



2022

FEDERAL BROADBAND FUNDING REPORT

INVESTING IN INTERNET FOR ALL



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01 Introduction

In December 2020, the Consolidated Appropriations Act, 2021¹ was enacted, including the Advancing Critical Connectivity Expands Service, Small Business Resources, Opportunities, Access, and Data Based on Assessed Need and Demand (ACCESS BROADBAND) Act.² This Act directed the Department of Commerce's National Telecommunications and Information Administration (NTIA) to establish the Office of Internet Connectivity and Growth (OICG) within NTIA. OICG administers and manages eight federal broadband grant programs, conducts various stakeholder engagement activities, and leads interagency coordination efforts to close the digital divide.

In December 2021, NTIA released the inaugural <u>ACCESS BROADBAND Report</u> (2021 Report). The 2021 Report provided a baseline understanding of the data captured for federal broadband and Universal Service Fund (USF) programs. The baseline report captured broadband data for Fiscal Year (FY) 2020 and identified opportunities for collecting, sharing, and reporting on broadband funding data for future reports. The 2022 Federal Broadband Funding Report summarizes and analyzes FY21 data collected from across the federal government. Broadband funding under the Bipartisan Infrastructure Law was appropriated in FY22 and will be included as part of the 2023 Report. Due to the data collection timeline, Federal Broadband Funding Reports currently report on the previous fiscal year rather than the fiscal year they are released in.

Report Purpose and Highlights: Tracking FY21 Federal Dollars

In December 2020, the Consolidated Appropriations Act, 2021 was enacted, including the Advancing Critical Connectivity Expands Service, Small Business Resources, Opportunities, Access, and Data Based on Assessed Need and Demand (ACCESS BROADBAND) Act. This Act directed the Department of Commerce's National Telecommunications and Information Administration (NTIA) to establish the Office of Internet Connectivity and Growth (OICG) within NTIA. OICG works to promote transparency and accountability across federal government broadband investments through tracking and reporting.

The **FY21 Federal Broadband Funding Report** includes an aggregate view to meet these legislative requirements:

- A description of how many residents of the United States were provided broadband by which universal service mechanism or which federal broadband support program.
- An estimate of the economic impact of such broadband deployment efforts on local economies, including any effect on small businesses or jobs.

FY21 Report Components: Investment, Connection, Impact



Number of residents In the U.S. who receive broadband access.



Broadband investments by program type (broadband specific and multi-use).



Broadband investment uses (infrastructure deployment, planning, data and mapping, and digital inclusion or adoption).



Narratives and accomplishments of early program progress.



Economic impacts and proposed indicators for future measurement.





The 2021 Report included two parts to fulfill the ACCESS BROADBAND Act's requirements. Part one of the 2021 Report provided a description of OICG's work for the previous year, including OICG's grant administration, engagment activities, and efforts to close the digital divide, and part two addressed the reporting requirements related to broadband funding across the U.S. Government. For 2022 and moving forward, the OICG Annual Report, detailing OICG's work and accomplishments, will be a separate report, which allows NTIA to better address the reporting requirements under the ACCESS BROADBAND Act. For 2022, the OICG Annual Report focuses on OICG's growth to administer the historic investments appropriated under the Consolidated Appropriations Act of 2021 and the Infrastructure Investment and Jobs Act (also known as the Bipartisan Infrastructure Law). Both this report and the 2022 OICG Annual Report are available on the NTIA website.

To accompany this report, NTIA developed a consolidated data dashboard to assist in the analysis and reporting for FY21 federal broadband investments. The full dashboard with comprehensive filters and data extract capabilities is housed on the NTIA ACCESS BROADBAND webpage and includes a link to the report data in Infogram®, a data visualization and infographics platform.

In 2022, while cross-agency data aggregation efforts and standardization improved compared to the prior reporting period there





Click on the computer icon throughout the report to link out to interactive data.

are still opportunities to mature the tracking and analysis of broadband access, usability, and impacts. Despite data limitations, NTIA worked to provide the most comprehensive understanding of the federal broadband investment landscape with the content and data provided by contributing federal agencies. This report reflects progress NTIA made in the areas of data collection processes, including, the addition of Tribal data, economic impact analysis and impact illustrations.

For this report, OICG:



Data Collection

Provided more time for data collection.



Tribal Data

Included available Tribal broadband data.



Impact Illustrations

Leveraged agency narrative vignettes for impact illustrations.



Future Reporting

Focused on developing impact measurement and fostering partnerships to enhance future reporting.





Key Findings

The 2022 Federal Broadband Funding Report: Investing In Internet For All details the evolution and maturation of broadband access. The report also reviews how funding has begun fulfilling the commitment to connect communities with reliable high-speed Internet service. Among the insights identified in this year's report, there are four key findings:

- Appropriated funding investments in broadband increased substantially exceeding FY20 funding by 694% (or \$11.8B).
- A more comprehensive look at broadband investments comes into view with the important inclusion of Tribal data from five agencies.
- In the second year of reported activity, a higher percentage of outlayed funding goes towards digital inclusion or adoption.
- NTIA defined a foundational architecture for assessing economic impacts. Early inputs into this model project broadband investments could add \$140B to the U.S. rural economy and improve small business survival rates by 30%.

For this FY21 report, agencies submitted the following on broadband specific funding.

Appropriated

An agency is provided budget authority and can incur obligations for specified purposes.

- Four agencies
- Ten programs
- \$13.5B appropriated

Obligated

An agency has a legal liability to disburse obligated funds.

- Ten agencies
- 33 programs
- \$8B obligated

Outlayed

An agency has federal money paid out, not just promised to be paid ("obligated").

- Nine agencies
- 37 programs
- \$6.7B outlayed





The **U.S. Department of Commerce** seeks to promote job creation and economic growth by ensuring fair trade, providing the data necessary to support commerce and constitutional democracy, and fostering innovation.

The National Telecommunications and Information Administration (NTIA) is the Executive Branch agency responsible for advising the President on telecommunications and information policy issues.





02 Report Progression

Addressing Reporting Limitations from 2021

The Path Forward section of the 2021 ACCESS BROADBAND Report provided three recommendations to meet the requirements of the ACCESS BROADBAND Act. These three recommendations were: promoting consistency across programs, leveraging open data initiatives, and identifying data sources and alternatives. These recommendations support a comprehensive approach to investment measurement and the ability to track broadband accessibility and usage. Over the last year, NTIA worked to address these recommendations by identifying possible solutions and taking steps to implement those solutions, detailed below:

Progress in Meeting ACCESS Broadband Act Requirements

2021 Identified Opportunities

Promote consistency across programs: Consistent standards across the federal government, including for recipient and subrecipient reporting, can support effective broadband-related data collection.

Leverage open data initiatives:
Agencies are required to collect and submit information about awards.

Identify data sources and alternatives: The annual report and database require input from multiple data sources, including programprovided data and economic data sources.

2022 Progressions

NTIA provided input, and facilitated interagency meetings, to garner input for the FCC Broadband Funding Map, on the necessary data elements in alignment with the data needed for the report. NTIA and USDA are collaborating on a joint "agency priority goal" to develop consistent data standards, which will inform the new FCC map.

NTIA and OMB collaborated on the development of a Controller's Alert to promote the use of specific language in award descriptions, minimizing agency burden in satisfying the reported requirements.

NTIA is exploring an agreement with the Census Bureau to create annual estimates of broadband access and adoption for all Census tracts.

NTIA is advising on the selection of economic indicators to include in an online broadband economic indicators tool.

2023 Progress Towards the Future

NTIA will leverage the infrastructurerelated data collected for the FCC maps for future reports. NTIA anticipates that the data collected by these maps will provide a better, more consistent understanding of the infrastructure funding landscape.

The Alert encourages agencies to incorporate specific language when making awards where broadband (including broadband planning, deployment, mapping and/or digital inclusion/adoption) is at least 51% of the planned purpose of the award, meeting the mandate.

NTIA will evaluate alternative strategies to gather data for this report, including using data from new FCC maps, and by exploring ways to estimate Internet use in relatively small geographic areas that often comprise project areas. NTIA will also explore the use of proxies and model-based estimates to determine the economic impact of broadband programs.





Promoting Consistency Across Programs

The Bipartisan Infrastructure Law (BIL), directs the Federal Communications Commission (FCC) to develop "an online mapping tool to provide a location overview of the geographic footprint of each broadband infrastructure deployment project funded by the Federal Government." The FCC Broadband Funding Map will be "the centralized, authoritative source of information on funding made available by the Federal Government for broadband infrastructure deployment in the United States." Note that this map is distinct from the Broadband Data Collection map that was created by the FCC upon direction from the Broadband DATA Act to improve collection and dissemination of fixed and wireless broadband availability data in the United States.

Over the past year, OICG provided input on the necessary functionality and data elements to the FCC during the map's development. In its interagency coordination role, OICG facilitated meetings between the FCC and other federal government agencies that fund broadband infrastructure to provide similar input. All federal agencies will be required to provide data to the FCC regarding awards made for the deployment of broadband infrastructure. With the launch of the map in FY23, the public will see federal broadband infrastructure investments made by location, which will help promote coordination between and maximize investments made by federal, state, local, and territory funders. The new FCC map will provide a visual of where funding already exists and where funding is lacking. It will also provide transparency and greater insights into where funding redundancies may exist. For future reports, OICG will contribute to and leverage programmatic data collected across agencies for broadband infrastructure funding.

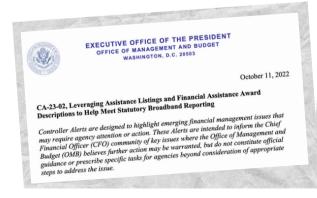
Leveraging Open Data to Promote Consistency

In January 2022, the Office of Management and Budget (OMB), at the request of NTIA, explored how to use <u>USAspending.gov</u> for future Federal Broadband Funding reports. This collaboration ultimately resulted in the release of OMB <u>Controller Alert CA-23-02</u>, Leveraging Assistance Listings and Financial Assistance Award Descriptions to Help Meet Statutory Broadband Reporting.



Released in October 2022, the Controller's Alert will promote the use of specific language in award descriptions to minimize agency burden in satisfying the reporting requirements of the ACCESS BROADBAND Act.

The alert encourages agencies with programs intended to support broadband planning, infrastructure deployment, and/or digital inclusion/adoption to review their Assistance Listings and provide updates as appropriate. This guidance ensures that the purpose, goals, and objectives appropriately reflect these broadband-specific priorities and projects. Additionally, these agencies are encouraged to incorporate specific language when making awards where broadband (including broadband planning, deployment, and/or digital inclusion/adoption) is at least 51% of the planned purpose of the award. This language reflects the broadband purposes included in this report.⁵



Consistent with existing guidance and statutory requirements, agencies with programs intended to support broadband planning, deployment, and/or digital inclusion/adoption (see below for the definition of these broadband categories) are encouraged to review their Assistance Listings and provide updates as appropriate to ensure the Assistance Listing purpose, goals, and objectives appropriately reflect these broadband-specific priorities and projects.





All federal agencies are required to submit federal contract, grant, loan, and other financial assistance awards of more than \$30,000 through their usual financial systems reporting processes. In 2008, the Government Funding Transparency Act amended the Federal Funding Accountability and Transparency Act (FFATA), which required prime recipients to report details on their first-tier sub-recipients for awards made as of October 1, 2010. The enactment of the Digital Accountability and Transparency Act (DATA Act) Pub. L. 113-101 on May 9, 2014 expanded the transparency and efforts of FFATA.

USAspending gov is the official open data source of federal spending information and intends to promote transparency and accountability of taxpayer funds. USAspending.gov provides a publicly accessible and searchable website to give the American public access to information on how their tax dollars are spent.

Identifying Data Sources and Alternatives

The ACCESS BROADBAND Act requires NTIA to provide an estimate of the economic impacts of federal broadband deployment efforts. In the 2021 ACCESS BROADBAND Report, NTIA proposed a logic model (see Report Approach) outlining the linkages between investments made by broadband programs and outcomes. For this report, NTIA consulted with experts and reviewed studies estimating the potential or realized economic impacts of broadband infrastructure. Findings from those efforts led to the creation of a conceptual **Economic Impact Framework**, which will be addressed later in this report. This framework summarizes the pathways by which broadband expansion could improve economic outcomes, specifically by raising the productivity of the workforce, increasing business activity, and improving overall local and regional economic conditions. The conceptual framework guided a selection of high-level indicators to monitor economic impacts as broadband infrastructure and digital inclusion programs unfold. Leveraging this framework, NTIA collaborated with the Census Bureau to create the ACCESS BROADBAND Dashboard, an online interactive mapping tool that makes it easier for the public to identify economic conditions in places where access to broadband is expanding. The ACCESS BROADBAND Dashboard includes 21 thematic maps to explore. It allows users to analyze maps displaying broadband access statistics and select social and economic indicators. Indicators include statistics on employment, small business establishments, wages and income, poverty, home values, population change and migration, educational attainment, and Real Gross Domestic Product (GDP). The dashboard was released in February 2023.

Estimating the causal effects of broadband expansion on economic indicators is challenging, but the ACCESS BROADBAND Dashboard will make it easier to locate the economic indicators needed to assess impacts.

Additionally, the dashboard will provide the access needed for researchers to assess the long-term economic performance of federal broadband expansion efforts. When paired with the new FCC map that shows where federal broadband investments are made, researchers will be able to assess the extent to which investments in broadband may have driven changes in the economic indicators contained in the dashboard.

FY22 Potential Economic Benefits of Broadband Expansion Conceptual Framework

Household & Workforce Impacts

- Direct and indirect employment from construction and operation of infrastructure.
- · Increased access to education and training leads to a more highly-skilled workforce.
- Increased access to labor market information, leading to reduced labor market friction, and higher productivity and wages.
- · Remote work increases work time and reduces commuting costs.
- Increased access to health services increases work time and the productivity and wages of the workforce.

Business Impacts

- Demand for goods and services increases from infrastructure construction and operation.
- Increased access to a more highly-skilled and productive workforce.
- · Access to capital increases, leading to an increase in business startups.
- · Access to suppliers and customers improves.
- · Access to ideas and knowledge-sharing increases innovation.
- Entrepreneurs and small businesses have improved access to mentoring and knowledge networks.

Other Regional Impacts

- K-12 education improves with increased access to digital resources.
- · Consumers benefit from increased access to goods and services.
- · Public services are delivered more efficiently.
- Capitalization of broadband service into home values increases the property tax base.



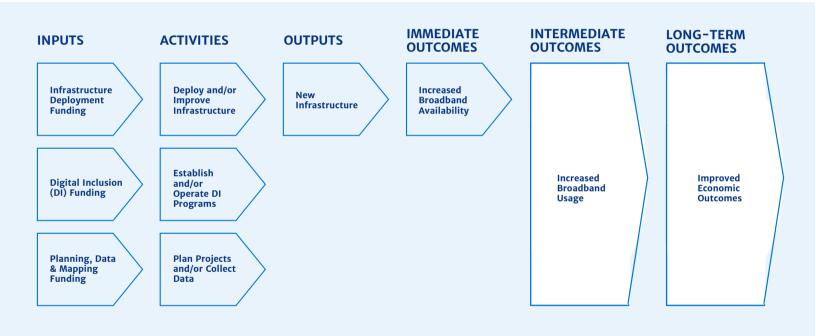


03 Report Approach

FY21 ACCESS BROADBAND Logic Model Framework

The **Logic Model Framework** informs the approach for this report. This framework guides data collection and effectively translates federal investments into real availability, usage, and economic impact on American communities in years to come. To minimize duplication with other program reporting requirements, the logic model identifies outputs and outcomes for infrastructure programs only, since programs focused on digital inclusion funding, and planning, data and mapping funding programs are required to submit information regularly to support transparency and accountability of funds and ensure alignment with federal agencies' programmatic goals.

This year's process focused on further understanding and refining data collection and reporting on broadband investments. NTIA intends to leverage the lessons learned from the past year's data collection, and the new opportunities available for data collection, to continue refining the methodology for future reports.



OICG is working with agency partners to evolve the reporting methodology.
Improvements will enable easier, sustainable annual tracking of federal broadband funds to understand the impact of high-speed Internet investments.





Methodology

In May 2022, OICG issued a data call to all federal agencies with broadband-related support programs in FY21. This data call requested FY21 budgetary and programmatic data on all "broadband-related support programs," referring to federal grant or loan programs that support broadband infrastructure deployment, digital inclusion or adoption activities, and broadband planning, data, and mapping efforts.

Program Types



(\$)) Exclusive Broadband

Programs with dedicated funding for broadband projects.



Programs with funding that allow for broadband as a potential use.

Program Uses



Planning, Data, and Mapping

Refers to grant or loan programs with funding for the planning of broadband initiatives (i.e., feasibility studies), or for capturing or plotting data on broadband deployment, availability, adoption, or usage. While these investments account for a relatively small portion of broadband funding, they help recipients assess and plan for broadband capabilities and support the efficient and effective use of funds.



Refers to funding for infrastructure development for high-speed transmission technologies, such as fiber, wireless, satellite, and cable.

Digital Inclusion or Adoption

Refers to funding for activities necessary to ensure that all individuals and communities, including the most disadvantaged, have access to and use of broadband Internet. This category includes Internet service subsidies; devices and equipment funding; public computer and Internet access funding; digital literacy. skills training, and workforce development training; telemedicine funding; and remote learning funding.

Funding Types



Appropriated

An agency is provided budget authority and can incur obligations for specified purposes.



An agency has a legal liability to disburse obligated funds.



An agency has federal money paid out, not just promised to be paid ("obligated").

The data call promoted consistency in responses where possible through standardized data fields, clear data definitions, and freeform fields to explain alternative data collected at the project or program level. Throughout the process, NTIA provided the responding federal agencies the opportunity to clarify their responses and give insight into the challenges they faced in answering the request. NTIA program staff held data call office hours on June 7, June 16, and June 23, 2022, to assist agencies with any questions they had about the data call. OICG also extended the time frame for data collection from the previous year's report, from three weeks to six weeks, to provide time for review by agency budget examiners prior to submission.

Addressed in 2022:

As part of this year's report enhancements, NTIA focused on capturing federal broadband Tribal data, working closely with DOI and other agencies to collect the impacts and purposes of broadband programs on Tribal land.





For this year's report, sixteen agencies received the data call requesting FY21 data. Thirteen federal agencies provided information for the 2022 Federal Broadband Funding Report. The Department of Veterans Affairs, the Small Business Administration, and the Health Resources & Services Administration (HRSA) within the Department of Health and Human Services (HHS) stated that they did not have data to provide for the FY21 data call. Requests for data on program funding included the amount of appropriated, obligated, and outlayed funding for broadband in FY21. Additionally, agencies, if available, submitted broadband funding uses eligible under each program, breakdowns of funding across states, projections for the number of households and businesses connected, and details on how their programs collect data.

Agencies Who Provided Data for the 2022 Federal Broadband Funding Report









Appalachian Regional Commission

Delta Regional Authority

Denali Commission

Department of Commerce





Education



Federal Communications Commission



Department of Housing and Urban Development







Department of the Interior

Institute of Museum and Library Services

Northern Border Regional Commission







National Science Foundation

Department of the Treasury

Department of Agriculture





Meeting Data and Analysis Challenges

In response to the 2022 data call, agencies expressed many of the same challenges with providing data outlined in the FY21 Report. While some agencies have the resources and existing data collection procedures in place to provide the required data, others do not. NTIA developed and provided guidance to federal agencies on the indicators and methods to track broadband data; however, it will take time to successfully transition to a consistent data collection procedure with the much needed standardization to ensure the required data is available and accessible.

Need for Standardization Mechanisms

There is significant variation in the types of programs that fund broadband, how those programs define "connection" to broadband, and how agencies collect programmatic data related to broadband outcomes. As this report highlights, some programs are broadband specific, while other programs have broadband as one of many eligible expenses. For programs where broadband is one of many eligible expenses, in many cases agencies do not have mechanisms to determine how much of that funding went specifically to broadband. Programs also define "residents connected to broadband" in different ways. Finally, agencies request different outcome data from recipients, using different timelines and geographic parameters, making it challenging to aggregate and analyze the data.

Addressed in 2022:

NTIA reported on programs that are broadband specific and multi-use program types and allowed agencies to provide narrative information on program success if requested data was unavailable.

