, NTIA will introduce a broadband mapping tool that uses additional data sets, beyond the FCC 477 data.	September 2019
15	NTIA	Improve Coordination Between Federal and State Programs: Through its work with the State Broadband Leaders Network (SBLN), NTIA facilitates coordination between State-level officials who support programs that promote broadband planning and deployment in unserved and underserved areas of their States. These State broadband leaders witness the need for increased coordination and information sharing with Federal funders. NTIA will convene discussions with State and Federal funding entities to identify opportunities for program alignment and coordination and will issue recommendations.	September 2019

APPENDIX B -ADDITIONAL AGENCY ACTIONS IN SUPPORT OF THE INITIATIVE

In order to promote research and innovation and advance American education, economic **development**, **healthcare**, **and digital inclusion**, Agencies are taking the following actions:

	P	romoting Research and Innovation	
ITEM NO.	RESPONSIBLE AGENCY/ AGENCIES	AGENCY ACTION	COMPLETION TIMELINE
1	NTIA	New Data on Computer and Internet Use in America: NTIA continues its longstanding Digital Nation research program with a new 2017 Computer and Internet Use Supplement to the Current Population Survey that gathered data on over 123,000 people living in 52,000 households across the country. Analysis and reports will be issued over the next 18 months.	June 2018 (completed)
2	NSF	The NSF WINS Challenge Winners Announced: NSF created and funded the NSF Wireless Innovation for a Networked Society (NSF WINS) Challenge to identify and prototype solutions that enhance wireless connectivity: (1) in communities affected by disasters where Internet access is compromised or (2) in communities that need greater access. Winners will be able to develop/license their design into full-fledged commercial offerings that will provide increased network resilience and reach. The WINS Challenges are administered by the Mozilla Foundation. https://wirelesschallenge.mozilla.org/#winners	September 2018 (completed)

	P	romoting Research and Innovation	
ITEM NO.	RESPONSIBLE AGENCY/ AGENCIES	AGENCY ACTION	COMPLETION TIMELINE
3	NSF/NITRD	NSF/NITRD Published New Research Resource Guide: NSF/NITRD published a resource guide detailing broadband-related research and development programs across the Federal Government. NITRD is supporting this effort, which is an outgrowth of the multi-Agency National Broadband Research Agenda that was published in January 2017. https://www.nitrd.gov/apps/broadband/index.aspx#content	September 2018 (completed)
4	NIST/NTIA	Global Cities Team Challenge on Rural and Smart Ag: The Smart Ag and Rural SuperCluster will host a workshop at Purdue University as part of the Global City Team Challenge (GCTC) to engage stakeholders from industry, governments, and nonprofits to create blueprints and best practices for smart cities and communities.	September 2018 (completed)
5	Census	Detailed ACS Data on Broadband Adoption : The U.S. Census Bureau will release new American Community Survey (ACS) data on computer and Internet usage that will be statistically valid at the census block group and tract level.	December 2018
6	NSF	NSF Ignites Internet Innovation: Building on the success of the US Ignite program, in April 2019, NSF will support the US Ignite Application Summit and Smart and Connected Communities Principal Investigators' Meeting co-located with Smart Cities Connect Conference and Expo in Denver, Colorado.	April 2019

Promoting Research and Innovation			
ITEM NO.	RESPONSIBLE AGENCY/ AGENCIES	AGENCY ACTION	COMPLETION TIMELINE
7	NTIA	Digital Nation 2019 Survey Released: NTIA expected to release the 2019 computer and Internet Use Supplement, building on over 20 years of longitudinal data on consumer trends in technology and information use.	November 2019

Improving Educational Outcomes				
ITEM NO.	RESPONSIBLE AGENCY/ AGENCIES	AGENCY ACTION	COMPLETION TIMELINE	
1	ED	Promoting Broadband Access for Students: ED will create an interagency working group and develop and test strategies to increase broadband access for students in and outside of school and complete collaborative technical assistance efforts by October 2019.	October 2019	
2	ED	Equity in Technology Access Questions Are Part of Civil Rights Data Collection for First Time: In the Spring of 2020, the upcoming Civil Rights Data Collection survey will measure equity in technology access with new questions on access to computers and broadband.	Spring 2020	