Addressed in 2022:

By starting the submission cycle earlier in the year, NTIA allowed more time for agencies to submit data.

Need for Resource Support

Agencies noted capacity and technology constraints to collect, aggregate, and report on the data required for the report. Some programs indicated they may lack the resources and technical capabilities to report on such a complex request. Programs are also limited in their ability to share real-time data due to differences in reporting systems, inconsistent formats of data collected from grantees, or data privacy requirements. These limitations make providing data a challenging and time-consuming process that many agencies indicated they do not have the resources to manage.

Additional Time to Measure Impact

There is a significant time lag between broadband projects and intended outcomes, including availability, use, and economic outcomes. It is also fundamentally difficult to measure physical connection to U.S. residences due to the complexity of accurately capturing the network speed, latency, or capacity levels that the definition of "connection to broadband" may require.

Addressed in 2022:

NTIA took crucial steps to understand and measure economic impact. Ultimately, this effort will be a long-term investment.





04 FY21 Investment Landscape

Providing an Overview of Federal Spending

For this report, NTIA defines broadband programs as federal grant or loan programs that support broadband planning, data, and mapping efforts; infrastructure deployment; and digital inclusion or adoption. For FY21, two distinct types of federal programs responded to the data call: those with funding focused on broadband (broadband specific) and those with funding that allow for broadband as a potential use of funding (multi-use). A full list of programs, program descriptions, and program uses can be found in the Appendix.

It should be noted that often appropriated, obligated, and outlayed funding amounts may not be equal in the FY. This is because funding may have been appropriated, obligated, and outlayed prior to FY21.

Appropriated	Obligated	Outlayed
An agency is provided budget authority and can incur obligations for specific purposes.	An agency has a legal liability to disburse obligated funds.	An agency has federal money paid out, not just promised to be paid ("obligated").

Additionally, there are many nuances for the data provided by the agencies. These nuances are noted in this report where applicable. The following overview includes snapshots of the funding amounts for most agencies. A full breakdown of funding by agency and programs can be found in the Federal Broadband Funding Report Dashboard.

Broadband Specific Programs

In FY21, five agencies submitted information for 29 broadband specific programs. The FCC, the U.S. Department of Agriculture (USDA), and NTIA account for the largest amount of appropriated funding in FY21. Along with the U.S. Department of the Treasury (Treasury), whose programs are not exclusively for broadband, these agencies make up the majority of broadband funding available, and they are leading the efforts to connect all Americans to affordable, reliable, high-speed Internet service.

FY21 Snapshot of Funding for Broadband Specific Programs				
Appropriated	Obligated	Outlayed		
\$13.5B	\$8B	\$6.7B		

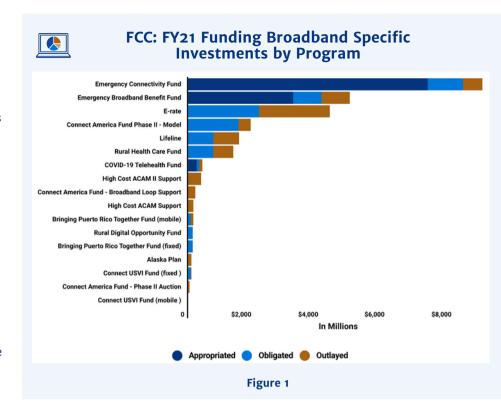




Federal Communications Commission (FCC)

The FCC regulates interstate and international communications by radio, television, wire, satellite, and cable across the country. The FCC is the federal agency responsible for implementing and enforcing America's communications laws and regulations. Its broadband programs are primarily focused on funding infrastructure deployment and digital inclusion or adoption projects.

FCC reported on 19 broadband specific programs with \$10.6B in appropriations, \$7.6B obligated, and \$6.3B outlayed in FY21 as shown in Figure 1. Two of the broadband specific programs do not have funding and therefore do not appear in the figure.





IMPACT ILLUSTRATION
FCC FUNDING
CREATES
BROADBAND
LIFELINES

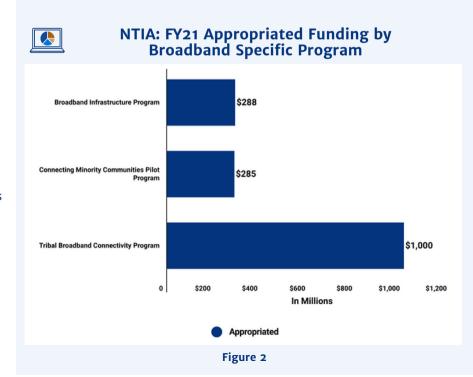


FCC broadband programs are primarily focused on funding infrastructure and digital inclusion or adoption projects. Below are key highlights of FCC programs for FY21.



Department of Commerce, National Telecommunications and Information Administration (NTIA)

NTIA, located within the U.S. Department of Commerce (DOC), is the Executive Branch agency that is principally responsible for advising the President on telecommunications and information policy issues. NTIA's programs and policymaking focus largely on expanding broadband Internet access and adoption in America. NTIA is charged with administering eight broadband programs enacted by the Consolidated Appropriations Act, 2021, and the Bipartisan Infrastructure Law. NTIA reported \$1.6B in appropriated funding for FY21.







U.S. Department of Agriculture (USDA)

USDA provides leadership on food, agriculture, natural resources, rural development, nutrition, and related issues based on public policy, the best available science, and effective management. Within USDA, the Rural Development Rural Utilities Service (RUS) provides funding for infrastructure or infrastructure improvements to rural communities, including water and waste treatment, electric power, and telecommunications services. The RUS Telecommunications Program primarily focuses on broadband infrastructure deployment and expanding distance learning and telemedicine adoption.

USDA reported on five broadband specific programs with \$1.4B appropriated, \$426.3M obligated, and \$270.5M outlayed in FY21.

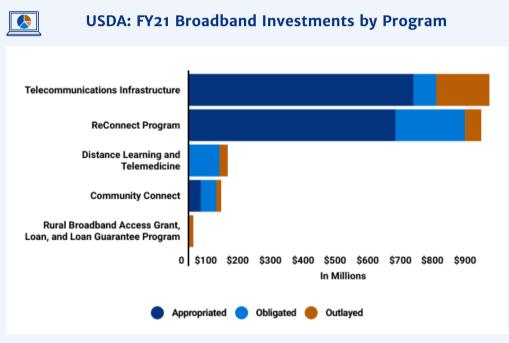


Figure 3



IMPACT ILLUSTRATION
USDA FUNDS
BROADBAND
INITIATIVES TO
CONNECT AND
EMPOWER RURAL
AMERICA



The United States Department of Agriculture (USDA) provides leadership on food, agriculture, natural resources, rural development, nutrition, and related issues based on public policy, the best available science, and effective management.



While USDA, NTIA, and the FCC comprise the majority of broadband specific programs and outlay the majority of funding for broadband, the Denali Commission, the National Science Foundation, and the Department of the Interior also have broadband programs.





The Denali Commission (Denali)

The Denali Commission⁷ is an independent federal agency created to promote and provide sustainable infrastructure improvement, job training, and other economic development services that improve health, safety, and economic self-sufficiency within rural communities in Alaska and alleviate the long-term economic disparities suffered by Alaska Native communities. As part of its efforts, the Commission works to connect Alaskans to broadband Internet. The Alaska Broadband Program⁸ is a plan to meet that goal, focusing largely on improving "middle-mile" and "last-mile" broadband infrastructure throughout Alaska.

FY21 Snapshot of Denali Commission Broadband Funding

Obligated

Outlayed

\$0

\$0.8M

U.S. Department of the Interior (DOI)

The U.S. Department of the Interior (DOI)⁹ protects and manages the nation's natural resources and cultural heritage; provides scientific and other information about those resources; and honors its responsibilities or special commitments to American Indians, Alaska Natives, and affiliated Island Communities. In pursuit of these goals, the department is working to help connect Tribal communities to the Internet through the National Tribal Broadband Grant (NTBG)¹⁰ program which provides funding to federally recognized American Indian and Alaska Native tribes, bands, villages, nations, or communities to deploy broadband.

FY21 Snapshot of DOI Broadband Funding

Appropriated

Obligated

Outlayed

\$1.5M

\$1.5M

\$1.5M



IMPACT ILLUSTRATION
DIGITAL INCLUSION
AND ADOPTION OFFICE
OF INDIAN ECONOMIC
DEVELOPMENT
BROADBAND GRANTS
FUND FUTURE ACCESS
AND OPPORTUNITY



The National Tribal Broadband Grants (NTBG) program funds Tribes to hire consultants to perform feasibility studies for deployment or expansion of high-speed Internet (broadband) transmitted, variously, through digital subscriber line (DSL), cable modem, fiber, wireless, satellite and broadband over power lines (BPL).



Read the full Impact Illustration on page 43.

⁷ The Denali Commission, Denali Commission Story, https://www.denali.gov/ (last accessed Nov. 17, 2021).

⁸ The Denali Commission, A Blueprint for Alaska's Broadband Future, (Dec. 11, 2019), https://secureservercdn.net/198.71.233.52/02e.11d.myftpupload.com/wpcontent/uploads/2019/12/2019_Alaska_Broadband_Plan_Final-1.pdf (last accessed Oct. 11, 2022).

⁹ DOI, About Interior, https://www.doi.gov/about (last accessed Oct. 11, 2022).

¹⁰ DOI, National Tribal Broadband Grant (NTBG), https://www.bia.gov/service/grants/ntbg (last accessed Oct. 11, 2022).





National Science Foundation (NSF)

The National Science Foundation (NSF) ¹¹ is an independent federal agency that supports research to create knowledge, promote the progress of science, advance the national health and prosperity, and secure the national defense. Expanding broadband is essential to these goals, motivating the agency to launch the OVERCOME (cOnnectiVityfor undERserved COMmunitiEs) Project.¹² The goal of this project is to select, launch, and oversee five proof-of-concept efforts to deploy novel broadband technology solutions to both rural and urban underserved communities. NSF provided information regarding its OVERCOME program which provides technical assistance and capacity-building services for smart and connected communities.





NSF funded the US Ignite Smart Gigabit Communities project which provides technical assistance and capacity-building services for smart and connected communities to identify problem areas, benchmark offerings, design solutions, and demonstrate new tech/social collaborations and at-scale deployments.



Read the full Impact Illustration on page 45.

FY21 Multi-Use Reporting Agencies

Beyond programs focused on broadband, many programs invest in broadband as a component of many eligible funding uses. In responding to this year's data call, and as acknowledged in last year's report, many multi-use programs noted challenges with isolating the portion of funds dedicated to broadband-related purposes from those allocated for non-broadband purposes. In other cases, agencies did not collect broadband specific data during the FY21 reporting cycle but plan to collect broadband data in the future. Where noted, funding information presented in this section does not represent the level of funds invested solely in broadband in FY21, but rather funds which were eligible for investment in broadband. Nonetheless, multi-use programs provide critical broadband support to communities nationwide across a plethora of activity including bolstering COVID resiliency, workforce capacity building, as well as educational and economic opportunity for underserved communities. The inclusion of these programs is essential to understand the full range of activity and impact throughout the federal broadband landscape.

For FY21, ten agencies responded to the data call (with eight agencies providing specific broadband data) indicating that broadband was an eligible expense for 68 programs. Out of these 68 programs, 17 programs collected and submitted broadband specific data in FY21. In FY21 \$81.5M was obligated and \$75.6M outlayed to these programs for broadband.

FY21 Snapshot of Multi-Use Programs by Agency				
Agencies	Programs	Obligated	Outlayed	
10	68	\$81.5M	\$75.6M	

¹¹ NSF, About the National Science Foundation, https://www.nsf.gov/about/ (last accessed Oct.11, 2021).

¹² NSF, OVERCOME: Connectivity for Underserved Communities, https://www.nsf.gov/awardsearch/showAward?AWD_ID=2044448&HistoricalAwards=false (last accessed Oct.11, 2021).





U.S. Department of the Treasury (Treasury)

Treasury's mission is to maintain a strong economy and create economic and job opportunities by promoting the conditions that enable economic growth and stability at home and abroad, strengthen national security by combating threats and protecting the integrity of the financial system, and manage the U.S. Government's finances and resources effectively.¹³ In response to COVID-19, Treasury administers the American Rescue Plan¹⁴ which includes many programs designed to provide relief to state, local, and Tribal governments to enable them to continue to support the public health response and lay the foundation for a strong and equitable economic recovery. Two programs included in the American Rescue Plan–the Coronavirus State and Local Fiscal Recovery Funds and the Capital Projects Fund–include broadband as an eligible use of funds. Treasury also administers the Community Development Financial Institutions (CDFI) Fund¹⁵ which works to expand economic opportunity for underserved people and communities. The CDFI Fund jointly administers with the Internal Revenue Service the New Markets Tax Credit (NMTC) Program, which incentivizes community development and economic growth through the use of tax credits that attract private investment to distressed communities. Broadband is one of many eligible areas of investment for the NMTC Program.

In FY21, Treasury reported \$360B of total appropriated funding for the Capital Projects Fund and the Coronavirus State and Local Fiscal Recovery Funds. While these programs did not have specific appropriations for broadband, broadband was indicated as being a main investment initiative for these programs. In the forthcoming years, Treasury will be a major funder of broadband projects. The reporting requirements for these programs will allow Treasury to provide data on the amounts obligated and outlayed for broadband.

FY21 Snapshot of Treasury Total Appropriated Funding

Capital Projects Fund

Coronavirus State and Local Fiscal Recovery Funds

Total Appropriated

\$360B

 $^{13\ \} Treasury, Role of the\ Treasury, \underline{https://home.treasury.gov/about/general-information/role-of-the-treasury}\ (last\ accessed\ Oct.11,\ 2021).$

¹⁴ Treasury, COVID-19 Assistance for State, Local, and Tribal Governments, https://home.treasury.gov/policy-issues/coronavirus/assistance-for-state-local-and-tribal-governments (last accessed Oct. 11, 2022).

¹⁵ Treasury, CDFI Fund, About Us, https://www.cdfifund.gov/about (last accessed Oct. 11, 2021).





U.S. Department of Commerce, Economic Development **Administration (EDA)**

The U.S. Economic Development Administration (EDA) designed its investment policy to establish a foundation for sustainable job growth and the building of durable regional economies throughout the United States. This foundation builds upon two key economic drivers-innovation and regional collaboration. Innovation is key to global competitiveness, new and better jobs, a resilient economy, and the attainment of national economic goals.¹⁶ Broadband is acknowledged to be a potential engine for economic opportunities and is frequently cited as a necessary condition for economic growth and prosperity in currently under/unserved areas. As such, EDA views its ability to fund broadband projects as an integral tool for helping communities and regions build the capacity for economic development.¹⁷ Specifically, EDA funds various types of projects designed to support broadband deployment based on the individual needs of communities and regions, including studies, planning activities, technical assistance on the deployment of technologies based on broadband, and the funding of actual broadband infrastructure. EDA has two programs where broadband is an eligible expense: the FY20 Economic Adjustment Assistance Program and the FY20 Public Works Program. These programs also include funding under the Coronavirus Aid, Relief, and Economic Security Act, also known as the CARES Act 2020.

FY21 Snapshot of EDA Broadband Funding			
FY20 Economic Adjustment Assistance Program	Obligated	Outlayed	
FY20 Public Works Program	\$32.5M	\$32.5M	

Appalachian Regional Commission (ARC)

The Appalachian Regional Commission (ARC)¹⁸ is an economic development partnership agency of the federal government and 13 state governments focusing on 423 counties across the Appalachian Region. ARC's mission is to innovate, partner, and invest to build community capacity and strengthen economic growth in Appalachia to help the Region achieve socio-economic parity with the nation. Expanding broadband is a core part of this mission. ARC administers two programs that include broadband-related activities as eligible uses: the Area Development Program and the POWER Initiative.

FY21 Snapshot of ARC Broadband Funding				
POWER Initiative	Obligated	Outlayed		
Area Development	\$22.4M	\$6.7M		

¹⁶ EDA, Overview, https://eda.gov/about/ (last accessed Oct. 11, 2022).

¹⁷ EDA, Annual Report to Congress 2020 https://www.eda.gov/sites/default/files/2022-02/FY2020-Approved-EDA-Annual-Report.pdf (last accessed Oct. 11, 2022).

¹⁸ ARC, About the Appalachian Regional Commission, https://www.arc.gov/about-the-appalachian-regional-commission/ (last accessed Oct.12, 2022).





Delta Regional Authority (DRA)

The Delta Regional Authority (DRA) is an independent federal agency that works to improve economic opportunity by helping to create jobs, build communities, and improve the lives of the 10 million people who reside in the 252 counties and parishes of the eight-state Mississippi Delta and Alabama Black Belt Delta region. The DRA provides funding for projects that advance economic development and develop infrastructure in the region. As such, grant programs eligible for broadband-related funding include the States' Economic Development Assistance Program (SEDAP) and the Community Infrastructure Fund. In FY21, DRA submitted combined data for these programs.

FY21 Snapshot of DRA Broadband Funding

States' Economic Development Assistance Program and Community Infrastructure Fund **Obligated**

\$130K

Northern Border Regional Commission (NBRC)

Northern Border Regional Commission (NBRC) is a Federal-State partnership for economic and community development within the most distressed counties of Maine, New Hampshire, Vermont, and New York. The NBRC was formed by the U.S. Congress in 2008. America's northeast has a long history of entrepreneurship, forest projects manufacturing, and surviving off the natural resources of the region. However, changing markets and global competition have challenged the northeast's once vibrant economy. In response, the NBRC was formed to help alleviate distress in the hard-hit northern counties of each state. These counties generally have higher levels of unemployment, population loss, and lower incomes. The state governments of Maine, New Hampshire, Vermont, and New York play a crucial role in the NBRC as they partner with the federal government to focus NBRC funding strategies and help prioritize investment applications. NBRC has one program where broadband is an eligible expense: the State Economic & Infrastructure Development Investment Program.

FY21 Snapshot of NBRC Broadband Funding

State Economic & Infrastructure Development Investment Program

Obligated

Outlayed

\$2.6M

\$0.2M



IMPACT ILLUSTRATION
MULTI-USE
INFRASTRUCTURE |
BROADBAND FUNDING
FUELS PROMISE OF
ECONOMIC VITALITY
IN NORTHERN BORDER
REGION



Northern Border Regional Commission (NBRC) is a Federal-State partnership for economic and community development within the most distressed counties of Maine, New Hampshire, Vermont, and New York.







U.S. Department of Education (Education)

The U.S. Department of Education²⁰ seeks to promote student achievement and preparation for global competitiveness by fostering educational excellence and ensuring equal access. In the digital age, a broadband connection is an essential tool for a robust education. Particularly in the era of COVID-19 and remote learning, a broadband connection has become a prerequisite to engage with the education system.

In FY21, the U.S. Department of Education reported that 39 programs included broadband as an eligible expense. Five of those programs shown below provided data on broadband investments.

FY21 Snapshot of Department of Education Broadband Funding

Adult Education National Leadership Activities - Workforce Innovation and Opportunity Act, Title II, Adult Education and Family Literacy Act

Obligated

Alaska Native Education Program

\$7.4M

Education Stabilization Fund I Allocations to the Outlying Areas-Governors

Outlayed

Education Stabilization Fund I Allocations to the Outlying Areas- SEAs

\$22.7M

Native Hawaiian Education Programs

FY21 Snapshot of Education Programs where Broadband is an Eligible Expense

Total Appropriated

\$222B

See Appendix for list of all 39 programs

U.S. Department of Agriculture, Rural Housing Service (RHS)

USDA's Rural Housing Service (RHS) offers funding through a variety of programs to build or improve housing and essential community facilities in rural areas.²¹ RHS administers the Community Facilities Direct Loan and Grants Program, which offers direct loans, loan guarantees and grants to construct, expand, or improve essential public services and facilities in communities across rural America, including those that provide health care, education, public safety, and public services.²² The program includes broadband as an eligible expense when developing these facilities.

> FY21 Snapshot of USDA, RHS Program where **Broadband is an Eligible Expense**

Total Appropriated

\$2.8B

²⁰ U.S. Department of Education, About ED, https://www2.ed.gov/about/landing.jhtml?src=ft (last accessed Oct. 12, 2022).

²¹ USDA, Rural Housing Service, https://www.rd.usda.gov/about-rd/agencies/rural-housing-service (last accessed Oct. 11, 2022).





U.S. Department of Housing and Urban Development (HUD)

The U.S. Department of Housing and Urban Development (HUD) works to create strong, sustainable, inclusive communities and quality affordable homes for all; strengthen the housing market to bolster the economy and protect consumers; meet the need for quality affordable rental homes; utilize housing as a platform for improving quality of life; and build inclusive and sustainable communities free from discrimination. A broadband connection is increasingly considered an essential tool in any house or apartment. For several of its programs, HUD offers funding that can be used to provide broadband access in housing units and in some cases, the department requires that funding recipients make broadband accessible in their housing units. In addition, the Community Development Block Grant Program can fund broadband infrastructure for entire communities, if the beneficiaries are predominantly low-to moderate-income.

FY21 Snapshot of HUD Broadband Funding

Indian Community Development Block Grant ARP

Obligated

\$2.9M

The Department of Housing and Urban Development reported that 14 programs have broadband as an eligible expense. HUD provided data on broadband specific investments for one program: the Indian Community Development Block Grant ARP.

FY21 Snapshot of HUD Programs where Broadband is an Eligible Expense with Total Appropriated

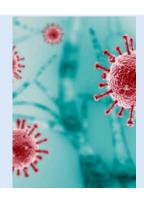
Section 108 Loan Guarantee Program
Community Development Block Grant Program (CDBG)
Continuum of Care (CoC) Program
Emergency Solutions Grants Program
HOME Investment Partnerships Program
Housing Trust Fund
Indian Community Development Block Grant ARP
Indian Housing Block Grant ARP
Indian Housing Block Grant (competitive)
Indian Housing Block Grant (formula)
NAHASDA Title Loan Guarantee Program
Multifamily Housing Regulatory Requirement
Public Housing Operating Funds
Public Housing Capital Funds

Total Appropriated

\$17.6B



DEPLOYS COMMUNITY
DEVELOPMENT BLOCK
GRANTS TO ENABLE
COVID 19 RESILIENCY



The Community Development Block Grant CARES Act (CDBG-CV) program provides one-time grants to states, insular areas, and local governments to prevent, prepare for, and respond to the spread of COVID-19.







U.S. Department of Labor (DOL)

The mission of the U.S. Department of Labor ²³ is to foster, promote, and develop the welfare of the wage earners, job seekers, and retirees of the United States; improve working conditions; advance opportunities for profitable employment; and assure work-related benefits and rights. In addition to the programs highlighted in the Impact Illustration graphic below, the Department of Labor (DOL) also administers several other training and workforce programs that can be used to develop a broadband workforce. For example, DOL is preparing an upcoming funding opportunity funded through H-1B visa fees to build pathways to infrastructure jobs needed to maximize the impact of investments made under the Bipartisan Infrastructure Law (BIL), including broadband investments. The WIOA and National Apprenticeship Act appropriations for FY21 totaled \$3.6B, which supports training, guidance, and technical assistance in a broad array of in-demand industries and sectors, including broadband.

Telecommunications Industry Registered Apprenticeship Program (TIRAP)

Public-private joint
venture that develops
credentialed
apprenticeship programs
for the
telecommunications
workforce.

Workforce Innovation and Opportunity Act (WIOA)

Funds approximately
2,300 American Job
Centers (One-Stop
Centers) that provide a
full range of assistance to
job seekers including
"Digital Literacy."

Strengthening Community Colleges Training Grants (SCC)

U.S. Department of Labor's grant program invests in the ability of community colleges to address the challenges of today's workforce.

Telecommunications Workforce Interagency Group (TWIG)

Created by the
Infrastructure Investment
and Jobs Act to address
the 5G workforce needs of
the telecommunications
industry, including
workforce safety.



IMPACT ILLUSTRATION
DOL SCALES 5G
WORKFORCE FOR
COAST-TO-COAST
CONNECTIVITY



The Department of Labor has several workforce initiatives scaling America's ability to adopt broadband technology across the nation.



Read the full Impact Illustration on page 49.





Institute of Museum and Library Services (IMLS)

The Institute of Museum and Library Services (IMLS)²⁴ advances museum, library, and information services to meet the essential needs of the American public through grant-making, research, strategic engagement, and policy development. Libraries play a central role in providing digital access and inclusion. Over 99% of public libraries provide Internet access to their users through public access computers. During the COVID-19 pandemic in 2020, 62% of public libraries provided Wi-Fi Internet access to users outside their buildings, and nearly 50% increased pre-existing external Wi-Fi access.

FY21 Snapshot of IMLS Broadband Funding

American Rescue Plan Act (ARPA)-Grants to States, Libraries

Grants to State Library Administrative Agencies

IMLS American Rescue Plan Grants

National Leadership Grants for Libraries

Native American Library Services: Basic Grants

Native American Library Services: Enhancement Grants

Obligated

\$13.5M

Outlayed

\$13.5M



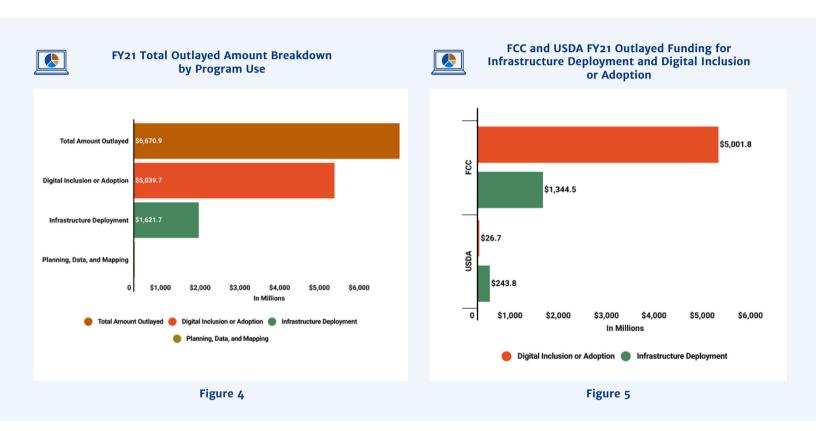


FY21 Broadband Program Uses

The report categorizes broadband programs based on the following broadband uses: planning, data and mapping; infrastructure deployment; digital inclusion or adoption.

In FY21, 21 programs reported funding for infrastructure deployment, 11 programs reported funding for digital inclusion or adoption, and seven programs reported funding for planning, data, and mapping.

The highest amount of outlayed funding was made by the FCC, with 95% of the FY21 funding, \$6.3B overall.



In FY21, the most outlayed funding was for digital inclusion or adoption at 75.6%, followed by infrastructure deployment at 24.3%, and planning, data and mapping at 0.1%.

In FY21, of all the agencies that provided data, the FCC and USDA outlayed the most funding for digital inclusion or adoption (\$5.0B) and infrastructure deployment (\$1.6B). In FY21, the FCC reported the most outlayed funding for digital inclusion or adoption at \$5.0B across six programs. The FCC also has the most outlayed funding for infrastructure deployment, with \$1.3B across 11 programs.

In FY21, five agencies outlayed \$9.5M across seven programs for planning, data, and mapping. The mostC funding for planning, data, and mapping was outlayed for the Department of Commerce's FY20 PublicC Works and Economic Adjustment Assistance Programs at \$6.1M.





05 FY21 Key Findings

The second iteration of this report displays continued progress toward the ACCESS BROADBAND legislative objectives. This progress included growth in agencies contributing data for the report. For the first time, the report has incorporated Tribal data which provides a more comprehensive and inclusive perspective on funding. Analysis of the data indicated a higher percentage of outlayed funding going toward digital inclusion or adoption investments. Movement toward legislative objectives was also achieved with the further development of an economic impact architecture.

All agencies who submitted broadband funding data:

Appropriated	Obligated	Outlayed
Four agenciesTen programs\$13.5B appropriated	Ten agencies33 programs\$8B obligated	Nine agencies37 programs\$6.7B outlayed

Top agencies who submitted broadband funding data:

Appropriated Funding

Top three agencies with appropriated funding include the Federal Communications Commission with \$10.6B, Department of Commerce with \$1.5B, and Department of Agriculture with \$1.4B.

Obligated Funding

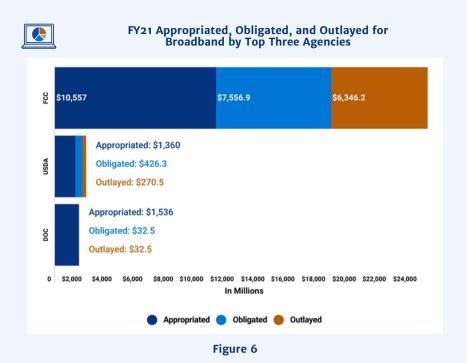
Top three agencies with obligated funding include the Federal Communications Commission with \$7.6B, Department of Agriculture with \$426M, and Department of Commerce with \$32.5M.

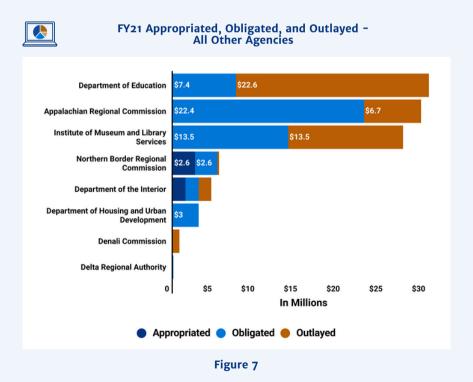
Outlayed Funding

Top three agencies with outlayed funding include Federal Communications Commission with \$6.3B, Department of Agriculture with \$270.5M, and Department of Commerce with \$32.5M.









With this report submission, NTIA has also included an interactive dashboard, available on NTIA's ACCESS BROADBAND webpage where this report is hosted. For this year, OICG focused on a streamlined version of the report to establish the right balance of content and data visualization. The interactive infographic is powered by Infogram and can be manipulated to show different filters and visuals based on the data requirements from 2021. These filters include new features such as year over year comparisons. Data from the dashboard graphics, many of which are included in this report, can be downloaded from the dashboard directly and the full data set

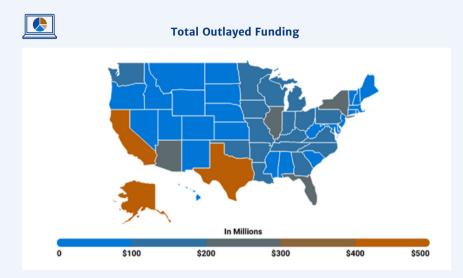
can be downloaded from the NTIA website.





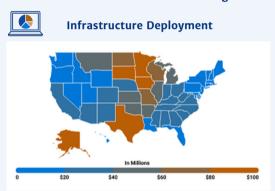
FY21 Funding to States

State Outlayed Funding Breakdown by Funding Type



The state of California reported the most outlayed funding totaling \$563.5M. California and Texas saw decreases in outlays from FY20 to FY21, while Alaska (172.2%) and American Samoa (72.7%) both saw increased outlays when compared against FY20 funding levels.

Figure 8





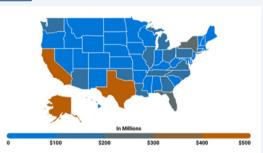




Figure 9

Alaska saw the highest outlayed for infrastructure deployment at \$104.3M followed by Minnesota at \$94.2M and then Texas at \$92.5M.

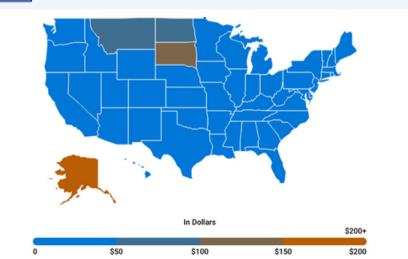
Figure 10

California had the highest outlayed amount for digital inclusion or adoption at \$524.2M followed by Alaska at \$421.8M and then Texas at \$408.8M.

Figure 11

Alaska also had the highest outlayed for planning, data, and mapping at \$1.2M followed by Maryland at \$960K and California at \$930.3K.

Outlayed Funding Per Capita by U.S. State and Territory



In FY20, Northern Mariana Islands yielded the highest per capita outlayed funding with \$522, followed by Alaska with \$263 per capita and North Dakota with \$130 per capita. In FY21, Alaska yielded the highest per capita outlayed funding at \$720 followed by South Dakota with \$103 per capita and North Dakota with \$96 per capita.

Figure 12 PAGE 28 OF 65





FY21 Funding to Tribes and Tribal Entities

For this year's report, NTIA issued a follow up data call for Tribal specific broadband data. Six agencies, USDA, HUD, Denali, DOI, DOC, and IMLS submitted Tribal data across thirteen programs. Data was submitted on 168 Tribes and Tribal consortia. ²⁵ A full list with funding breakdown can be found in the Federal Broadband Funding Report Dashboard.

The total funding for Tribal submissions is based only on outlayed funding, totaling \$32.3M. Appropriated and obligated amounts were not requested for this data call. This initial submission of data reported \$27.6M in infrastructure deployment funding use, representing 86% of total funding by type. Outlayed funding for digital inclusion or adoption (representing 5.7%) totaled \$1.8M, and planning, data, and mapping totaled \$2.8M, representing 8.7%.

Data included outlays for over 168 Tribes and Tribal consortia, Geographically, these broadband outlays were spread across 21 states, with a significant concentration of this funding in the state of Oklahoma. Tribes and Tribal consortia residing in Oklahoma received \$19.1M or 59.3% of total Tribal broadband outlayed funding. The next two states, by amount of outlays received, were South Dakota (\$6.9M) and New Mexico (\$1.1M) respectively, representing 21.3% and 3.5% of total funding outlays.

In FY21, NTIA released the Notice of Funding Opportunity for the Tribal Broadband Connectivity Program. NTIA received over 280 applications requesting over \$5B in funding. TBCP began awarding funding in November 2022 and the awards made in FY22 will be reflected in next year's report. It should be noted that the amount of funding outlayed for planning, data, and mapping in FY21 helped Tribes and Tribal consortia prepare for the TBCP application period.

FY21	Snapshot of Total Outlayed Funding and Funding	5
	for Tribal, by Program Use	

Total Outlayed	Digital Inclusion or Adoption	Infrastructure	Planning, Data, or Mapping
\$32.3M	\$1.8M	\$27.6M	\$2.8M

²⁵ Tribal consortium is defined as any group of Tribes or entity that received a grant benefitting a group of Tribes. 26 In FY21, the Notice of Funding Opportunity for NTIA's Tribal Broadband Connectivity Program was released and NTIA began accepting applications. In the forthcoming years, it is expected that the outlayed funding to Tribes and Tribal consortia will grow exponentially as that funding is rolled out.





Showcasing Funding Impacts

The 2022 Federal Broadband Funding Report consolidates data from a wide range of federal broadband programs and quantifies the investments of these programs.

Analysis of this data indicated the following three key findings:

1

Increases in FY21 Appropriated
Broadband Funding

2

Inclusion of Tribal View of Broadband Provides More Complete Picture

3

In FY21 Broadband Program
Outlays Allocate More to Digital
Inclusion or Adoption

1 Increases in FY21 Appropriated Broadband Funding

Appropriated funding investments in broadband increased in FY21. This increase was especially significant in appropriated funding where the total of \$13.5B represented a substantial jump (over 694%) over last year's appropriated funding. This large increase in appropriate funding is a direct result of the investments in broadband established under the Consolidated Appropriations Act, 2021, and will continue to grow with the passage of the Bipartisan Infrastructure Law (BIL). With the passage of the BIL, Congress appropriated \$65B for broadband. These increases were not reflected in obligated or outlayed funding in FY21; however, with the increase of appropriated funding in FY21, it is expected that obligated and outlayed funding will increase in the coming years.

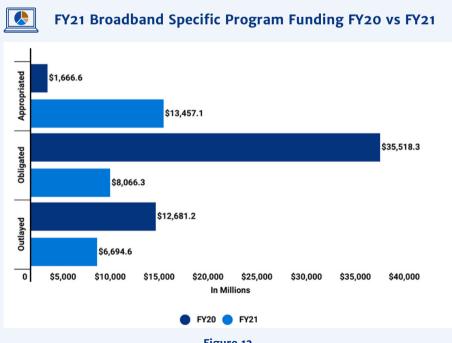


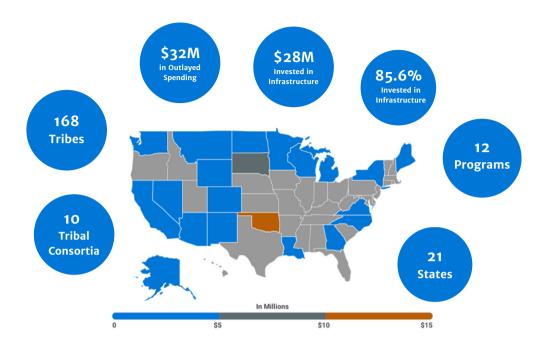
Figure 13





2 Inclusion of Tribal View of Broadband Provides More Complete Picture

In FY21, a more comprehensive look at broadband investments comes into view with the important inclusion of Tribal data. For FY21, five agencies reported on 12 programs with Tribal funding for the first time. These investments, totaling \$32M in outlayed spending, spanned across 21 states and were made to 168 federally recognized Tribes and 10 Tribal consortia.



In FY21 Broadband Program Outlays Allocate More to Digital Inclusion or Adoption

In the second year of reported activity, reported outlays by program use revealed a higher percentage of outlayed funding going towards digital inclusion or adoption in comparison to planning, data, and mapping and infrastructure deployment.

In FY21, digital inclusion or adoption (DI/A) captured 75.6% (or over \$5B) of broadband funding while infrastructure deployment and planning, data, and mapping uses represented 24.3% (or over \$1.6B) and 0.1% (or over \$9.5M) respectively. This shift in outlays represents the emphasis on connecting unserved and underserved communities but is also reflective of the maturation cycle as broadband investments begin to impact communities and economic activity. The DI/A investments were made across a wide array of communities from Tribal to rural to underserved urban neighborhoods and originated primarily from the programs of three agencies: FCC, USDA, and DOC.

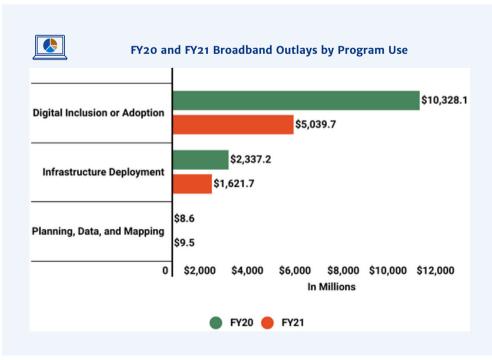


Figure 14





Connecting Availability and Use

Over time, the Federal Broadband Funding Report will provide estimates of the number of residents connected because of federal broadband investments and Universal Service Fund (USF) programs and estimate the impact of investments on local economies. This impact assessment will take multiple years to build. There are many ways to measure how residents are "connected" to broadband.

For FY21, OICG requested the following data from programs:

Broadband Availability

Refers to being physically located near broadband. Availability can be measured by the type of deployment effort or the level or quality of service available. OICG requested data on "households and businesses passed by infrastructure" and "households and businesses included in the proposed funded service area (PFSA)" to explore the feasibility of programs reporting on outcomes that quantify physical connection. Availability measures only apply to infrastructure programs.

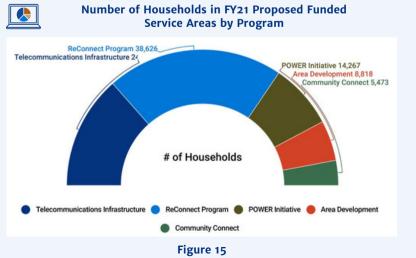
Broadband Usage

Refers to usage of broadband infrastructure once it is available. Much like availability, usage can be measured in many ways and may vary depending on specific programmatic objectives. To align around a broadly applicable standard, this year's data request asked programs to provide data on "households and businesses projected to subscribe to available broadband service" to gather information on broadband use. Usage measures may apply to both infrastructure and digital inclusion or adoption programs.

Many programs do not collect measures on availability and usage. Instead, they collect alternative outcome data specifically aligned to their programmatic objectives. At the time of this report's release, broadband programs are not required to collect consistent outcome-based measures, and for some, the measures requested may not easily translate to their programmatic objectives.