Stimulating Economic Development					
ITEM NO.	RESPONSIBLE AGENCY/ AGENCIES	AGENCY ACTION	COMPLETION TIMELINE		
1	DOL	Clarifying Broadband Funding Eligibility Within DOL Programs: DOL issued clarification stating that broadband is an eligible administrative expense within One Stops and Job Centers.	January 2017 (completed)		
2	DOL	DOL Promotes Technology Use in Workforce System: DOL will complete research to help better leverage Technology-based Learning to help clients improve job skills.	October 2018		
3	USDA	Evaluate the Economic Benefits of Broadband for Precision Agriculture: USDA will publish a report on the role of high-speed Internet in precision agriculture applications. This report will use evidence-based methods and industry perspectives to provide USDA with guidance on infrastructure investment decisions and may point to what deeper research is needed.	March 2019		

Improving Health Access and Outcomes							
ITEM NO.	RESPONSIBLE AGENCY/ AGENCIES	AGENCY ACTION	COMPLETION TIMELINE				
1	USDA (NIFA, RD)	USDA Releases Opioid Resource Matrix and Prioritizes Support: The Rural Opioid Subcommittee will develop a comprehensive opioid resource matrix of all Federal funds that directly and indirectly help rural communities to tackle the epidemic. In addition, USDA has prioritized this issue within the funding mechanisms for telehealth and telemedicine community investments.	November 2018 (completed)				

2 **VA and HHS** Placing Shared Telehealth Equipment in FQHC December 2018 **to Serve Veterans:** The VA expects to announce new partnerships between VHA and HHS's Health Resources and Services Administration that will result in increased access to telehealth equipment in Federally Qualified Health Centers (FQHC), bringing more services to veterans closer to where they live.

FCC 3 Leveraging Broadband to Help Address the **Opioid Crisis:** FCC has taken steps to expand the Connect2Health Mapping Broadband Health in America platform to include drug abuse/opioid statistics (in coordination with HHS) to help stakeholders better leverage broadband as a tool in fighting opioid misuse, addiction, and overdose. The

initial effort included the development of a conceptual model for intersecting broadband and opioid data, and catalyzing broadband-enabled interventions in the opioid arena.

FCC and HHS Bridging the Rural Healthcare Gap in Appalachia: The National Cancer Institute (NCI), FCC, and Health Resources and Services Administration have joined forces with University of Kentucky Markey Cancer Center, University of California San Diego and other

stakeholders in a public-private partnership to help bridge the broadband health connectivity gap in Appalachia. This multi-phase demonstration project will study how increasing broadband access and adoption in rural areas can help address the burden of symptom management for rural cancer patients. Results from the collaboration will be made available and are expected to be published and widely disseminated, and used as the basis for an actionable model for leveraging broadband-enabled technologies in rural cancer control nationwide.

May 2019

June 2020

5 HHS, FCC, USDA

Agencies Collaborate to Improve Broadband at Rural Healthcare Facilities: In 2019, HHS, FCC, and USDA will conduct meetings and workshops to encourage the adoption of telehealth services in rural communities and to promote the use of Federal programs that help to improve broadband connectivity . In October 2020, the Agencies will evaluate the number of the health care entities that have leveraged these programs.

October 2020

Advancing Digital Inclusion and Equity						
ITEM NO.	RESPONSIBLE AGENCY/ AGENCIES	GENCY/ AGENCY ACTION				
1	IMLS	Digital Literacy Corps Promotes Access and Skills in Tribal and Rural Areas: IMLS will lead efforts to develop a "Digital Literacy Corps" in five States, working with rural libraries and libraries of Native American and Alaska Natives to promote broadband access, test and explore connectivity options, and develop digital literacy skills. Best practices will be documented in reports, and toolkits will be issued by December 2018.	December 2018			
2	FCC	National Verifier for Lifeline Eligibility: The FCC and USAC will complete the national rollout of a centralized system to determine Lifeline eligibility. The system will streamline and improve the Lifeline application and management process.	December 2019			
3	HUD	Connecting Thousands to Broadband Through Partnerships in HUD Housing: Building on the successful launch of the ConnectHome program, HUD will add 35 more partner communities in 2018 with the goal of reaching 170 communities by 2020. ConnectHome uses a public-private partnership model that includes local city and town partners to bring computers and broadband to low-income households.	December 2020			