Broadband Availability

USDA and ARC reported data on the number of households and businesses located in proposed funded service areas (PFSAs) for five programs. Combined, these programs estimated 92,028 households and 10,816 businesses located in their PFSAs. USDA's ReConnect Program accounts for the largest numbers of households within its PFSAs, with an estimated total of 38,626 households within its PFSAs for which funding was outlayed in FY21. USDA's Telecommunications Infrastructure Program accounts for the largest number of businesses within its PFSAs, with an estimated total of 6,853 households within its PFSAs for which funding was outlayed in FY21.



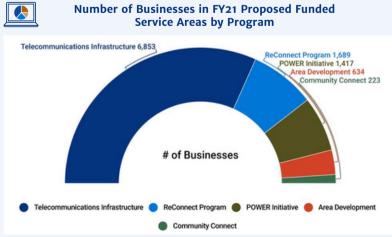


Figure 16





Broadband Usage

Ten programs out of 98 reported on the number of households and businesses projected to subscribe to broadband as a result of FY21 funding. Although this number represents a fraction of all programs with broadband eligible funding, it is a 40% increase in the number reporting their projections from the prior year. As shown in Figure 17, of this group, seven programs reported projected subscription data totaling 13,513,352 households. FCC's Lifeline Program had the broadest reach in household subscriptions with 7,504,000 households. The FCC's Rural Health Care Fund reported the most substantial business subscription projections–12,550 subscriptions–for FY21 powered by two programs: the Healthcare Connect Fund Program and the Telecommunications Program. The former provides support for high-capacity broadband connectivity to eligible health care providers and the latter subsidizes the difference between urban and rural rates for telecommunications services. The ten reporting programs projected business subscription growth totaling over 18,703 due to FY21 funding outlays.



Projected Number of Households and Businesses Subscribed as a Result of FY21 Outlayed Funding by Program

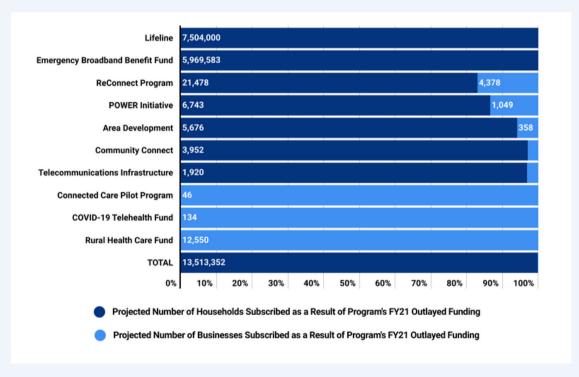


Figure 17





06 Economic Impact

Tracking to the Legislative Mandate

In addition to tracking and reporting annually on federal broadband investments, the Consolidated Appropriations Act, 2021, charged NTIA with reporting on "an estimate of the economic impact of such broadband deployment efforts on local economies, including any effect on small businesses or jobs." Last year's report proposed a framework and logic model clarifying how NTIA's data collection and classification efforts of three major broadband expansion activities—developing and/or improving infrastructure, establishing and/or operating digital inclusion programs, and planning projects and/or collecting data—lead to program outputs, immediate outcomes, intermediate outcomes, and long-term outcomes. For infrastructure programs especially, immediate program outcomes are primarily reflected in the number of businesses and households with access (availability) to and use (adoption) broadband service.

FY21 Conceptual Framework Impact Metrics

Household & Workforce Impacts

- Employment
- Unemployment
- Labor Force Participation
- Self-Employment
- Telework
- Wages
- Household Income
- Poverty

Business Impacts

- Establishment Entry Rate
- Growth in Number of Small Business Establishments

Other Regional Impacts

- School Quality
- Home Values
- Net Migration

GDP





Building the Foundation for the Impact Assessment

Over the past fiscal year NTIA took foundational steps forward to develop the data and methodological architecture for assessing the economic impacts of federal broadband programs.

NTIA made progress in two major areas:

- Framework for Economic Outcomes: OICG developed a conceptual framework illustrating the potential pathways by which expanded broadband service could lead to improved economic outcomes over the long run. This framework drives the selection of economic indicators to track over time to help assess program impacts. Extensive consultations with experts both within and outside the federal government and a review of existing broadband impact studies informed the framework, shown above. It highlights the ways in which broadband service can improve productivity, increase access to information and markets, and serve as a desirable amenity attracting businesses and people to a region.
- Dashboard of Economic Indicators: OICG created the ACCESS BROADBAND Dashboard, an interactive mapping tool including the economic indicators corresponding to the pathways and economic outcomes implicated by the conceptual framework. Working with the Census Bureau, NTIA gathered in one location the economic indicators at the most granular geographic scale possible, making it easier for the public to monitor economic conditions as broadband access expands. The dashboard was made available in February 2023.

Meeting Challenges to the Economic Impact Assessment

The steps taken by NTIA in 2022 established the foundation for assessing economic impacts. While NTIA is setting this foundation, they considered the significant challenges that remain. Local and regional economic impacts of broadband infrastructure projects will likely take time before they are observable in the data. Furthermore, isolating the impact of broadband expansion on economic outcomes from other factors is difficult.

Local and regional economic impacts will take time: While some individual and household-level economic impacts of access and adoption of broadband service may occur immediately, local and regional economic impacts are more likely to be realized over the long term. Infrastructure projects may take years to complete, followed by gradual adoption, followed by a period for economic development activities that take advantage of new service–such as new business startups—to develop. Nevertheless, retrospective studies of the economic impacts of broadband service provide insights of the scope and scale federally assisted broadband expansion efforts could have for the economic vitality of people and places connected to high-speed Internet service.

Isolating the impact of broadband expansion on economic outcomes: Estimating the causal impact of broadband expansion on long-run economic outcomes is difficult. As shown in the conceptual framework above, economic theory suggests that the expansion of broadband service in an area can enable new workforce and economic development in a locality that spurs economic growth. At the same time, economic growth itself can spur demand for broadband service. Isolating the former—the causal impact of expanded broadband service on economic growth—from the latter is exceedingly difficult. Nevertheless, there are rigorous studies that attempt to tackle the challenge.





Sourcing the Research Landscape

Prior economic impact assessments of broadband expansion provide guideposts for assessing its impacts. The most reliable studies are retrospective (ex post), looking backward to determine the contribution of past broadband expansion efforts to economic development, and include attempts to mitigate problems associated with establishing causality.

A selection of findings grouped by economic impact are highlighted below.

Overall Economic Growth: Gross Domestic Product (GDP) is the broadest measure of overall economic activity. Economic theory suggests that high-speed Internet service can boost economic growth by reducing transaction costs and the cost of spreading ideas and information and opening access to new markets. Czernich et al. (2011) found that a 10-percentage point increase in broadband access resulted in a 0.90% to 1.5% increase in annual per capita growth for countries in the Organization for Economic Cooperation and Development (OECD, which includes the United States) between 1996 and 2007.²⁹ More recently, Katz and Jung (2022) examined broadband expansion as well as speed of service. They found that "if broadband adoption and speeds had remained at 2010 levels, in 2020 the US GDP would have been \$1.3T lower. This is equivalent to almost \$4,000 annual dollars less for the average American." 30

Job Growth: Direct impacts on job creation occur through building out the infrastructure for broadband service. A Brookings federal infrastructure investment study for a hypothetical \$80B broadband infrastructure buildout, using estimates from Pollin and Chakroborty (2020)³¹ estimated it would generate "200,000 job-years 32 in about 130 occupations, principally in Installation, Maintenance, and Repair Occupations."33 Beyond the direct job creation from building the infrastructure, research suggests that increased access to broadband service and adoption is positively related to job growth, especially in industries that rely heavily on information technology³⁴ and that high-speed service (above 100 Mbps) is associated with a 0.26% lower unemployment rate in Tennessee counties.³⁵

²⁹ Czernich, Nina, Oliver Falck, Tobias Kretschmer, and Ludger Woessmann. 2011. "Broadband Infrastructure and Economic Growth." Economic Journal 121(522): 505-532.

³⁰ Katz, Raul and Juan Jung. 2022. "The Contribution of Fixed Broadband to the Economic Growth of the United States between 2010 and 2020." Telecom Advisory Services LLC.

³¹ Pollin, Robert and Shouvik Chakraborty. 2020. "Job Creation Estimates Through Proposed Economic Stimulus Measures." PERI at University of Massachusetts Amherst, September 11.

³² Job-years is a standardization equal to the number of jobs created during the life of the project assuming that the budget and all jobs were created in a single year

³³ Escobari, Marcela, Dhruv Gandhi, and Sebastian Strauss. 2021. "How federal infrastructure investment can put America to work." Policy Brief, Center for Sustainable Development, Brookings Institution, March.

³⁴ Whitacre, Brian, Roberto Gallardo, and Sharon Strover, 2014, "Does rural broadband impact jobs and income? Evidence from spatial and first-differenced regressions," The Annals of Regional Science 53:649-670.; Kolko, Jed. 2012. "Broadband and Local Growth." Journal of Urban Economics 71(1):100-113.





Business Impacts: Generally, past studies have found a positive relationship between expanded broadbandC service and business startup rates in rural areas, suggesting that broadband access plays a key role in entrepreneurship.36 Industry-funded studies suggest that rural businesses benefit from adopting the digital tools and capabilities that broadband service offers. A U.S. Chamber of Commerce study (2019) ³⁷ suggests that greater adoption of digital tools could add \$140B to the U.S. rural economy, while a Deloitte study (2018)³⁸ estimated that the access to global markets online allows connected small businesses to have a 30% higher survival rate than unconnected businesses. Impacts are likely to vary by industry by the degree to which broadband brings increased exposure to competition.³⁹

Individual and Consumer Benefits: Expanded access to goods and services gives consumers a wider array of options, leading to potentially sizable savings. On average, survey-based estimates place the annual economic benefit of access to broadband service at about \$1,900 per household in 2022 dollars. 40 Researchers at the Ohio State University argue that given the "rapid increase in usage by the average household for remote work, service such as healthcare and entertainment, and retail and grocery goods," the benefit to households likely exceeds \$2,000 per year. 41 Homeowners may also benefit from higher home values. One study found that increasing the number of houses in rural counties with faster Internet speeds increased housing values.⁴² Another study found a 2.5%-3% increase in property values associated with an increase in broadband connection speed from 1 Mbps to 25 Mbps.⁴³

While much is known about the economic impacts of broadband, many studies suffer from a lack of accurate data about exactly where broadband service is available, and where it is not.44 New data resources in FY23, specifically more granular data on broadband availability and federal broadband infrastructure funding, will make research identifying the economic impacts of broadband expansion more accurate and reliable. The new FCC Broadband Funding Map will provide clarity about broadband availability and will show where federal resources are being spent.

³⁶ Deller, Steven, Brian Whitacre, and Tessa Conroy. 2022. "Rural Broadband Speeds and Business Startup Rates." American Journal of Agricultural Economics 104:999-1025.; Kim, Youniun and Peter Orazem, 2017, "Broadband Internet and New Firm Location Decisions in Rural Areas," American Journal of Agricultural Economics 99(1):285-302,

³⁷ U.S. Chamber of Commerce, 2019, Greater Adoption of Digital Tools in Rural America Could Add \$140 Billion to the U.S. Economy by 2021.

³⁸ Deloitte, 2018. Connecting Small Businesses in the US

³⁹ While some research finds benefits to businesses from increased access to broadband, other research points to the potential risk to some businesses due to increased exposure to competition (Kim and Orazem, 2017).

⁴⁰ Greenstein, Shane, and Ryan McDevitt. 2012. "Measuring the Broadband Bonus in Thirty OECD Countries." OECD Digital Economy Papers, No. 197, Paris: OECD Publishing.

⁴¹ Genetin, Brandon, Nick Messenger, Mark Partridge, and Seung-Hun Chung. 2022. "Finding the Missing Dots: An Update on Ohio Broadband Policy." Swank Program in Rural-Urban Policy, The Ohio State University, April. p.15.

⁴² Deller, Steven and Brian Whitacre. 2019. "Broadband's Relationship to Rural Housing Values." Papers in Regional Science 98(5):1-22.

⁴³ Molnar, Gabor, Scott J. Savage, and Douglas C. Sicker. 2019. "High-speed Internet access and housing values." Applied Economics 51(55):5923-5936.

⁴⁴ Congressional Research Service. 2019. Broadband Data and Mapping: Background and Issues for the 116th Congress.





07 Conclusion

Investing In Internet for All

The development of this year's report validated additional opportunities associated with tracking federal broadband investments and measuring the number of residents connected to broadband. NTIA continues to explore opportunities for further collaboration with other agencies, in recognition that investing in *Internet For All* is a whole of government effort. This year, NTIA provided input on the FCC Broadband Funding Map, collaborated with the Office of Management and Budget to automate aspects of the data reporting process, and initiated new projects with Census to map relevant digital equity and economic indicators.

While progress has been made, opportunities remain to achieve NTIA's vision for an integrated, sustainable method and tool to capture and share broadband investment information. Federal agencies, Internet service providers, state and Tribal governments, and the public will all have a role to play in contributing accurate, granular data about broadband availability and investment to NTIA and the FCC. The FCC's forthcoming maps showing broadband infrastructure investment and broadband availability, will be a critical tool for understanding where the federal government has taken action to expand broadband access at a location level. NTIA will continue to publish this report on federal broadband investment and the report's underlying data—informed by both agencies themselves and the FCC's deployment maps—and will also explore ways to measure and present information about the economic impact of broadband and the progress of digital equity.

Key Takeaways



Automated data processing yields better results



Interagency contributions remain necessary to measure the Internet for All impacts



Data maps are critical for tracking infrastructure investments



More standardization and monitoring of broadband progress is needed to track broadband program uses



Additional broadband studies and research could identify economic impacts

NTIA will continue to explore options to enhance the accuracy and consistency of the data within this report, with the goal of producing an annual report that allows Congress and the American public to understand where federal investments are made, the results of those investments, and ultimately, a connection to economic impacts in those areas. This report exemplifies the importance of data collaboration for broadband policy and investment decisions across the United States.





Federal Communications Commission

FCC Funding Creates
Broadband Lifelines





FCC broadband programs are primarily focused on funding infrastructure and digital inclusion or adoption projects.
Below are key highlights of FCC programs for FY21.

Reaching More Households with Modernized Programs

In FY21, the FCC continued modernizing the Universal Service Fund High-Cost Program⁴⁵ by authorizing support for broadband awarded through competitive processes. Funds are helping to bridge the digital divide. The FCC authorized support from the Rural Digital Opportunity Fund and Connect America Phase II Auction to deploy broadband to an estimated 81,978 households. The FCC also authorized support to cover Puerto Rico and the U.S. Virgin Islands with broadband services of speeds up to 1 gigabit per second.

Extending Lifelines for COVID-19 Relief

In FY21, the FCC issued orders in February 2021, June 2021, and September 2021, extending several waivers associated with certain Lifeline program rules, such as recertification and reverification, to provide relief to consumers during the continuing COVID-19 pandemic.

In FY21, FCC extended E-Rate for COVID-19 relief. Program improvements included a Notice of Proposed Rulemaking Clarifying that Tribal libraries are eligible to participate in the E-Rate program. The COVID-19 Telehealth Program was created to help health care providers provide telehealth services in response to the COVID-19 pandemic.

- For Round 1, \$200M was appropriated in March 2020.
- For Round 2, \$249.95M was appropriated in December 2020.
- During FY21, the COVID-19
 Telehealth Program reimbursed nearly \$140M in telehealth costs to 460 entities previously awarded funding commitments for Round 1 projects. Announced Round 2 funding commitments totaling \$83M to 134 eligible telehealth providers.





Optimizing Broadband Benefit Programs

The Emergency Broadband Benefit Program (EBB) launched in FY21 and its successor program the Affordable Connectivity Program launched in FY22. These programs enable eligible households to apply both benefits to the same qualifying service or allow service providers to submit consumer applications through a streamlined ACP enrollment process.

Adopting the Emergency Connectivity Fund for Schools and Libraries

The Commission adopted the Emergency Connectivity Fund (ECF) Report and Order (FCC 21-58) on May 10, 2021, establishing rules for the distribution of support to eligible schools and libraries.

Ensuring Rural Health Care

In FY21, the FCC issued a waiver of program rules capping support for certain funding request types. This waiver allowed all funding year 2020 funding requests to be fully funded and allowed service providers to offer free upgraded services to health care providers. The FCC also extended the application filing deadline as well as deadlines for installation of services, invoicing, and responding to information requests from the Program administrator. Program improvements included issuing separate waivers of the Rates Database, a new mechanism used to calculate support in the Rural Health Care Telecommunications Program for health care providers in Alaska and nationwide. In the Connected Care Pilot Program, the Commission selected 59 projects seeking over \$57M in funding to participate in the Pilot Program. The FCC also issued guidance for program participants regarding eligible services, competitive bidding, requesting funding, and seeking reimbursements.





U.S. Department of Agriculture USDA Funds Broadband Initiatives to Connect and Empower Rural America





The United States Department of Agriculture (USDA) provides leadership on food, agriculture, natural resources, rural development, nutrition, and related issues based on public policy, the best available science, and effective management. Within USDA, the Rural Development (RD) Rural Utilities Service (RUS) provides funding for infrastructure or infrastructure improvements to rural communities, including water and waste treatment, electric power, and telecommunications services. The RUS Telecommunications (Telecom) Program primarily focuses on broadband infrastructure deployment and expanding distance learning and telemedicine adoption.

"Generations ago, the federal government recognized that without affordable access to electricity, Americans couldn't fully participate in modern society and the modern economy. Broadband Internet is the new electricity."

Secretary Tom Vilsack

In 2021, USDA increased its year over year broadband-specific outlays by 27% funding \$270.5M in the fiscal year. During the same period, its total appropriated funding was over \$4.2B. Several examples of the critical broadband investments made by USDA programs follow.

ReConnect Program

USDA's <u>ReConnect Program</u> provides loans and grants to construct, improve or acquire facilities and equipment needed to provide broadband service in eligible rural areas. In August 2021, USDA announced several investments to spur broadband connectivity in rural communities. In rural Arizona, USDA provided a grant of \$14.8 million to deploy a fiber-to-the-premises network. The funded service area includes 5,547 households, 22,645 people, 142 businesses, a school, a health care facility and six farms spread over 59 square miles.

Similar grants provided funding in rural communities in Virginia and Georgia where the department granted \$14.1 million and \$10.6 million, respectively, to deploy a fiber-to-the-premises network. In Virginia, the funded service area includes 37 educational facilities, three health care facilities, 14 essential community facilities, 4,139 households, 13,886 people, 193 businesses and 65 farms spread over 65 square miles. For the beneficiary communities in Georgia this funded an area that includes 6,665 households, 18,789 people, 25 educational facilities, 17 essential community facilities, 10 health care facilities, 573 businesses and 207 farms spread over 246 square miles.

Impact Illustration: U.S. Department of Agriculture





Community Connect Program

The Community Connect Program provides financial assistance to eligible applicants that will provide broadband service in rural, economically challenged communities where service does not exist. A subcomponent of this program is the Distance Learning and Telemedicine program where an array of grants was made during FY21 to improve access to learning resources and vital healthcare services.

"USDA is helping rural America build back better using technology as a cornerstone to create more equitable communities. With health care and education increasingly moving to online platforms, the time is now to make historic investments in rural America to improve quality of life for decades to come."

Secretary Tom Vilsack

In Georgia, the Morehouse School of Medicine Inc. will use a \$997,194 grant to purchase interactive telecommunications, distance learning and telemedicine equipment. Equipment will be installed in service hubs in two counties in west-central Georgia. It will be used to provide a variety of health care services to residents in underserved rural areas of nine counties across the state. These services include mental health and substance abuse treatment and counseling; clinical services; referrals for specialty care; health education and career development to schools; and chronic disease diagnosis, treatment and management, including COVID-19.

The Fall Mountain Regional School District in New Hampshire received a \$995,158 grant. This funding has provided distance learning services in Cheshire and Sullivan counties. Distance learning enables schools to share instructional resources, provide cultural literacy and career pathways programs for students, provide professional development opportunities and generally support community resilience through the COVID-19 pandemic.

Oklahoma's Okmulgee Public School District is being awarded a \$756,760 grant to provide distance learning services in Creek and Okmulgee counties. Schools will expand course offerings, including Science, Technology, Engineering and Math (STEM) courses, enable students to participate in virtual field trips, and provide professional development opportunities.





Office of Indian Economic Development

Digital Inclusion and Adoption Office of Indian Economic Development Broadband Grants Fund Future Access and Opportunity



The National Tribal Broadband Grants (NTBG) program funds Tribes to hire consultants to perform feasibility studies for deployment or expansion of high-speed Internet (broadband) transmitted, variously, through digital subscriber line (DSL), cable modem, fiber, wireless, satellite and broadband over power lines (BPL). Current eligibility for NTBG is open to all federally recognized Indian Tribes listed as Indian Entities Recognized by and Eligible to Receive Services from the United States Bureau of Indian Affairs at 87 FR 4636 (January 28, 2022). A key objective of this year's report is to highlight investments made to support Digital Inclusion and Adoption and expand broadband access to underserved communities. The NTBG program 7 provides a view into this national digital inclusion effort.

FY20 - Initial NTBG Cohort

Launched in 2020, through authority under the Snyder Act (25 USC 13) and the Further Consolidated Appropriations Act(s), the NTBG is a competitive discretionary grant program granting eligibility to federally recognized Tribes. During its inaugural performance year (9/21/20 – 9/30/21), 31 awardees across 13 states received funding totaling \$1,506,119. These awards ranged from \$40,000-\$50,000 (CFDA15.032). In this first year there were many notable highlights including the two described below.

1. Cherokee Nation

Initial NTBG Cohort

In this initial cohort, the Cherokee Nation was awarded a \$50,000 NTBG to evaluate the use of 2.5GHz spectrum to the 35 existing Cherokee community buildings. These community focal centers, while also providing their citizens with local and free Wi-Fi hotspot, would be followed by an effort to expand to households within 10 to 15 miles of that community center. The funding enabled the Nation to contract ACRS Telecommunications to plan and deploy to realize this vision. To begin, ACRS Telecommunications engineers outlined a phased approach impacting 65,000 households within the boundaries identified in the scope of work. In the first phase (Phase I), the plan envisions constructing and/or leasing fiber facilities to interconnect the numerous Tribal facilities located within 14 counties of northeast Oklahoma. In Phase II, engineers would deploy a limited coverage wireless overlay by constructing tower sites to be collocated at the Tribal facilities impacting 30,000 households. Ultimately in Phase III, albeit beyond the scope of the study, the plan calls for adding more fiber and wireless distribution to provide broadband service to Cherokee Nation citizens. As part of this design, the Cherokee Nation may also consider forming a new Limited Liability Company for the purpose of offering the proposed broadband services or establish a direct partnership between the Nation and a third-party ISP to operate the network.





2. Hoopa Valley Public Utilities District

In a second example from this initial cohort, the Hoopa Valley Public Utilities District used their NTBG funding to procure a feasibility study for a Tribally chartered wireless Internet service provider. EnerTribe, a Native American- and women owned consulting firm specializing in Tribal businesses with a focus on the planning, funding, engineering, and construction of telecommunications infrastructure projects, was contracted to provide the necessary expertise in recommending the best practices for broadband projects from a wireless, fiber, and regulatory standpoint. This business model, founded on a 5year net income forecast, identifies a conservatively projected path for wireless implementation at current "snapshot" industry and market rates.

FY22 – Solicitation Closed October 17, 2022

- BIA-NTBG-2022-OIED Full Announcement
- \$2,700,000 Total Funding Available
- CFDA 15.032
- 2yr Period of Performance, Estimated
 1/3/23 12/31/24
- Awards Ranged \$100,000-\$175,000
- Ability to Direct Charge FTE for Oversight Personnel
- Includes Travel Budget for a Grantee Meeting
- No Indirect or Administrative Costs Are Available

FY2021 - Results from Second Year

In the second year of the program, new parameters were announced to spur broadband activities among Tribal communities. In this award announcement, applicants were invited to apply for NTBG funds to improve the quality of life, spur economic development and commercial activity, create opportunities for self-employment, enhance educational resources and remote learning opportunities, and meet emergency and law enforcement needs by bringing broadband services to Native American communities that lack them. Moreover, applicants are encouraged to launch feasibility studies with NTBG funds as a means to assist Tribes in making informed decisions regarding deployment or expansion of broadband in their communities. In the FY21 cohort, the period of performance was extended to two years and awards were expanded to a new range between \$100,000 and \$175,000 for a total funding of \$2,700,000, a 44% increase from the initial cohort funding. All eligible applicants also have access to scheduled training and technical assistance from the pre-application phase through the post-award close-out.





National Science Foundation

Small Catalysts, Big Potential





NSF funded the US Ignite Smart Gigabit Communities project ^{48 49} which provides technical assistance and capacity-building services for smart and connected communities to identify problem areas, benchmark offerings, design solutions, and demonstrate new tech/social collaborations and at-scale deployments.

Today, nearly 50 communities form the US Ignite network of leaders, creators, and owners of premier programs that meet community needs, increase equity across their footprint, and make the best use of federal/philanthropic and private funding.

In FY 2021, NSF funded US Ignite⁵⁰ to conduct the OVERCOME project (NSF Award # 2044448).⁵¹ US Ignite released the request for proposals, resulting in a strong response from the broad community, with innovative projects. After a rigorous review, seven projects were selected, as listed below, covering diversity of geography, housing type, underserved populations, and technology. These projects are small-scale efforts, but NSF hopes they yield interesting results and insights by next year.

	Westchester County Association	Digital C	Libraries without Borders	Missouri University of Science & Technology	University of Buffalo	Allied Media	Onward Eugene
Location	Yonkers NY	Cleveland OH	Loiza Puerto Rico	Clinton County MO	Buffalo NY	Detroit MI	Blue River OR
Technology	CBRS	mmWave	Hot spots	RFoF links to fiber	CBRS	Fiber & fixed wireless	Fiber/CBRS /hotspots
Setting	Urban	Urban	Urban	Rural	Urban	Urban	Rural
Anticipated Impact	250 households	225 households	3 Community centers	30 households	140 households	60 households	95 hotspots
Deployment Partners	Y-PIE Youth	Community partners	Promotoras	Volunteers	Digital Stewards	Digital Stewards	Community partners

⁴⁸ https://www.us-ignite.org/program/us-ignite-communities/

⁴⁹ https://nsf.gov/awardsearch/showAward?AWD_ID=1531046&HistoricalAwards=false

⁵⁰ NSF, US Ignite, https://www.us-ignite.org/program/us-ignite-communities/overcome/ (last accessed, Oct. 17, 2022).

⁵¹ NSF, Award of US Ignite, https://www.nsf.gov/awardsearch/showAward?

 $[\]underline{AWD_ID=2044448\#:} \\ \text{\sim text=NSF\%20Award\%20Search\%3A\%20Award\%20\%23\%202044448}, \\ \underline{OVERCOME\%3A\%20Connectivity\%20 for\%20Underserved\%20Communities\&text=Awardee\%3A\%20Connectivity\%20 for\%20Underserved\%20Communities\&text=Awardee\%3A\%20Connectivity\%20 for\%20Underserved\%20Communities\&text=Awardee\%3A\%20Connectivity\%20 for\%20Underserved\%20Communities\&text=Awardee\%3A\%20Connectivity\%20 for\%20Underserved\%20Communities\&text=Awardee\%3A\%20Connectivity\%20 for\%20Underserved\%20Communities\&text=Awardee\%3A\%20Connectivity\%20 for\%20Underserved\%20Communities\&text=Awardee\%3A\%20Connectivity\%20 for\%20Underserved\%20Connectivity\%20 for\%20Underserved\%20 for\%20 f$





Northern Border Regional Commission

Multi-Use Infrastructure | Broadband Funding Fuels Promise of Economic Vitality in Northern Border Region





Northern Border Regional Commission (NBRC) is a Federal-State partnership for economic and community development within the most distressed counties of Maine, New Hampshire, Vermont, and New York. The Northern Border Regional Commission (NBRC) was formed by Congress in 2008. America's northeast has a long history of entrepreneurship, forest projects manufacturing, and surviving off the natural resources of the region.

It is an exciting time for the Town of Pittsfield to see four years of planning and effort to come together.

Changing markets and global competition have challenged the northeast's once vibrant economy. In response, the NBRC was formed to help alleviate distress in the hard-hit northern counties of each state. These counties generally have higher levels of unemployment, population loss, and lower incomes.

The state governments of Maine, New Hampshire, Vermont, and New York play a crucial role in the NBRC as they partner with the federal government to focus NBRC funding strategies and help prioritize investment applications. Our main funding opportunity is a multi-use program called SEID - State Economic and Infrastructure Development Program.

2021 NBRC Broadband Funding

In 2021, NBRC appropriated funds to support broadband buildouts in each NBRC state. These funds are currently being used in a variety of ways, primarily filling gaps among existing programs.

In September 2021, six projects from NBRC's SEID grant funding round were focused on broadband. These awards were made in September 2021. Most of these projects are still in the beginning phase, but progress has been made since award. In the coming year, these nascent projects, described in more detail below, will begin reporting programmatic accomplishments associated with the grant funding and their impact on northern border communities.





1. Lewis County, NY (CD-21)

The project will provide affordable, reliable, and high-speed broadband to approximately 1,173 homes and businesses covering a 10-mile radius to include the Village of Copenhagen and surrounding rural communities that are currently underserved or have no access to Internet. Upon completion of the project, 1,733 homes and businesses will benefit from this investment in vital infrastructure.

2. Livingston County, New York (CD-27)

In Livingston County, Village of Lima will partner with Empire Long Distance Corporation to build a 12.4-mile fiber-optic network. The XGS PON network will provide businesses and residents in the Village with Internet speeds of up to 10 Gigabits per second. This investment will help up to 2,000 residents.

3. Town of Sandwich, New Hampshire Carroll County (CD-01)

The Town of Sandwich will form a public-private partnership to construct a fiber-optic broadband network which will service the entire town (1,354 people) and provide access for every household and business to fast, reliable Internet service at an affordable price. Today, this town is only served by unreliable DSL.

New Hampshire Electric Cooperative (NHEC) collected system information necessary for project design, including utility pole, line and service locations. Through a series of competitive request for proposals (RFPs), vendors were awarded contracts to perform fiber-optic network design and project management services, make ready construction, project materials, and construction services.

4. Town of Hebron, Grafton County, New Hampshire (CD-02)

The Town of Hebron will construct a 25-mile fiber-optic network that will be a middle mile network connecting and integrating into the Town of Bristol and University of New Hampshire's fiber networks. This fiber network will create a resilient, fail-safe broadband system that spurs economic growth. It will bring broadband connectivity to 3,421 residents, 258 businesses, the entire town of Bristol and the campus of the University of New Hampshire.

5. Town of Pittsfield, Summerset County, ME

Project will reconstruct 4,100' of sidewalk/conduit, replacing one electrical control and adding 4,100' broadband fiber to increase and diversify business growth and jobs, leverage private investment, retain and increase talent, and improve working wages by creating a safe and thriving downtown.

The Town of Pittsfield is working with the Maine DOT to coordinate scheduling of the Main Street Sidewalk Project to be funded through this grant as well as a Community Development Block Grant and other smaller grants.

6. Greater Augusta Utility District, Kennebec County, Maine

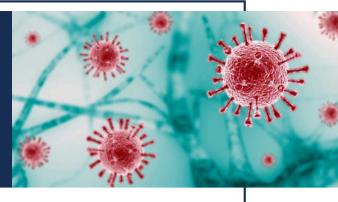
The project replaces a 900 foot long 8" sewer utility crossing of the Kennebec River with 16" pipe, provides water system looping resiliency with 6,300 feet of 12" and 16" pipe, and increases fiber-optic system reliability with 15,000 feet of new fiber cable.





Housing and Urban
Development
Deploys Community
Development Block Grants to
Enable COVID 19 Resiliency





The Community Development Block Grant CARES Act (CDBG-CV) program⁵² provides one-time grants to states, insular areas, and local governments to prevent, prepare for, and respond to the spread of COVID-19. These block grants are impacting equitable access to high-speed Internet, building community awareness of broadband benefits, and investing in resources that transform broadband access into economic vitality.

- In Michigan, the pandemic revealed that broadband connectivity is critical in accessing telework opportunities, telehealth, distance learning and assisting small businesses. HUD realizes the importance of creating digital equality. This program will help communities to overcome the barriers to achieve more equitable access to high-speed Internet in Michigan. This program will provide up to ten grants of up to \$60,000 each to eligible applicants to install broadband support staff in ten regions across the state. Funding in the form of a grant will be awarded to Michigan non-profit organizations currently engaged in economic development activities at the regional level and/or regional governmental entities.
- At a municipal level, the City of Cranston, Rhode Island had one grantee use \$38,000 in funding to purchase computers enabling seniors at a senior center to benefit directly from broadband access during the Covid pandemic.





Department of Labor Scales 5G Workforce for Coast-to-Coast Connectivity





The Department of Labor has several workforce initiatives scaling America's ability to adopt broadband technology across the nation. In turn, these initiatives benefit from the expanding broadband access which ensures that many more communities can access the resources and opportunities to participate in the telecommunications economy as skilled technicians and apprentices.

Apprenticeship in Support of Telecommunications and Broadband

The Telecommunications Industry Registered Apprenticeship Program (TIRAP) is a joint venture of telecommunications companies, industry associations, and the U.S. Department of Labor that develops credentialed Registered Apprenticeship Programs available to qualified employers for career development of the telecommunications workforce. The TIRAP's mission is to partner with stakeholders to promote safety, enhance quality, and enable education and advancement opportunities in the telecommunications workforce that will meet network infrastructure buildout needs.

"Bringing broadband to every corner of the United States means we need telecom workers with the skills to install networks in challenging areas...[we] are helping to ensure we have the workforce we need to safely bring connectivity to all."

Evelyn Remaley, Associate Administrator for NTIA's Office of Policy Analysis and Development

(source: https://www.dol.gov/newsroom/releases/osec/osec20220114)

In February 2020, the Wireless Infrastructure Association (WIA), the National Sponsor of TIRAP, was awarded a \$5,997,096 grant under the Department of Labor's "Apprenticeships: Closing the Skills Gap" program. In partnership with the Power & Communication Contractors Association (PCCA), employer partners, and technical colleges, the grant supports the curricula development and training of the 5G workforce. The nearly \$6M grant is supplemented by over \$9M in matching support from industry, including cash and in-kind contributions from WIA, PCCA, Ditch Witch, FS3, and participating employers, for a total commitment to apprenticeship of \$15M in a public-private partnership.

In September 2020, the Employment and Training Administration (ETA) awarded a major contract to the Wireless Infrastructure Association (WIA) to perform as the 5G Industry Intermediary to develop the wireless workforce. The contract will enable WIA to assist employers in developing over 600 apprentices in the next year with multi-year options to renew thereafter. It also provides \$400,000 per year in incentive funds for employers that adopt registered apprenticeship and serve under-represented populations.





Workforce Innovation and Opportunity Act (WIOA)

The Workforce Innovation and Opportunity Act (WIOA) was enacted in 2014 to help stimulate and reinforce increased coordination and alignment among federal workforce development and related programs to benefit our customers–jobseekers and employers. The legislative act includes the proposed amendment of supportive services and the proposed addition of language regarding broadband and rural communities. WIOA funds under the annual appropriations are distributed to the States. Throughout the American Job Center network, these funds can be used to pay for devices and broadband nternet service that will allow a participant to create or maintain a wireless connection for distance learning, job search, and other employment and training services.

Strengthening Community Colleges Training Grants (SCC) Program

The U.S. Department of Labor's Trade Adjustment Assistance Community College and Career Training (TAACCCT) grant program represented a major governmental investment to increase the ability of community colleges to address the challenges of today's workforce including broadband-relevant skills. Through its grant program, every state received funding for each of four years (2011-2014) through 256 grants totaling \$1.9B. The curricula (Open Educational Resources or OER) developed by the community colleges under TAACCCT can be found on www.skillscommons.org. This content can be reused, revised, retained, redistributed and remixed by an individual, institution, and industry for free with the proper attribution to the original author of the resources. While the TAACCCT grants are no longer operating, many of the efforts implemented by grantee institutions and consortia have been sustained; additionally, the Department of Labor's Strengthening Community Colleges (SCC) Training Grants continue the efforts initiated under TAACCCT, such as supporting the capacity of community colleges to develop industry-responsive career pathways in in-demand sectors, including broadband. The SCC grants continue to create OER materials that are available to the public.

Telecommunications Workforce Interagency Group

The Telecommunications Workforce Interagency Group (TWIG) was created by the Infrastructure Investment and Jobs Act to address the workforce needs of the telecommunications industry, including the safety of that workforce. The TWIG submitted a report to Congress containing its recommendations to address the workforce needs of the Telecommunications industry, including the workforce needed to build and maintain the 5G wireless infrastructure necessary to support 5G wireless technology.



Appendix

Table 1

FY21 Broadband Program Funding Purposes

= Programs That Provided Tribal Data Infrastructure Deployment ("I") Digital Inclusion or Adoption ("DI/A") Planning, Data, and Mapping ("P/D/M")

Agency	Description (From 2021 Federal Funding Guide)	Program Type	1	DI/A	P/D/M
Appalachian Regional	Area Development: Each year ARC provides funding for several hundred investments in	Multi-Use	X		Χ
Commission	the Appalachian Region, in areas such as business development, education and job				
	training, infrastructure (including broadband), community development, and				
	transportation. These projects create thousands of new jobs, improve local water and				
	sewer systems, increase school readiness, assist local communities with strategic				
	planning, and provide technical and managerial assistance to emerging businesses.				
Appalachian Regional	POWER Initiative: POWER targets federal resources to help communities and regions	Multi-Use	Χ		Χ
Commission	that have been affected by job losses in coal mining, coal power plant operations, and				
	coal-related supply chain industries due to the changing economics of America's energy				
	production. Within the POWER Initiative, up to one third of the total funding is				
	specifically available for broadband related projects.				
Delta Regional	The Community Infrastructure Fund was created to target physical infrastructure	Multi-Use	Х		
Authority	projects that help build safer, more resilient communities in the Delta region. The three	Wattr OSC			
,	areas of investment through this program target basic public infrastructure,				
	transportation infrastructure, and flood control project centered around economic				
	development.				
Delta Regional	States' Economic Development Assistance Program (SEDAP) is a competitive grant	Multi-Use	Χ	1	1
Authority	program designed to support economic development activities across the Mississippi				
	River Delta and Alabama Black Belt regions. SEDAP addresses the DRA's congressionally				
	mandated four funding priorities: basic public infrastructure, transportation				
	infrastructure, workforce development, and business development.				
Denali Commission	Alaska Broadband Program: The Denali Commission is tasked with building	Broadband	Х		Х
	infrastructure and economic opportunity in rural Alaska. Broadband is critical	Specific			, A
₹	infrastructure that all Americans need, though not all Alaskans have access to affordable	Ореспис			
	broadband. This program is well suited for partnerships with additional funding				
	agencies.				
Department of	Community Facilities Program: This program provides loan guarantees to eligible private	Multi-Use			
Agriculture	lenders to help build essential community facilities in rural areas. An essential	Width OSC			
7.6.1041141	community facility is defined as a facility that provides an essential service to the local				
	community for the orderly development of the community in a primarily rural area, and				
	does not include private, commercial, or business undertakings.				
Department of	Community Connect Program: The Community Connect program helps fund broadband	Broadband	Х		
Agriculture RUS	deployment in rural communities where it is not yet economically viable for private-	Specific			
	sector providers to deliver service. The grants offer financial assistance to eligible	Specific			
?	service providers that will construct, improve, or expand broadband networks in rural				
	areas.				
Department of	Distance Learning and Telemedicine: The Distance Learning and Telemedicine program	Broadband		X	
Agriculture RUS	helps rural communities use the unique capabilities of telecommunications to connect	Specific		^	
	to each other and to the world, overcoming the effects of remoteness and low	Specific			
হ	population density.				
Department of	ReConnect Program: ReConnect offers three types of funding options for broadband	Broadband	Х		
Agriculture RUS	infrastructure to connect rural families, businesses, farms, ranches, schools, libraries,	Specific	^		
		Specific			
ੵ	and public safety facilities to modern, high-speed internet. A rural area is eligible if it				
	currently does not have sufficient access to broadband. The ReConnect grants, grant				
	and loan combinations, and low-interest loans can be used to construct, improve, and				
	acquire facilities that provide internet services to customers' premises, with reliable				
	technologies that are suitable for the type of rural community and the type of high-				
	speed internet use.		ļ		<u> </u>
Department of	Rural Broadband Access: The Broadband Program furnishes loans and loan guarantees	Broadband	X		
Agriculture RUS	to provide funds for the costs of construction, improvement, or acquisition of facilities	Specific			
₹	and equipment needed to provide service at the broadband lending speed in eligible				
_	rural areas.	1	1	1	1