APPENDIX C -**AMERICAN BROADBAND INITIATIVE COMPONENTS**

The American Broadband Initiative takes the first steps to carry out the e-Connectivity call-toaction in the Task Force on Agriculture and Rural Prosperity report, builds on NTIA's mission as the Agency principally responsible for advising the Administration on telecommunications and information policy, refocuses the work of the Broadband Interagency Working Group, supports Agencies executing the President's broadband-related Executive Orders, and establishes a coordination point for the broadband provisions in the 2018 Omnibus Budget. The following sections describe each of those projects and summarize the scope, structure, and membership of the Initiative.

Agriculture and Rural Prosperity Task Force

"A reliable, safe, and affordable food, fiber, and forestry supply is critical to America's national security, stability, and prosperity." - President Donald J. Trump, April 25, 2017

On April 25, 2017, President Trump signed Executive Order 13790 – "Promoting Agriculture and Rural Prosperity in America," establishing an Interagency Task Force to "identify legislative, regulatory, and policy changes to promote in rural America agriculture, economic development, job growth, infrastructure improvements, technological innovation, energy security, and quality of life."20

Rural America covers 72 percent of the Nation's land and includes 46 million people.²¹ It represents a diverse set of vital American industries, including agricultural production, manufacturing, mining, and forestry. American economic prosperity is unmistakably linked to rural America's ability to compete in the new global economy and Internet e-connectivity is the cornerstone to achieving this vision.

The Rural Prosperity Task Force, chaired by Secretary of Agriculture Sonny Perdue, included more than 20 Federal Agencies and Executive Departments. To capture the voice of rural America in its recommendations, the Task Force leadership conducted "listening sessions" across the country with stakeholders from industry, and State, local, and Tribal governments. The Task Force identified over 100 ways that the Federal Government could advance a vision of greater rural and American prosperity. The recommendations were organized around five key indicators of rural prosperity:

- 1. E-Connectivity for Rural America
- 2. Improving Quality of Life
- 3. Supporting a Rural Workforce
- 4. Harnessing Technological Innovation
- 5. Economic Development

Broadband or "e-Connectivity" emerged as an overarching catalyst and crosscutting theme throughout the Report.

As noted in the Report:

"In today's information-driven global economy, e-connectivity is not simply an amenity - it has become essential. E-connectivity, or electronic connectivity, is more than just connecting households, schools, and healthcare centers to each other as well as the rest of the world through high-speed internet. It is also a tool that enables increased productivity for farms, factories, forests, mining, and small businesses. E-connectivity is fundamental for economic development, innovation, advancements in technology, workforce readiness, and an improved quality of life. Reliable and affordable high-speed internet connectivity will transform rural America as a key catalyst for prosperity."22 - Sonny Perdue, Secretary of Agriculture, October 21, 2017

The Task Force Report called for the following actions to support e-connectivity in rural America:

- Establish Executive Leadership to Expand e-Connectivity across Rural America
- Assess State of Rural E-connectivity
- Reduce Regulatory Barriers to Infrastructure Deployment
- Assess Efficacy of Current Programs
- Incentivize Private Capital Investment

In January 2018, the White House and the Departments of Agriculture and Commerce started carrying out these recommendations immediately as part of the Broadband Interagency Working Group, now the American Broadband Initiative.