Agency	Description (From 2021 Federal Funding Guide)	Program Type	1	DI/A	P/D/I
Department of	Telecommunications Infrastructure Program: The Infrastructure program provides	Broadband	Χ		
Agriculture RUS	financing for the construction, maintenance, improvement and expansion of telephone	Specific			
₹	service and broadband in rural areas.				
Department of	21st Century Community Learning Centers (Title IV, Part B of ESEA): This program	Multi-Use			
Education	supports the creation of community learning centers that provide academic enrichment				
	opportunities during non-school hours for children, particularly students who attend				
	high-poverty and low-performing schools. The program helps students meet state and				
	local student standards in core academic subjects, such as reading and math; offers				
	students a broad array of enrichment activities that can complement their regular				
	academic programs; and offers literacy and other educational services to the families of				
	participating children.				
Department of	Adult Education National Leadership Activities: This program supports activities to	Multi-Use		X	
Education	enhance the quality of adult education and literacy programs nationwide. Priorities				
	include technical assistance to states, accountability and data quality, demonstrations or				
	models of what works, dissemination on innovations and best practices, expanding				
D	access to services, and research and evaluation.		-		
Department of	Adult Education State Grants: The Adult Education and Family Literacy State Grant	Multi-Use			
Education	program provides grants to eligible agencies to provide adult education and literacy				
	services. These grants help adults (1) become literate and obtain the knowledge and				
	skills necessary for employment and economic self-sufficiency; (2) obtain the education				
	and skills that are necessary to become full partners in the educational development of their children and lead to sustainable improvements in the economic opportunities for				
	their family; and (3) attain a secondary school diploma and transition to postsecondary				
	education and training, including through career pathways. These grants also assist				
	immigrants and other individuals who are English language learners in improving their				
	reading, writing, speaking, and comprehension skills in English and mathematics and in				
	acquiring an understanding of the American system of government, individual freedom,				
	and the responsibilities of citizenship.				
Department of	Alaska Native & Native Hawaiian Serving Program: This program provides grants and	Multi-Use			
Education	related assistance to eligible Alaska Native-serving institutions and Native Hawaiian-				
	serving institutions of higher education to enable such institutions to improve and				
	expand their capacity to serve Alaska Natives and Native Hawaiians.				
Department of	Alaska Native Education Program (84.356A): The overall purpose of the Alaska Native	Multi-Use	X	X	
Education	Education program is to meet the unique education needs of Alaska Natives and to				
	support supplemental education programs to benefit Alaska Natives. Grantees under				
	the program use their funds for such activities as the development of curricula and				
	education programs that address the education needs of Alaska Native students, and				
	the development and operation of student enrichment programs in science and				
	mathematics. Eligible activities also include professional development for educators,				
	activities carried out through Even Start programs and Head Start programs, family				
D f	literacy services, and dropout prevention programs.		-		
Department of	American Indian Vocational Rehabilitation Services Program: The purpose of the	Multi-Use			
Education	American Indian Vocational Rehabilitation Services (AIVRS) program, which is also				
	known as the Section 121 Program, is to provide grants to the governing bodies of				
	Indian Tribes to develop or to increase their capacity to provide a program of vocational rehabilitation services, in a culturally relevant manner, to American Indians with				
	disabilities residing on or near federal or state reservations. The program's goal is to				
	assist American Indians with disabilities, consistent with such individuals' strengths,				
	resources, priorities, concerns, abilities, capabilities, interests, and informed choice, so				
	that such individuals may prepare for, and engage in, high-quality employment that will				
	increase opportunities for economic self-sufficiency. Program services are provided				
	under an individualized plan for employment and may include native healing services.				
Department of	American Rescue Plan – Homeless Children and Youth (ARP-HCY) provides \$800 million	Multi-Use			
Education	to states, which in turn provide subgrants to school districts to improve the	Widiti-03e			
	identification of children and youth experiencing homelessness and to provide supports				
	and wraparound services to these children and youth. The goals to make it easier for				
	children and youth experiencing homelessness to participate in school activities like in-				
	person instruction and extracurricular activities.				
Department of	Asian American and Native American Pacific Islander: This program provides grants and	Multi-Use	1		
Education	related assistance to Asian American and Native American Pacific Islander-serving				
	institutions to enable such institutions to improve and expand their capacity to serve				
	Asian Americans and Native American Pacific Islanders and low-income individuals.				
Department of	Carl D. Perkins Career and Technical Education Act (Perkins V) - Title I Basic Grants to	Multi-Use	+		
Education	States: Career and Technical Education (CTE) State Grants are authorized under the Carl	WIGHT-USE			
	D. Perkins Career and Technical Education Act of 2006 as amended and reauthorized by				
	the Strengthening Career and Technical Education for the 21st Century Act (Perkins V) in				
	2018. The program assists states and outlying areas in expanding and improving career				
	and technical education in high schools, technical schools, and community colleges.				
	Each state uses program funds to support a variety of career and technical education				
	11 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1	1	1	1



Description (From 2021 Federal Funding Guide)	Program Type	1	DI/A	P/D/M
Early Intervention for Infants and Toddlers with Disability: The Grants for Infants and Families program (Part C) awards formula grants to the 50 states, District of Columbia, Puerto Rico, the Department of the Interior, and Outlying Areas to assist them in implementing statewide systems of coordinated, comprehensive, multidisciplinary,	Multi-Use			
interagency programs and making early intervention services available to children with disabilities, aged birth through 2, and their families. Under the program, states are				
to all eligible birth-through-2-year-olds with disabilities and their families, including Indian children and families who reside on reservations geographically located in the				
Education for Homeless Children and Youth: This formula grant to states supports an office for coordination of the education of homeless children and youths in each state, which gathers comprehensive information about homeless children and youths and the impediments they must overcome to regularly attend school. Sates provide subgrants to districts to help children experiencing homelessness, including preschoolers and youths,	Multi-Use		Х	
Elementary and Secondary School Emergency Relief (ESSER) Fund: This program provided nearly \$200 billion of one-time funding to state educational agencies, which in turn made subgrants (at least 90% of the state award) to local educational agencies to address the impact of COVID-19 on students and school personnel. ESSER funds under the CARES Act expired on September 30, 2022; ESSER funds under the CRRSA Act will expire on September 30, 2023; and, ESSER funds under the ARP Act will expire on	Multi-Use			
English Language Acquisition State Grants (Title III, Part A of ESEA): This program is designed to improve the education of English learner (ELs) by helping them learn English and meet challenging state academic content and student academic achievement standards. The program also provides enhanced instructional opportunities for immigrant children and youth. Funds are distributed to states based on a formula that takes into account the number of immigrant and EL students in each state.	Multi-Use			
Full-Service Community Schools: The Full-Service Community Schools (FSCS) program provides support for the planning, implementation, and operation of full-service community schools that improve the coordination, integration, accessibility, and effectiveness of services for children and families, particularly for children attending high-poverty schools, including high-poverty rural schools.	Multi-Use			
Governor's Emergency Education Relief (GEER) Fund: This program provided over \$4 billion of one-time funding to Governors' offices, which in turn made subgrants to local educational agencies, institutions of higher education, and/or other education related entities to address the impact of COVID-19 on educational systems. GEER funds under the CARES Act expired on September 30, 2022; GEER funds under the CRRSA Act will expire on September 30, 2023.	Multi-Use			
Higher Education Emergency Relief Fund (HEERF): The HEERF Program is in response to the novel coronavirus to support institutions of higher education as they serve students and ensure learning continues during the COVID-19 pandemic. Institutions are to use funds to prevent, prepare for and respond to the national pandemic.	Multi-Use	X	Х	
HSI STEM and Articulation program: This discretionary grant program is designed to increase the number of Hispanic and low-income students that acquire a degree in a STEM area. The program also supports the articulation to facilitate the transfer of students from 2yr to 4yr degree STEM program. Additionally, given the number of allowable activities, grantees can use these funds to improve labs and equipment, as well as faculty development, and STEM course improvements.				
Improving Basic Programs Operated by Local Educational Agencies (Title I, Part A of ESEA): Title I, Part A (Title I) of the Elementary and Secondary Education Act provides financial assistance to local educational agencies (LEAs) and schools with high numbers or high percentages of children from low-income families to help ensure that all children, particularly low-achieving children, meet challenging state academic standards. Federal funds are currently allocated through four statutory formulas that are based primarily on census poverty estimates and the cost of education in each state.	Multi-Use			
Magnet Schools Assistance Program: The Magnet Schools Assistance program provides grants to eligible local educational agencies to establish and operate magnet schools that are operated under a court-ordered or federally approved voluntary desegregation plan. These grants assist in the desegregation of public schools by supporting the elimination, reduction, and prevention of minority group isolation in elementary and secondary schools with substantial numbers of minority group students. In order to meet the statutory purposes of the program, projects also must support the development and implementation of magnet schools that assist in the achievement of systemic reforms and provide all students with the opportunity to meet challenging academic content and student academic achievement standards. Projects support the development and design of innovative education methods and practices that promote	Multi-Use			
	Early intervention for Infants and Toddlers with Disability: The Grants for Infants and Families program (Part C) awards formula grants to the 50 states, District of Columbia, Puerto Rico, the Department of the Interior, and Outlying Areas to assist them in implementing statewide systems of coordinated, comprehensive, multidisciplinary, interagency programs and making early intervention services available to children with disabilities, aged birth through 2, and their families. Under the program, states are responsible for ensuring that appropriate early intervention services are made available to all eligible birth-through-2-year-olds with disabilities and their families, including Indian children and families who reside on reservations geographically located in the State. Education for Homeless Children and Youth: This formula grant to states supports an office for coordination of the education of homeless children and youths in each state, which gathers comprehensive information about homeless children and youths and the impediments they must overcome to regularly attend school. Sates provide subgrants to districts to help children experiencing homelessness, including preschoolers and youths, have equal access to free and appropriate public education (FAPE). Elementary and Secondary School Emergency Relief (ESSER) Fund: This program provided nearly \$200 billion of one-time funding to state educational agencies, which in turn made subgrants (a least 90% of the state award) to local educational agencies to address the impact of COVID-19 on students and school personnel. ESSER funds under the CARES Act expired on September 30, 2022; essER funds under the CARES Act expired on September 30, 2022; essER funds under the ARP Act will expire on September 30, 2023; and, ESSER funds under the ARP Act will expire on September 30, 2023; and, ESSER funds under the CARES Act expired on September 30, 2022; ESSER funds under the CARES Act expired on September 30, 2022; GEER funds under the case of the program also provides	Early Intervention for Infants and Toddlers with Disability. The Grants for Infants and Families program (Part C) awards formula grants to the 50 states, District of Columbia, Puerto Rico, the Department of the Interior, and Outlying Areas to assist them in implementing statewide systems of coordinated, comprehensive, multidisciplinary, interagency programs and making early intervention services available to children with disabilities, aged birth through 2, and their families. Under the program, states are responsible for ensuring that appropriate early intervention services are made available to all eligible birth-through-2-year-olds with disabilities and their families, including Indian children and families who reside on reservations geographically located in the State. Education for Homeless Children and Youth: This formula grant to states supports an office for coordination of the education of homeless children and youths in each state, which gathers comprehensive information about homeless children and youths in each state, which gathers comprehensive information about homeless children and youths, have equal access to free and appropriate public education (RAPE). Elementary and Secondary School Emergency Relief (ESSER) Fundi: This program provided nearly \$200 billion of one-time funding to state educational agencies, which in turn made subgrants (at least 60% of the state award) to local educational adencies to address the impact of COVID-19 on students and school personnel. ESSER funds under the CARES Act expired on September 30, 2022, and, ESSER funds under the ARP Act will expire on September 30, 2023, and, ESSER funds under the ARP Act will expire on September 30, 2023, and, ESSER funds under the ARP Act will expire on September 30, 2023. English Language Acquisition State Grants (Title III, Part A of ESEA): This program is designed to improve the education of English learner (ELS) by helping them learn English and meet challenging state academic content and student academic achievement standards.	Early Intervention for Infants and Toddiers with Disability. The Grants for Infants and Families program (Part C) awards formula grants to the 50 states, District of Columbia, Puerto Rico, the Department of the Interior, and Outlying Areas to assist them in implementing statewide systems of coordinated, comprehensive, multidisciplinary, interagency programs and making early intervention services available to children with disabilities, aged birth through. Paya-rolds with disabilities, aged birth drough 2-year-olds with disabilities, and their families, including Indian children and families who reside on reservations geographically located in the State. Education for Homeless Children and Youtht: This formula grant to states supports an office for coordination of the education of homeless children and youths in each state, which gathers comprehensive information about homeless children and youths and the impeliments they must overcome to regularly attend school, State provide subgrants to districts to help children experiencing homelessness, including preschoolers and youths, have equal access to free and appropriate public decutation (FARE). Elementary and Secondary School Emergency Relief (ESSER) Fund: This program provided enabry \$200 billion of one-time funding to state educational agencies, which in turn made subgrants fat least 90% of the state award) to local education agencies, which in turn made subgrants fat least 90% of the state award) to local educational agencies which in turn made subgrants and the state award in the state award in the state of the state award in the state award in the state of the state award in the state of the state award in the state and the state award in	Early intervention for Infants and Toddiers with Disability. The Grants for Infants and Families program (Part C) awards formulai grants to the 50 states, District of Columbia, Puerto Rico, the Department of the Interior, and Outhring Areas to assist them in implementing statewide systems of coordinated, comprehensive, multidisciplinary, interagency programs and making early intervention services available to children with disabilities, aged birth through 1-year-olds with disabilities, aged birth through 1-year-olds with disabilities and their families, including Indian children and families who reside on reservations geographically located in the State. Education for Homeless Children and Youth: This formulai grant to states supports an office for coordination of the education of homeless children and youths in each state, which gathers comprehensive information about homeless children and youths and the impediments they must overcome to regularly student school. State provide subgrants to districts to help children experiencing homelessness, including preschoolers and youths, have equal access to free and appropriate public education (FAPE). Elementary and Secondary School Emergency Relief (ESSER) Fund: This program provided nearly \$200 billion of one-time funding to state educational agencies, which in turn made subgrants (at least 90% of the state award) to local educational agencies to address the impact of COVID-19 on students and school personnel: ESSER funds under the CRRSA Act will expire on Supported Space and SSSER funds under the ARP act will expire on Supported Space and SSSER funds under the ARP act will expire on Support and SSSER funds under the ARP act will expire on Support and the ARP act will expire on Support for the planning man and state of the ARP act will expire on Support for the planning man and state that a state of the ARP act will expire on Support for the planning man and state of the ARP act will expire on Support for the planning man and state of the ARP act will expire a supp



Agency	Description (From 2021 Federal Funding Guide)	Program Type	1	DI/A	P/D/M
	challenging standards—through professional development and other activities that will				
	enable the continued operation of the magnet schools at a high-performance level after				
	funding ends. Finally, the program supports the implementation of courses of instruction in magnet schools that strengthen students' knowledge of academic subjects				
	and their grasp of tangible and marketable vocational skills.				
Department of	Migrant Education Program: The goal of the Migrant Education Program is to ensure	Multi-Use			
Education	that all migratory children reach challenging academic standards and graduate with a				
	high school diploma or complete a high school equivalency that prepares them for				
	responsible citizenship, further learning, and productive employment. Funds support				
	high quality education programs for migratory children and help ensure that migratory children who move among the States are not penalized by disparities among States in				
	curriculum, graduation requirements, and State academic standards. Funds also ensure				
	that migratory children not only are provided with appropriate education services that				
	address their unique needs but also that such children receive full and appropriate				
	opportunities to meet the same State academic standards that all children are expected				
	to meet. Federal funds are allocated by formula to State educational agencies (SEAs)				
	based on the three-year average of the number of eligible migratory children, ages 3 through 21, residing within the state, the number of migratory children, ages 3 through				
	21, receiving summer services during the previous year, and each state's per pupil				
	expenditure for education.				
Department of	Native American-Serving Nontribal Institutions Program: This program provides grants	Multi-Use			İ
Education	and related assistance to Native American-serving nontribal institutions to enable such				
	institutions to improve and expand their capacity to serve Native Americans and low-				
	income individuals.				
Department of	Native Hawaiian Education Program (84.362A): The purpose of the Native Hawaiian	Multi-Use		Χ	X
Education	Education program is to develop innovative education programs to assist Native Hawaiians and to supplement and expand programs and authorities in the area of				
	education. Authorized activities include, among others: early education and care				
	programs; family-based education centers; beginning reading and literacy programs;				
	activities to address the needs of gifted and talented Native Hawaiian students; special				
	education programs; professional development for educators; and activities to enable				
	Native Hawaiian students to enter and complete postsecondary education programs.				
Department of Education	Native Youth Community Project (Discretionary): "Demonstration Grants for Indian Children is a competitive discretionary grant program that supports projects to develop,	Multi-Use			
Ludcation	test and demonstrate the effectiveness of services and programs to improve				
	educational opportunities and achievement of Indigenous children. Funded under the				
	Elementary and Secondary Education Act, as amended, Title VI, Part A, Subpart 2, Sec.				
	6121 (20 U.S.C. 7441)."				
Department of Education	Office of Indian Education, Title VI(A)(1) Formula Grants: This program is designed to address the unique cultural, language, and educationally related academic needs of	Multi-Use			
Education	American Indian and Alaska Native students, including preschool children. The programs				
	funded are to meet the unique cultural, language, and educational needs of Indian				
	students and ensure that all students meet the challenging State academic standard.				
	The program is the Department's principal vehicle for addressing the particular needs of				
	Indian children. While adhering to all related program requirements, grantees will				
	provide participant Native American/American Indian and Alaska Native PreK-12 students with valid ED506 forms or who are included in an approved BIE ISEP Count				
	with highly relevant, culturally-based academic learning experiences that improve their				
	skill-set(s), while addressing the needs of the "whole child/person."				
Department of	Preschool Grants for Children with Disabilities: The Preschool Grants program provides	Multi-Use			
Education	formula grants to states, the District of Columbia, and Puerto Rico to make available	munti osc			
	special education and related services for children with disabilities aged 3 through 5. In				
	order to be eligible for these grants, states must serve all eligible children with				
	disabilities aged 3 through 5 and have an approved application under Part B of the				
	Individuals with Disabilities Education Act (IDEA). A state that does not make a free appropriate public education (FAPE) available to all children with disabilities aged 3				
	through 5 cannot receive funds under this program or funds attributable to this age				
	range under the IDEA Grants to States program. Currently, all States are making FAPE				
	available to all children aged 3 through 5 with disabilities.				
Department of	Prevention and Intervention Programs for Children and Youth who are Neglected,	Multi-Use			
Education	Delinquent, or At-Risk (Title I, Part D of ESEA): The purpose of this program is to				
	improve educational services for children and youth in local, Tribal, and State institutions who are neglected, or delinquent children and youth, so that they have the				
	opportunity to meet the same challenging State academic standards that all children in				
	the State are expected to meet; provide these children and youth with services to				
	successfully transition to further schooling or employment; and prevent youth who are				
	at risk from dropping out of school and provide youth who drop out and children and				
	youth returning from correctional facilities with a support system to ensure their				
Department of	continued education and the involvement of their families and communities. Promise Neighborhoods: The Promise Neighborhoods program is authorized under the	Multi-Use			\vdash
- apartment of	Elementary and Secondary Education Act of 1965 (ESEA), as amended by the Every	Multi-026	1	ĺ	1



Agency	Description (From 2021 Federal Funding Guide)	Program Type I	DI/A	P/D/M
	Student Succeeds Act (ESSA). The program provides funding to support eligible entities, including (1) institutions of higher education; (2) an Indian tribe or Tribal organization;			
	(3) one or more nonprofit organizations, which may include faith-based nonprofit			
	organizations, in partnership with high-need LEAs, institutions of higher education, the			
	office of a chief elected official of a unit of local government, or an Indian tribe or Tribal			
	organization.			
Department of	Rural Education Achievement Program - Rural, Low-Income School (RLIS) Program: The	Multi-Use	X	X
Education	purpose of the Rural and Low-Income School (RLIS) grant program is to provide poor,			
	rural districts with financial assistance to address the unique needs of rural school			
	districts that frequently lack the personnel and resources needed to compete effectively for federal competitive grants and receive formula grant allocations in amounts too			
	small to be effective in meeting their intended purposes. The grant is non-competitive,			
	and eligibility is determined by statute. Awards are issued annually to state educational			
	agencies (SEAs), which make sub-grants to local educational agencies (LEAs) that meet			
	the applicable requirements. Awards are made to all SEAs with eligible LEAs that apply			
	and meet the applicable requirements of the act (see legislative citation above).			
Department of	Rural Education Achievement Program - Small, Rural School Achievement (SRSA)	Multi-Use	X	X
Education	Program: The purpose of the Small, Rural School Achievement (SRSA) program is to			
	provide small, rural local educational agencies (LEAs) with financial assistance to address			
	the unique needs of rural school districts that frequently lack the personnel and resources needed to compete effectively for federal competitive grants and receive			
	formula grant allocations in amounts too small to be effective in meeting their intended			
	purposes. LEAs are entitled to funds if they meet eligibility and application			
	requirements. Awards are issued annually, and award amounts are determined using a			
	formula.			
Department of	Special Education - Grants to States: The Grants to States program provides formula	Multi-Use		
Education	grants to assist the 50 states, the District of Columbia, Puerto Rico, the Department of			
	the Interior, Outlying Areas, and the Freely Associated States in meeting the excess			
	costs of providing special education and related services to children with disabilities. In order to be eligible for funding, states must serve all children with disabilities between			
	the ages of 3 through 21, except that they are not required to serve children aged 3			
	through 5 or 18 through 21 years if services are inconsistent with State law or practice			
	or the order of any court. A state that does not provide a free appropriate public			
	education (FAPE) to children with disabilities aged 3 through 5 cannot receive base			
	payment funds attributable to this age group or any funds under the Preschool Grants program.			
Department of	State Supported Employment Services Program: The State Supported Employment	Multi-Use		
Education	Services Program is authorized by Title VI of the Rehabilitation Act of 1973			
	(Rehabilitation Act), as amended by Title IV of the Workforce Innovation and			
	Opportunity Act (WIOA). This program provides grants to assist States in developing and			
	implementing collaborative programs with appropriate entities to provide supported employment services for individuals with the most significant disabilities, including			
	youth with the most significant disabilities, who require supported employment services			
	following the achievement of a supported employment outcome. Supported			
	employment grant funds are used to supplement funds provided under the State VR			
	Services Program to provide supported employment services. Program funds may be			
	used to provide supported employment services, once an individual has been placed in			
	supported employment, for up to 24 months and to supplement other VR services necessary to help individuals with the most significant disabilities and work in the			
	integrated labor market.			
Department of	State Vocational Rehabilitation Services Program: The State Vocational Rehabilitation	Multi-Use		
Education	(VR) Services Program is authorized by the Rehabilitation Act of 1973 (Rehabilitation	muiti osc		
	Act), as amended by Title IV of the Workforce Innovation and Opportunity Act (WIOA).			
	This program provides grants to assist States in operating statewide VR programs, each			
	of which is an integral part of a statewide workforce development system. State VR			
	programs provide VR services for individuals with disabilities, consistent with their strengths, resources, priorities, concerns, abilities, capabilities, interests, and informed			
	choice, so that they may prepare for and engage in competitive integrated employment			
	or supported employment and achieve economic self-sufficiency.			
Department of	Statewide Family Engagement Centers: The purpose of the Statewide Family	Multi-Use		
Education	Engagement Centers (SFEC) program is to provide financial support to organizations that			
	provide technical assistance and training to State educational agencies (SEAs) and local			
	educational agencies (LEAs) in the implementation and enhancement of systemic and			
	effective family engagement policies, programs, and activities that lead to improvements in student development and academic achievement.			
Department of	Strengthening Institutions Program: The program helps eligible IHEs to become self-	Multi-Use		
Education	sufficient and expand their capacity to serve low-income students by providing funds to	iviuiti-USE		
		1		
	improve and strengthen the academic quality, institutional management, and fiscal	l l	l	



Department of Education Department of Education	Student Support and Academic Enrichment Program, Title IV, Part A of the ESEA: To improve student's academic achievement by increasing the capacity of States, local educational agencies, schools and local communities to: (1) provide all students with access to a well-rounded education; (2) improve school conditions for student learning;			DI/A	P/D/N
Department of	educational agencies, schools and local communities to: (1) provide all students with	Multi-Use	X		
•					
•	access to a well-rounded education; (2) improve school conditions for student learning;				
•	and (3) improve the use of technology in order to improve the academic achievement				
•	and digital literacy for all students				
Education	Title III, Part B: Strengthening Historically Black Colleges and Universities Program: This	Multi-Use	Χ	Χ	Χ
	program provides financial assistance to Historically Black Colleges and Universities				
	(HBCUs) to establish or strengthen their physical plants, financial management,				
	academic resources, and endowment-building capacity				
Department of	Tribally Controlled Colleges and Universities: Provide formula-based grants to Tribally-	Multi-Use			
Education		Multi-ose			
Luucation	controlled institutions of higher education to increase self-sufficiency and strengthen				
	academic quality, institutional management, and fiscal stability.				
Department of	Tribally Controlled Postsecondary Career and Technical Institutions Program (TCPCTIP):	Multi-Use			
Education	Each year under the Strengthening Career and Technical Education for the 21st Century				
	Act (Perkins V) statute, Section 117, Congress appropriates approximately \$10 million				
	under the Tribally Controlled Postsecondary Career and Technical Institutions Program				
	(TCPCTIP) to Tribally controlled postsecondary career and technical institutions that do				
	not receive assistance under the Tribally Controlled Colleges and Universities Assistance				
	Act or the Navajo Community College Act to provide basic support for the education				
	and training Indian students. The TCPCTIP grantees are authorized to use grant funds for				
	expenses associated with capital expenditures, maintenance and operation of programs,				
	expansion and improvement of educational offerings and student support services,				
	including tuition and fees, books, childcare, counseling, job placement, transportation,				
	supplies, and specialized tools and uniforms that are required for students to fully				
	participate in career and technical education programs. TCPCTIP grantees also provide				
	professional development opportunities to its instructors, administrators, and TCPCTIP				
	staff to support preparation for high-skill, high-wage, or in-demand occupations in				
	established or emerging professions. Students are provided career and technical				
	education opportunities to attain one-year and two-year certificates, as well as two-				
	year associate degrees.				
Department of the	National Tribal Broadband Grant: The Division of Economic Development provides the	Broadband			Χ
Interior	opportunity for tribes to receive funding to explore the possibility of developing or	Specific			
ङ	extending broadband services in their communities to: Spur economic development and				
•	commercial activity				
	- Create opportunities for self-employment - Enhance educational resources and remote				
5	learning opportunities - Meet emergency and law enforcement needs				
Department of Labor	Apprenticeship in Support of Telecommunications and Broadband: The	Multi-Use			
	Telecommunications Industry Registered Apprenticeship Program ("TIRAP") is a joint				
	venture of telecommunications companies, industry associations and the Department of				
	Labor (DOL or Department) that develops credentialed Registered Apprenticeship				
	Programs (RAP) available to qualified employers for career development of the				
	telecommunications workforce. The TIRAP's mission is to partner with stakeholders to				
	promote safety, enhance quality, and enable education and advancement opportunities				
	in the telecommunications workforce that will meet network infrastructure buildout				
	needs. In February 2020, the Wireless Infrastructure Association (WIA), the National				
	Sponsor of TIRAP, was awarded a \$5,997,096 grant under the Department of Labor's				
	"Apprenticeships: Closing the Skills Gap" program. In partnership with the Power &				
	Communication Contractors Association (PCCA), employers, and technical colleges, the				
	grant is being used to train a 5G workforce. The nearly \$6 million grant is supplemented				
	by \$2.7 million in matching support from industry, including cash and in-kind		1	1	
	9 11				
	contributions from WIA, PCCA, Ditch Witch, FS3, and participating employers, for a total				
	commitment to apprenticeship of nearly \$9 million in a public-private partnership.				
	The grant provides the necessary funding to address skills gaps, design curricula and				
	deliver training to develop qualified participants for placement in middle- to high-skilled				
	jobs nationwide that will accelerate 5G deployment for America's 5G Apprenticeship				
	Initiative. America's 5G Apprenticeship Initiative is engaging a consortium of public and				
	private partners with 33 small and mid-sized employers committing to create over 5,500		1	1	
	private partition with 35 small and mild sized employers committing to create over 5,500				
	and the contraction of the contr				
	new apprenticeships in this rapidly evolving sector. These industry-driven, competency-		1	1	i
	based apprenticeships target unemployed, underemployed, and incumbent workers				
	based apprenticeships target unemployed, underemployed, and incumbent workers with priority outreach to veterans; transitioning service members; military spouses;				
	based apprenticeships target unemployed, underemployed, and incumbent workers with priority outreach to veterans; transitioning service members; military spouses; women; and people of color. In an effort to expand Registered Apprenticeship through				
	based apprenticeships target unemployed, underemployed, and incumbent workers with priority outreach to veterans; transitioning service members; military spouses; women; and people of color. In an effort to expand Registered Apprenticeship through Industry Intermediary Services, in September 2020, the Employment and Training				
	based apprenticeships target unemployed, underemployed, and incumbent workers with priority outreach to veterans; transitioning service members; military spouses; women; and people of color. In an effort to expand Registered Apprenticeship through				
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	based apprenticeships target unemployed, underemployed, and incumbent workers with priority outreach to veterans; transitioning service members; military spouses; women; and people of color. In an effort to expand Registered Apprenticeship through Industry Intermediary Services, in September 2020, the Employment and Training Administration (ETA) awarded a major contract to the Wireless Infrastructure Association (WIA) to serve as an Apprenticeship Intermediary within the 5G Industry to train workers for careers in the wireless sector. The objective of the funding is to				
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	based apprenticeships target unemployed, underemployed, and incumbent workers with priority outreach to veterans; transitioning service members; military spouses; women; and people of color. In an effort to expand Registered Apprenticeship through Industry Intermediary Services, in September 2020, the Employment and Training Administration (ETA) awarded a major contract to the Wireless Infrastructure Association (WIA) to serve as an Apprenticeship Intermediary within the 5G Industry to train workers for careers in the wireless sector. The objective of the funding is to				



Agency	Description (From 2021 Federal Funding Guide)	Program Type	1	DI/A	P/D/M
	year in incentive funds for employers that adopt registered apprenticeship and serve				
	under-represented populations. Those incentive funds can be used to help offset				
	employer costs for the following activities:• Registration of RAPs; • Costs related to				
	design and start-up of RAPs; • Classroom education or online training for apprentices; • Outstanding costs related to on-the-job training (excluding wages); • Train-the-trainer				
	costs or activities; and/or• Training equipment for apprentices;• Curricula development.				
	WIA has also announced it has contracted with ApprentiScope, an online platform				
	designed for Registered Apprenticeship that helps companies manage their apprentices				
	and track training outcomes. This apprenticeship management software is now available				
	at no cost to all 71 employers in TIRAP.				
	Additionally, ETA's Office of Apprenticeship is actively coordinating with the				
	Communications Workers of America to develop a Registered Apprenticeship program.				
	This would further expand high quality Registered Apprenticeship opportunities in the				
	telecommunications industry.				
	Lastly, the Department has been working to promote Registered Apprenticeship leaders				
	across industries, as part of that work is the Apprenticeship Ambassador Initiative In July				
	2022, where the Department announced the selection of the initial cohort of				
	Apprenticeship Ambassadors who will share their experiences and collaborate with the				
	Department to champion apprenticeship opportunities. This first cohort of 205				
	Ambassadors includes a broad range of organizations including employers, labor unions,				
	universities and community colleges, business associations, community-based organizations, state and local agencies, foundations, nonprofits, and other key				
	workforce partners.				
Department of Labor	Strengthening Community Colleges Training Grants (SCC) Program: Funded beginning in	Multi-Use			
	FY2020, SCC grants build the capacity of community colleges to collaborate with				
	employers and the public workforce development system to meet local and regional labor market demand for a skilled workforce. The grants help community colleges and				
	four-year colleges and universities through consortia build capacity and leverage their				
	expertise and resources, so that more individuals are acquiring industry-recognized				
	skills. Since January 2021, DOL has awarded a total of \$135 million in grants to 39				
	community colleges, across three rounds. SCC builds on and continues the efforts made				
	under the Department's previous Trade Adjustment Assistance Community College and				
	Career Training (TAACCCT) grant program, which was funded at \$1.9 billion over four				
	years (2011-2015). The repository of Open Educational Resources developed under TAACCCT remains available free of charge to all training providers at				
	www.SkillsCommons.org. Curricula searches can be conducted using terms such as				
	"information technology," "STEM" and "broadband."				
Department of Labor	Workforce Innovation and Opportunity Act: Each year, Congress appropriates dollars	Multi-Use			
	under the Workforce Innovation and Opportunity Act (WIOA) for adult, dislocated				
	worker, youth, and basic labor exchange programs. The nation's business-led State and				
	Local Workforce Development Boards help set the strategic direction for the programs and services in their respective state, regional, and local labor markets. There are				
	approximately 2,400 American Job Centers (One-Stop Centers) that provide a full range				
	of assistance to job seekers and employers. The centers offer job seekers training				
	referrals, career counseling, job listings, and similar employment-related services.				
	Patrons can take advantage of the Center's "resource rooms" which provide computers,				
	printers, and Internet connectivity to obtain a perspective on availability of jobs and the				
	availability of training opportunities in various sectors of the economy. American Job Centers also provide an array of services to help employers meet workforce needs by				
	facilitating skilled talent recruitment and connecting them with training entities that				
	provide incumbent worker training, Registered Apprenticeships, and other types of				
	customized occupational skills training.				
Department of the	Capital Projects Fund: The Coronavirus Capital Projects Fund (Capital Projects Fund) will	Multi-Use	Χ	X	X
Treasury	address many challenges laid bare by the pandemic, especially in rural America, Tribal				
	communities, and low- and moderate-income communities, helping to ensure that all communities have access to the high-quality modern infrastructure, including				
	broadband, needed to access critical services. The American Rescue Plan provides \$10				
	billion for payments to eligible governments to carry out critical capital projects that				
	directly enable work, education, and health monitoring, including remote options, in				
	response to the public health emergency. The COVID-19 public health emergency				
	revealed and continues to reinforce our understanding that communities without access				
	to high-quality modern infrastructure, including broadband, face impediments to fully				
	participating in aspects of daily life, such as remote work, telehealth, and distance learning. Treasury is launching the Capital Projects Fund to allow recipients to invest in				
	capital assets that meet communities' critical needs in the short- and long-term, with a				
	key emphasis on making funding available for broadband infrastructure. The Capital				
	Projects Fund aims to: Directly support recovery from the COVID-19 public health				
	emergency by strengthening and improving the infrastructure necessary for				1



Agency	Description (From 2021 Federal Funding Guide)	Program Type	1	DI/A	P/D/I
	participation in work, education, and health monitoring that will last beyond the				
	pandemic. Enable investments in capital assets designed to address inequities in access to critical services. Contribute to the Administration's goal of providing every American				
	with the modern infrastructure necessary to access critical services, including a high-				
	quality and affordable broadband internet connection. A key priority of this program is				
	to make funding available for reliable, affordable broadband infrastructure and other				
	digital connectivity technology projects. Recipients may also use funds for certain other				
	capital projects, such as multi-purpose community facilities, that enable work,				
	education, and healthcare monitoring, including remote options. The program				
	encourages recipients to focus on economically distressed areas, support community				
	empowerment, and adopt strong labor practices.				
Department of the	State and Local Fiscal Recovery Funds: The Coronavirus State and Local Fiscal Recovery	Multi-Use			
Treasury	Funds provide a substantial infusion of resources to help turn the tide on the pandemic,				
	address its economic fallout, and lay the foundation for a strong and equitable recovery.				
	Treasury is launching this much-needed relief to: *Support urgent COVID-19 response				
	efforts to continue to decrease spread of the virus and bring the pandemic under				
	control. *Replace lost revenue for eligible state, local, territorial, and Tribal governments to strengthen support for vital public services and help retain jobs.				
	*Support immediate economic stabilization for households and businesses. *Address				
	systemic public health and economic challenges that have contributed to the inequal				
	impact of the pandemic. The Coronavirus State and Local Fiscal Recovery Funds provide				
	substantial flexibility for each government to meet local needs—including support for				
	households, small businesses, impacted industries, essential workers, and the				
	communities hardest hit by the crisis. These funds can also be used to make necessary				
	investments in water, sewer, and broadband infrastructure.				
Economic	FY 2020 EDA Public Works and Economic Adjustment Assistance Programs: The	Multi-Use	Χ		Χ
Development	Economic Development Administration (EDA) has published the FY 2020 Public Works				
Administration	and Economic Adjustment Assistance Programs Notice of Funding Opportunity (PWEAA				
	NOFO). EDA's Public Works and Economic Adjustment Assistance (EAA) programs				
	provide economically distressed communities and regions with comprehensive and				
	flexible resources to address a wide variety of economic needs. Projects funded by				
	these programs will support work in Opportunity Zones and will support the mission of				
	the Department by, among other things, leading to the creation and retention of jobs				
	and increased private investment, advancing innovation, enhancing the manufacturing				
	capacities of regions, providing workforce development opportunities, and growing				
	ecosystems that attract foreign direct investment. Through the PWEAA NOFO, EDA				
	solicits applications from applicants in order to provide investments that support construction, non-construction, planning, technical assistance, and revolving loan fund				
	projects under EDA's Public Works program and EAA programs (which includes				
	Assistance to Coal Communities). Grants and cooperative agreements made under these				
	programs are designed to leverage existing regional assets and support the				
	implementation of economic development strategies that advance new ideas and				
	creative approaches to advance economic prosperity in distressed communities,				
	including those negatively impacted by changes to the coal economy. This funding also				
	includes responses to COVID.				
Federal	5G Fund: Provides funding to bring 5G mobile broadband service to rural areas that	Broadband			
Communications	would be unlikely to otherwise see deployment of 5G broadband service based upon	Specific			
Commission	new mobile coverage data submitted in the Commission's Digital Opportunity Data				
	Collection.				
Federal	Alaska Plan: Provides and allocates funding to maintain, extend, and upgrade broadband	Broadband	X		
Communications	service across certain areas of Alaska.	Specific			
Commission	CAE Breadhard Lan Cornert Established to the ECC1 2005 CAE DIG 1	Droodbaad	V	1	
Federal	CAF - Broadband Loop Support: Established by the FCC in 2016, CAF BLS provides	Broadband	X		
Communications Commission	support for voice and broadband service, including stand-alone broadband. The fund, a	Specific			
COMMISSION	reform of Interstate Common Line Support (ICLS), helps carriers recover the difference				
	between loop costs associated with providing voice and/or broadband service and				
	consumer loop revenues. In 2018, the FCC set a budget of \$1.42 billion for CAF BLS,				
	which will rise annually with inflation, and reduced the monthly per-line limit on				
	support from \$250 to \$225 as of July 2019 and \$200 as of July 2021. The 2018 order				
	support from \$250 to \$225 as of July 2019 and \$200 as of July 2021. The 2018 order also establishes new deployment obligations for carriers remaining on CAF BLS support,				
	support from \$250 to \$225 as of July 2019 and \$200 as of July 2021. The 2018 order also establishes new deployment obligations for carriers remaining on CAF BLS support, requiring them to expand deployment of broadband at speeds of 25/3 Mbps before				
Federal	support from \$250 to \$225 as of July 2019 and \$200 as of July 2021. The 2018 order also establishes new deployment obligations for carriers remaining on CAF BLS support, requiring them to expand deployment of broadband at speeds of 25/3 Mbps before 2024.	Broadhand	X		
Federal Communications	support from \$250 to \$225 as of July 2019 and \$200 as of July 2021. The 2018 order also establishes new deployment obligations for carriers remaining on CAF BLS support, requiring them to expand deployment of broadband at speeds of 25/3 Mbps before 2024. Connect America Fund - Phase II Auction: The Connect America Fund Phase II (Phase II)	Broadband Specific	X		
Communications	support from \$250 to \$225 as of July 2019 and \$200 as of July 2021. The 2018 order also establishes new deployment obligations for carriers remaining on CAF BLS support, requiring them to expand deployment of broadband at speeds of 25/3 Mbps before 2024. Connect America Fund - Phase II Auction: The Connect America Fund Phase II (Phase II) is part of the Commission's reform and modernization of its universal service support	Broadband Specific	X		
	support from \$250 to \$225 as of July 2019 and \$200 as of July 2021. The 2018 order also establishes new deployment obligations for carriers remaining on CAF BLS support, requiring them to expand deployment of broadband at speeds of 25/3 Mbps before 2024. Connect America Fund - Phase II Auction: The Connect America Fund Phase II (Phase II) is part of the Commission's reform and modernization of its universal service support programs. In 2018, the Commission conducted an auction (Auction 903) to allocate		X		
Communications	support from \$250 to \$225 as of July 2019 and \$200 as of July 2021. The 2018 order also establishes new deployment obligations for carriers remaining on CAF BLS support, requiring them to expand deployment of broadband at speeds of 25/3 Mbps before 2024. Connect America Fund - Phase II Auction: The Connect America Fund Phase II (Phase II) is part of the Commission's reform and modernization of its universal service support programs. In 2018, the Commission conducted an auction (Auction 903) to allocate Phase II support to certain eligible areas across the United States. Auction 903 ran from		X		
Communications	support from \$250 to \$225 as of July 2019 and \$200 as of July 2021. The 2018 order also establishes new deployment obligations for carriers remaining on CAF BLS support, requiring them to expand deployment of broadband at speeds of 25/3 Mbps before 2024. Connect America Fund - Phase II Auction: The Connect America Fund Phase II (Phase II) is part of the Commission's reform and modernization of its universal service support programs. In 2018, the Commission conducted an auction (Auction 903) to allocate Phase II support to certain eligible areas across the United States. Auction 903 ran from July 24, 2018 to August 21, 2018. 103 bidders won \$1.49 billion over 10 years to provide		x		
Communications	support from \$250 to \$225 as of July 2019 and \$200 as of July 2021. The 2018 order also establishes new deployment obligations for carriers remaining on CAF BLS support, requiring them to expand deployment of broadband at speeds of 25/3 Mbps before 2024. Connect America Fund - Phase II Auction: The Connect America Fund Phase II (Phase II) is part of the Commission's reform and modernization of its universal service support programs. In 2018, the Commission conducted an auction (Auction 903) to allocate Phase II support to certain eligible areas across the United States. Auction 903 ran from July 24, 2018 to August 21, 2018. 103 bidders won \$1.49 billion over 10 years to provide fixed broadband and voice services to over 700,000 locations in 45 states. (See full		х		
Communications	support from \$250 to \$225 as of July 2019 and \$200 as of July 2021. The 2018 order also establishes new deployment obligations for carriers remaining on CAF BLS support, requiring them to expand deployment of broadband at speeds of 25/3 Mbps before 2024. Connect America Fund - Phase II Auction: The Connect America Fund Phase II (Phase II) is part of the Commission's reform and modernization of its universal service support programs. In 2018, the Commission conducted an auction (Auction 903) to allocate Phase II support to certain eligible areas across the United States. Auction 903 ran from July 24, 2018 to August 21, 2018. 103 bidders won \$1.49 billion over 10 years to provide		X		