National Telecommunications and Information Administration

"This Administration understands that too many Americans still lack access to reliable, affordable broadband Internet service. This is a problem that's felt particularly in rural America, as well as some urban areas that have been left behind. We know one of the best ways to solve the digital divide is to better understand it. I'm excited about the opportunity we have in front of us, and the goals we share - connecting every community to broadband and ensuring that our workforce has the skills to maintain our global competitiveness."²³ – David Redl, Assistant Secretary of Commerce for Communications and Information, February 6, 2018

The American Broadband Initiative provides a focal point for NTIA's interagency work related to broadband. NTIA's mission is to serve as the President's principal advisor on telecommunications and information policy, and its work focuses on a broad range of issues that include spectrum management, broadband connectivity, the growth and stability of the Internet, data privacy, and measuring the growth and significance of the digital economy. NTIA works on research and policy, Internet governance, cybersecurity, and the Internet of Things (IoT).

Spectrum Management

NTIA manages the Federal Government's use of the radio frequency spectrum and ensures that America's domestic and international spectrum needs are met while making efficient and effective use of this limited resource. The ever-growing demands for wireless communication among consumers, businesses, and Government Agencies and for other important purposes require access to more spectrum. NTIA evaluates present and future uses of spectrum, promotes its efficient use, recommends reallocating it for commercial use where it makes sense, and encourages sharing spectrum between and among commercial and government users where it is possible.

BroadbandUSA

NTIA's support for broadband includes providing technical assistance for local communities, strengthening partnerships with States, working across Federal Agencies, and coordinating with the FCC and the States to update the broadband map with more diverse data sources to improve broadband availability data. Accurate, reliable broadband availability data is critical to properly inform public and private investment decisions and provide opportunities to coordinate amongst Federal programs that fund broadband infrastructure.

FirstNet

NTIA supports the operations of the First Responder Network Authority (FirstNet), an independent entity that established a public-private partnership with AT&T to meet its statutory responsibilities to deploy, maintain, and operate a nationwide public safety broadband network. With Federal spectrum, a national contract, and opt-in agreements with States and territories, FirstNet and AT&T are building a dedicated new wireless network that will reach deep into rural America. In addition to supporting FirstNet's progress, NTIA awarded grants to States and territories to help them plan and collaborate in the development of the network.

Department of the Interior: Leveraging Public Lands for Broadband Infrastructure

On January 8, 2018, and in association with the release of Executive Order (EO) 13821, a Presidential Memorandum was issued to the Secretary of the Interior entitled, Supporting Broadband Tower Facilities in Rural America on Federal Properties Managed by the Department of the Interior. The memorandum directs the Secretary to "...develop a plan to support rural broadband development and adoption by increasing access to tower facilities and other infrastructure assets managed by the Department of the Interior (DOI)" and to "identify assets that can be used to support rural broadband deployment and adoption."24 In response to the Presidential Memorandum, DOI prepared a 332-page report which contains a comprehensive review of DOI programs related to broadband permitting and deployment. The report also discusses challenges faced by the extensive regulations surrounding permitting and the diversity of requirements and authorities that various land management agencies face.

The report outlines that the majority of the nearly 500 million acres managed by the Department of the Interior (DOI) is located in the American west where inadequate broadband coverage is highly prevalent.²⁵ Through this review, the Department has identified five areas of focus for improved efficiency:

1. Regulations, Policy, and Guidelines

Governed by a wide array of statutes, communications site program leasing and permitting has antiquated regulations, policies, and other internal guidance, which increase complexity and limit or slow access to broadband deployment. For most DOI Agencies, the regulatory structure underlying the communications site program has not been updated in decades and has not kept pace with technological innovation or with increasing broadband usage.

2. Environmental Review

National Environmental Policy Act compliance is required for all communications site program actions and comprises a large portion of the review timeframe. Over the past several years, processing issues have been identified, including the complexity and lengthy duration of NEPA analyses.

3. Leasing and Permitting

The process to lease public lands for communications purposes has evolved based on coordination with industry and other stakeholders, other program reviews, and the results of litigation or appeals. As a result, permitting processes are cumbersome and extensive. Land use planning decisions and special designations also impact the availability of the public lands for broadband development.

4. Fair Market Value Rental

The FMV determination is part of the leasing process. It is based on a schedule for communications site program properties that, for the BLM, has not been updated since 1995. In addition, the agencies need to simplify the rental process to determine and charge fair market value rental for broadband uses.

5. Program Administration

Communications site programs may require additional staff who are trained and competent to issue technically accurate leases and permits in an efficient manner. The agencies will need to ensure that realty staff and managers are trained and that they understand the importance of making Federal assets available for broadband deployment in rural areas. The agencies need to improve how they manage workloads and competing priorities and how they define roles and responsibilities of staff and industry.²⁶

Additionally, existing land patterns and land use planning can also be an obstacle to rural broadband development. Much of the public lands administered through the DOI are available for broadband infrastructure development unless there is a designation restricting the development, (primarily wilderness and wilderness study areas, where development is precluded). Other land use designations, such as national monuments, wild and scenic rivers, areas of critical environmental concern (ACECs), and other surface-limiting stipulations or buffer zones, make development and permitting cumbersome. For instance, many Alaskan villages remain surrounded by public lands, and in some cases land use restrictions may limit or prohibit broadband infrastructure deployment.²⁷

Subsequent to the memorandum and report, the Department has identified solutions to many of these issues and will continue to engage with industry, local communities, and other Departments to maximize the effectiveness of rural broadband permitting and distribution.

Broadband Interagency Working Group

The American Broadband Initiative includes and expands upon the work of the Broadband Interagency Working Group (BIWG), co-chaired by the Departments of Agriculture and Commerce. The Working Group was established in late 2016 to continue the work of the Broadband Opportunity Council, which encouraged Federal Agencies to use all viable options within their mission, and budgets to accelerate broadband deployment, improve broadband adoption, and strengthen competition. BIWG and Agency commitments and actions to date were published in the January 2017 Progress Report.²⁸

Executive Actions

On January 8, 2018, President Trump issued a Presidential Memorandum "Supporting Broadband Tower Facilities in Rural America on Federal Properties Managed by the Department of the Interior."29 This action was inspired by the interagency report to the President from the Agriculture and Rural Prosperity Task Force, 30 and directed the Secretary of the Interior to develop a plan to increase access to tower facilities and other infrastructure assets managed by the Department of the Interior. The goal of making these facilities available for commercial wireless facility co-location is to lower costs for broadband deployment to rural areas, strengthen the business case to build broadband facilities, and therefore amplify investments in broadband infrastructure.

President Trump signed Executive Order 13821 on January 8, 2018, "Streamlining and Expediting Requests to Locate Broadband Facilities in Rural America," which stated that the Executive Branch should use all viable tools to accelerate the deployment and adoption of high-speed broadband connectivity and "seek to reduce barriers to capital investment, remove obstacles to broadband services, and more efficiently employ government resources."31 It directed the GSA to conduct a review of its common form application and master contract for wireless facility siting on buildings and other property owned by the Federal Government.

While DOI and GSA are implementing these Executive actions respectively, their goals further the objectives of the American Broadband Initiative and represent early demonstrations of the Administration's mission to reduce barriers and transform government practices to support broadband deployment.

2018 Consolidated Appropriations Act (Omnibus Budget)

Congress and the President recognized the importance of strengthening our Nation's broadband infrastructure by passing the 2018 Consolidated Appropriations Act which provided a number of additional opportunities to support broadband development and deployment.³² The American Broadband Initiative will provide cross-Agency coordination and support for a number of these new initiatives and programs.

APPENDIX D -**AMERICAN BROADBAND INITIATIVE AGENCY PARTICIPATION**

The following Agencies are participants in the American Broadband Initiative:

- The White House Office of American Innovation
- The White House National Economic Council
- Executive Office of the President Office of Science and Technology Policy
- · Executive Office of the President -Office of Management and Budget
- Department of Agriculture
- Department of Commerce
- Department of Defense
- Department of Education
- Department of Energy
- Department of Health and Human Services
- Department of Homeland Security

- Department of Housing and Urban Development
- Department of the Interior
- Department of Labor
- Department of Transportation
- Department of the Treasury
- Department of Veterans Affairs
- Advisory Council on Historic Preservation
- Appalachian Regional Commission
- **Delta Regional Authority**
- Environmental Protection Agency
- Federal Communications Commission (consulting, as permitted)
- General Services Administration
- Institute of Museum and Library Services
- National Science Foundation

APPENDIX E -**AMERICAN BROADBAND** INITIATIVE AGENCY ACRONYMS

The following acronyms were used throughout this report:

- Advisory Council on Historic Preservation (ACHP)
- Appalachian Regional Commission (ARC)
- Council on Environmental Quality (CEO)
- Delta Regional Authority DRA)
- Department of Agriculture (USDA)
- Rural Development (RD)
- USDA Forest Service (Forest Service)
- Department of Commerce (DOC)
- **Economic Development Administration** (EDA)
- National Telecommunications and Information Administration (NTIA)
- · National Institute of Standards and Technology (NIST)
- Department of Defense (DoD)
- Department of Education (ED)
- Department of Energy (DOE)
- Department of Homeland Security (DHS)
- Department of Housing and Urban Development (HUD)

- Department of the Interior (DOI)
- Bureau of Indian Education (BIE)
- Bureau of Land Management (BLM)
- Department of Labor (DOL)
- Department of Transportation (DOT)
- Department of the Treasury
- Environmental Protection Agency (EPA)
- Federal Communications Commission (FCC)
- General Services Administration (GSA)
- Health and Human Services (HHS)
- Institute of Museum and Library Services (IMLS)
- National Aeronautics and Space Administration (NASA)
- National Science Foundation (NSF)
- **Networking & Information Technology** Research & Development (NITRD)
- Office of Management and Budget (OMB)
- Department of Veterans Affairs (VA)

Endnotes

- Sonny Perdue, "Report to the President of the United States from the Task Force on Agriculture and Rural Prosperity," United States Department of Agriculture, October 21, 2017, https://www.usda.gov/sites/default/files/documents/ruralprosperity-report.pdf. "E-connectivity, or electronic connectivity, is more than just connecting households, schools, and healthcare centers to each other as well as the rest of the world through high-speed Internet. E-connectivity is fundamental for economic development, innovation, advancements in technology, workforce readiness, and an improved quality of life."
- Broadband Glossary, NTIA, accessed June 22, 2018, the glossary includes abbreviations, acronyms and technical terms associated with broadband, https://broadbandusa.ntia.doc.gov/sites/default/files/resource-files/bbusa broadband glossary_161024.pdf.
- U.S. Broadband Investment Rebounded in 2017, October 18, 2018, https://www.ustelecom.org/research/u-sbroadband-investment-rebounded-in-2017-2/.
- "2018 Broadband Deployment Report, Federal Communications Commission, February 2, 2018, https://www.fcc.gov/ reports-research/reports/broadband-progress-reports/2018-broadband-deployment-report, page 22.
- 5 Ibid. page 26.
- Edward Carlson, Justin Goss, "The State of the Urban/Rural Digital Divide," August 10, 2016, National Telecommunications and Information Administration, 2015, Current Population Survey (CPS) with Computer and Internet Supplement, https://www.ntia.doc.gov/blog/2016/state-urbanrural-digital-divide.
- Digital Nation Data Explorer, National Telecommunications and Information Administration, October 27, 2016, Current Population Survey (CPS) with Computer and Internet Supplement, https://www.ntia.doc.gov/data/digital-nation-dataexplorer#sel=homeInternetUser&demo=income&pc=prop&disp=chart.
- Ibid. page 24.
- Carol Hardy Vincent, et al., "Federal Land Ownership: Overview and Data." Congressional Research Service, March 2017, https://fas.org/sgp/crs/misc/R42346.pdf.
- 10 Broadband Deployment Advisory Committee: Streamlining Federal Siting Working Group, Final Report, January 23-24, 2018, FCC, retrieved July 5, 2018, https://www.fcc.gov/sites/default/files/bdac-federalsiting-01232018.pdf
- 11 "Connectivity in Rural America," United States Department of the Interior, July 2018, https://www.doi.gov/broadband.
- 12 40 CFR §1508.4
- 13 "Connectivity in Rural America: Leveraging Public Lands for Broadband Infrastructure," United States Department of the Interior, July 2018, https://www.doi.gov/broadband.
- 14 Donald J. Trump, "Streamlining and Expediting Requests to Locate Broadband Facilities in Rural America," January 8, 2018, https://www.whitehouse.gov/presidential-actions/presidential-executive-order-streamlining-expeditingrequests-locate-broadband-facilities-rural-america/.
- 15 "Connectivity in Rural America: Leveraging Public Lands for Broadband Infrastructure," United States Department of the Interior, July 2018, https://www.doi.gov/broadband.
- 16 Donald J. Trump, "Supporting Broadband Tower Facilities in Rural America on Federal Properties Managed by the Department of the Interior," January 8, 2018, https://www.federalregister.gov/documents/2018/01/12/2018-00628/ supporting-broadband-tower-facilities-in-rural-america-on-federal-properties-managed-by-the.
- 17 FCC Public Notice, "FCC Facilitates Review of Restoring Internet Freedom Record," FCC, November 7, 2017, https://docs. fcc.gov/public/attachments/DA-17-1089A1.pdf.
- 18 See https://data.usac.org/publicreports/caf-map/.

- 19 Donald, J. Trump, "Streamlining and Expediting Requests to Locate Broadband Facilities in Rural America," January 8, 2018, https://www.whitehouse.gov/presidential-actions/presidential-executive-order-streamlining-expeditingrequests-locate-broadband-facilities-rural-america/.
- 20 Donald, J. Trump, "Presidential Executive Order on Promoting Agriculture and Rural Prosperity in America," EO 13790, April 25, 2017, https://www.whitehouse.gov/presidential-actions/presidential-executive-order-promotingagriculture-rural-prosperity-america/.
- 21 Sonny Perdue, "Report to the President of the United States from the Task Force on Agriculture and Rural Prosperity," United States Department of Agriculture, October 21, 2017, https://www.usda.gov/sites/default/files/documents/ruralprosperity-report.pdf.
- 22 Ibid, page 2.
- 23 David J. Redl, Remarks at MMTC Broadband and Social Justice Summit, February 6, 2018, https://www.ntia.doc.gov/ speechtestimony/2018/remarks-assistant-secretary-redl-mmtc-broadband-and-social-justice-summit
- 24 Donald J. Trump, "Supporting Broadband Tower Facilities in Rural America on Federal Properties Managed by the Department of the Interior," January 8, 2018, https://www.federalregister.gov/documents/2018/01/12/2018-00628/ supporting-broadband-tower-facilities-in-rural-america-on-federal-properties-managed-by-the.
- 25 "Connectivity in Rural America: Leveraging Public Lands for Broadband Infrastructure," United States Department of the Interior, July 2018, https://www.doi.gov/broadband.
- 26 Ibid. page 12.
- 27 Ibid. page 6.
- 28 "Broadband Opportunity Council Agencies' Progress Report," January 2017, United States Department of Agriculture and United States Department of Commerce, Report https://www.ntia.doc.gov/files/ntia/publications/broadband_ opportunity_council_agencies_progress_report_jan2017.pdf
- 29 Donald J. Trump, "Supporting Broadband Tower Facilities in Rural America on Federal Properties Managed by the Department of the Interior," January 8, 2018, https://www.federalregister.gov/documents/2018/01/12/2018-00628/ supporting-broadband-tower-facilities-in-rural-america-on-federal-properties-managed-by-the.
- 30 Agriculture and Rural Prosperity Task Force Report, January 8, 2018, www.usda.gov/ruralprosperity
- 31 Donald J. Trump, "Streamlining and Expediting Requests to Locate Broadband Facilities in Rural America," January 8, 2018, https://www.whitehouse.gov/presidential-actions/presidential-executive-order-streamlining-expeditingrequests-locate-broadband-facilities-rural-america/.
- 32 "H.R.1625 Consolidated Appropriations Act, 2018 115th Congress," U.S. Congress, March 22, 2018, https://www. congress.gov/bill/115th-congress/house-bill/1625.