Agency	Description (From 2021 Federal Funding Guide)	Program Type	1	DI/A	P/D/M
	and maintaining voice and broadband service in the high-cost areas in their respective				
	states. The areas for which price cap carriers did not accept model-based support, as				
	well as other areas, were made available in the Phase II auction.				
Federal	Connect America Fund Phase II - Model-Based Support: Provides support to price-cap	Broadband	X		
Communications	carriers based on a forward-looking model of the cost of constructing modern networks	Specific			
Commission	for deploying voice and broadband services in states with unserved areas.				-
Federal	Connect USVI Fund (fixed deployment): Provides funding over a 10-year period to	Broadband	X		
Communications Commission	support the restoration, expansion, and upgrade of fixed and mobile communications	Specific			
Commission	networks on the U.S. Virgin Islands and offers funding to carriers in the U.S. Virgin Islands to help restore voice and broadband service.				
Federal	Connect USVI Fund (mobile deployment): Provides funding over a 10-year period to	Broadband	Х		
Communications	support the restoration, expansion, and upgrade of fixed and mobile communications	Specific			
Commission	networks on the U.S. Virgin Islands and offers funding to carriers in the U.S. Virgin				
	Islands to help restore voice and broadband service.				
Federal	Connected Care Pilot Program: On April 2, 2020, the FCC established a new three-year	Broadband			
Communications	Connected Care Pilot Program, which will provide up to \$100 million of support from	Specific			
Commission	the Universal Service Fund (USF) to help defray eligible health care providers' costs of providing connected care services and help assess how USF funds might be used to				
	support connected care services. The FCC is in the process of implementing the				
	Connected Care Pilot Program. The Connected Care Pilot provides funding for selected				
	pilot projects to cover 85% of the eligible costs of broadband connectivity, certain				
	network equipment (e.g., network equipment needed to make a support broadband				
	service functional, such as a router), and information services necessary to provide				
	connected care services to the intended patient population. In selecting pilot projects				
	from eligible health care providers (HCPs), the FCC maintained a strong preference for				
Federal	pilot projects that will primarily benefit low-income Americans or veterans. COVID-19 Telehealth Fund: Round 2 of the COVID-19 Telehealth Program administers	Broadband		X	
Communications	\$249.95 million in additional funding appropriated in the CARES Act for the COVID-19	Specific		^	
Commission	Telehealth Program to support "efforts of health care providers to address coronavirus	Specific .			
	by providing telecommunications services, information services, and devices necessary				
	to enable the provision of telehealth services" during the COVID-19 pandemic.				
Federal	E-rate: The schools and libraries universal service support program, commonly known as	Broadband		Х	
Communications	the E-rate program, helps schools and libraries to obtain affordable broadband. Eligible	Specific			
Commission	schools, school districts and libraries may apply individually or as part of a consortium.				
	Funding may be requested under two categories of service: category one services to				
	access), and category two services that deliver Internet access within schools and				
	libraries (internal connections, basic maintenance of internal connections, and managed internal broadband services). Discounts for support depend on the level of poverty and				
	whether the school or library is located in an urban or rural area. The discounts range				
	from 20 percent to 90 percent of the costs of eligible services. E-rate program funding is				
	based on demand up to an annual Commission-established cap.				
Federal	Emergency Broadband Benefit Fund: The Emergency Broadband Benefit Program, which	Broadband		Х	
Communications	has been replaced by the Affordable Connectivity Fund, provided support for broadband	Specific			
Commission	services and certain devices to help low-income households stay connected during the				
	COVID-19 pandemic. On December 27, 2020, the Consolidated Appropriations Act, 2021				
	became law and established an Emergency Broadband Connectivity Fund of \$3.2 billion in the United States Treasury to help Americans afford internet service during the				
	pandemic. The Act directed the Federal Communications Commission to use the fund to				
	establish an Emergency Broadband Benefit Program (EBB Program), under which eligible				
	low-income households may receive a discount off the cost of broadband service and				
	certain connected devices, and participating providers can receive a reimbursement for				
	such discounts. With the passage of IIJA, EBB was extended to become the Affordable				
Codoral	Connectivity Program.	Droodbaad		V	1
Federal Communications	Emergency Connectivity Fund: The FCC's Emergency Connectivity Fund Program (Program) provides funding for schools and libraries for the purchase, during the	Broadband Specific		X	
Commission	coronavirus (COVID-19) pandemic, of connected devices and broadband connections for	эрссиис			
	use by students, school staff, and library patrons for primarily educational purposes				
	while they are at locations other than schools and libraries. Support provided through				
	the Program reimburses eligible schools and libraries for purchases of eligible				
	equipment, including Wi-Fi hotspots, modems, routers, and connected devices, as well				
	as advanced telecommunications and information services, to meet the remote learning				
	needs of students, school staff, and library patrons who would otherwise lack access to				
	connected devices and breadhand connections sufficient to engage in semi-t-leaving				
	connected devices and broadband connections sufficient to engage in remote learning during the uncoming school year. The ECC has designated the Universal Service				
	during the upcoming school year. The FCC has designated the Universal Service				
Federal	during the upcoming school year. The FCC has designated the Universal Service Administrative Company (USAC) as the Administrator of the Program.	Broadband	X		
Federal Communications Commission	during the upcoming school year. The FCC has designated the Universal Service	Broadband Specific	X		



Agency	Description (From 2021 Federal Funding Guide)	Program Type	1	DI/A	P/D/M
Federal	High Cost ACAM Support: Provides funding to rate-of-return carriers that voluntarily	Broadband	X		
Communications Commission	elected to transition to a new cost model for calculating High-Cost support in exchange	Specific			
Federal	for meeting defined broadband buildout obligations. Lifeline: The Lifeline program provides a discount on phone and broadband service for	Broadband		X	
Communications	qualifying low-income households to ensure that all Americans have the opportunities	Specific		A	
Commission	and security that those services bring, including being able to connect to jobs, family,				
	and emergency services.				
Federal	Rural Digital Opportunity Fund: Disburses funding over a 10-year period to entities	Broadband	Χ		
Communications Commission	including telephone companies, cable operators, electric cooperatives, satellite operators and fixed wireless providers to bring fixed broadband and voice service to	Specific			
Commission	millions of unserved homes and small businesses in rural America.				
Federal	Rural Health Care Fund: The Rural Health Care (RHC) Program provides funding to	Broadband		Х	
Communications	eligible public or non-profit health care providers for broadband and	Specific			
Commission	telecommunications services necessary for the provision of health care. RHC Program				
	support is provided on a funding year basis. Funding years run from July 1 through June				
	30 of the subsequent year. The RHC Program has an annual funding cap, which is				
	adjusted for inflation each year. For FY2020, the funding cap was \$604,759,306. The RHC Program provides funding through two programs: the Telecommunications				
	(Telecom) Program and the Healthcare Connect Fund Program. The Telecom Program,				
	established in 1997, ensures that rural health care providers pay no more than their				
	urban counterparts for eligible telecommunications services. Specifically, an applicant's				
	program support is based on the difference between rural rates charged for				
	telecommunications services in the rural area where the health care provider is located,				
	and the urban rates charged for similar telecommunications services in the State. The rural health care provider pays only the urban rate for the telecommunications service,				
	and the USF pays the difference between the urban rate and rural rate for the service to				
	the service provider. The Healthcare Connect Fund Program, established in 2012,				
	provides a flat 65% discount on an array of communications services to both individual				
	rural health care providers and consortia, which can include non-rural health care				
	providers (if the consortium has a majority of rural sites). These services include				
	Internet access, dark fiber leases, business data, traditional DSL, and private carriage services, among others, along with funding for construction of health care provider-				
	owned communications facilities. With the Healthcare Connect Fund Program, the				
	Commission intended to promote the use of broadband services, recognizing the				
	increasing need for rural health care providers to have access to specialists who are				
	often located in urban areas, as well as the advent of certain communications-based				
	trends in healthcare delivery, such as the move towards electronic health records.				
Federal	Bringing Puerto Rico Together Fund: Provides funding to support the restoration,	Broadband	X		
Communications Commission	expansion, and upgrade of fixed and mobile communications networks in Puerto Rico, including funding to rebuild, expand and harden fixed and mobile voice and broadband	Specific			
Commission	networks across Puerto Rico to ensure that communications systems on the islands are				
	capable of withstanding future storms.				
Housing and Urban	HUD's Section 108 Loan Guarantee Program (Section 108) provides CDBG grantees with	Multi-Use	X		
Development	access to guaranteed loans for community development activities, Section 108				
	guaranteed loans can be used to upgrade broadband infrastructure to create more 'connected' communities, in addition to other activities. Section 108 can enhance				
	projects in communities, addressing the needs of Low- and Moderate-Income				
	populations. Section 108 has a non-competitive and rolling application process coupled				
	with availability for one-on-one technical assistance from program staff. Communities				
	can use Section 108 guaranteed loans to either finance specific projects or to launch				
	loan funds to finance multiple projects over several years.				
Housing and Urban	Community Development Block Grant Program (CDBG): The CDBG Program provides	Multi-Use	X		
Development	grants on a formula basis to states, insular areas, and local governments, to be used for				
	economic and community development, principally for low- and moderate-income persons.				
Housing and Urban	Continuum of Care (CoC) program also allows internet services to be charged to	Multi-Use			
Development	operating costs and similar to ESG, if internet service is directly related to carrying out				
	CoC grant activities, the costs can be charged to the eligible activity.				
Housing and Urban	Emergency Solutions Grants (ESG) program: allows internet services to be charged to	Multi-Use			
Development	essential services or shelter operations. Additionally, if the internet services are directly				
	related to carrying out activities eligible under an ESG component, the costs are				
Housing and Urban	considered eligible under that component. HOME Investment Partnerships Program: HOME provides annual formula grants to	Multi-Use	X		1
Development	state, local governments, and insular areas to create affordable housing for low-income	ividiti-038	^		
•	and very-low income families.				
Housing and Urban	Housing Trust Fund (HTF): The HTF is funded through an annual set-aside by the Federal	Multi-Use	Χ		
Development	Home Loan Mortgage Corporation (Freddie Mac) and the Federal National Mortgage				
	Association (Fannie Mae). HTF Funds are then transferred and allocated to HUD where				
	they are distributed by formula to states and insular areas to increase and preserve the				



Agency	Description (From 2021 Federal Funding Guide)	Program Type	1	DI/A	P/D/M
	supply of rental housing and homeownership opportunities for extremely low-income				
	and very low-income families, including homeless families.		ļ.,		
Housing and Urban Development	Indian Community Development Block Grant Program (ICDBG) ARP: The ICDBG Program provides eligible grantees with direct grants for use in developing viable Indian and	Multi-Use	X	X	
Development	Alaska Native Communities, including decent housing, a suitable living environment, and				
	economic opportunities. Projects funded by the ICDBG program must principally benefit				
	low-and-moderate-income persons (24 CFR 1003.208). The program provides funding in				
	three categories: housing (housing rehabilitation, land acquisition to support new				
	housing construction, and under limited circumstances, new housing construction);				
	community Facilities (Infrastructure construction, e.g., roads, water and sewer facilities; and, single or multipurpose community buildings); and economic development (wide				
	variety of commercial, industrial, agricultural projects which may be recipient owned				
	and operated or which may be owned and/or operated by a third party).				
Housing and Urban	Indian Community Development Block Grant Program (ICDBG): The ICDBG Program	Multi-Use	Х	Х	
Development	provides eligible grantees with direct grants for use in developing viable Indian and				
	Alaska Native Communities, including decent housing, a suitable living environment, and				
	economic opportunities, primarily for low- and moderate- income persons. Projects				
	funding by the ICDBG program must principally benefit low-and-moderate-income				
	persons (24 CFR 1003.208). The program provides funding in three categories: housing				
	(housing rehabilitation, land acquisition to support new housing construction, and under limited circumstances, new housing construction); community Facilities (Infrastructure				
	construction, e.g., roads, water and sewer facilities; and, single or multipurpose				
	community buildings); and economic development (wide variety of commercial,				
	industrial, agricultural projects which may be recipient owned and operated or which				
	may be owned and/or operated by a third party).				
Housing and Urban	Indian Housing Block Grant (IHBG) ARP: The American Rescue Plan Act of 2021 (ARP)	Multi-Use			
Development	(Public Law 117-2) appropriated \$450 million for the Indian Housing Block Grant (IHBG)				
	Program and authorized the U.S. Department of Housing and Urban Development (HUD) to waive or establish alternative requirements for any provision of the Native American				
	Housing Assistance and Self-Determination Act of 1996 (NAHASDA) or IHBG regulation				
	that would allow grantees to expedite or facilitate the use of funds. All activities funded				
	under this program must address one of the three priorities: preventing, preparing for				
	or responding to COVID-19.				
Housing and Urban	Indian Housing Block Grant (IHBG) Competitive: The Indian Housing Block Grant	Multi-Use	X		
Development	Program (IHBG) is a competitive grant that provides a range of affordable housing				
	activities on Indian reservations and Indian areas. The block grant approach to housing				
	for Native Americans was enabled by the Native American Housing Assistance and Self Determination Act of 1996 (NAHASDA). Eligible activities include assistance for units				
	developed prior to the enactment of NAHASDA, development, housing services to				
	eligible families and individuals, housing management services, crime prevention and				
	safety, and model activities that provide creative approaches to solving affordable				
	housing problems.				
Housing and Urban	Indian Housing Block Grant (IHBG) Formula: The Indian Housing Block Grant Program	Multi-Use	X		
Development	(IHBG) is a formula grant that provides a range of affordable housing activities on Indian				
	reservations and Indian areas. The block grant approach to housing for Native Americans was enabled by the Native American Housing Assistance and Self				
	Determination Act of 1996 (NAHASDA). Eligible activities include assistance for units				
	developed prior to the enactment of NAHASDA, development, housing services to				
	eligible families and individuals, housing management services, crime prevention and				
	safety, and model activities that provide creative approaches to solving affordable				
Housing and Hishan	housing problems. Multifamily Housing: Property owners and agents should contact their HUD Account	NA INCLUS		X	
Housing and Urban Development	Executive to learn more about how to fund Neighborhood Networks centers in	Multi-Use		^	
Development	Multifamily Housing. HUD Multifamily has a regulatory requirement under 24 CFR				
	880.212 that the buildings provide broadband infrastructure.				
Housing and Urban	Public Housing Capital Funds: The Public Housing Capital Funds, Public Housing Agencies	Multi-Use	Χ		
Development	may use Capital Fund grants for development, modernization, and management				
	improvements. For computer internet connectivity, PHAs have used Capital Funds to				
	update buildings to support broadband internet and Wi-Fi. They have also used funds to				
	purchase and install equipment, and for capital expenditures to facilitate programs to				
	improve the empowerment and economic self-sufficiency of public housing residents, tenant accommodations, and training to operate equipment.				
Housing and Urban	Public Housing Operating Funds: The Public Housing Operating Funds, based on Section	Multi-Use		Χ	
Development	9(e), Public Housing Agencies may use Operating Funds to provide computer internet	1110101 036			
•	services to residents of public housing both in their units and in common areas. HUD				
	has allowed PHAs to use Operating Funds to cover costs of computer internet service				
	for computer labs, common areas, and PHA operation and management purposes. In				
	addition to the benefits for residents outlined above, access to the computer internet in				
	the buildings and in individual units also enables public housing residents to better				
	communicate with PHA management and their resident councils.	1		1	<u> </u>



Agency	Description (From 2021 Federal Funding Guide)	Program Type	1	DI/A	P/D/M
Housing and Urban	NAHASDA Title VI Loan Guarantee Program: The Title VI Housing Activities Loan	Multi-Use	X	2.47.	.,_,
Development	Guarantee Program (Title VI) is an effective public investment tool that HUD offers to	Width OSC			
	federally recognized tribes and Tribally Designated Housing Entities (TDHEs). It provides				
	an additional source of financing for affordable Tribal housing activities. Eligible				
	activities include the same eligible activities as the Indian Housing Block Grant (IHBG)				
	program. The IHBG statutory and regulatory requirements apply to all projects using				
	Title VI financing.				
Institute of Museum	Grants to States Library Administrative Agencies: The Grants to States program supports	Multi-Use		Х	Χ
and Library Services	library initiatives and services to meet the needs of children, parents, teenagers, adult				
,	learners, senior citizens, the unemployed, the business community, and members of the				
	current and future library workforce. Funds are distributed according to a population-				
	based formula and may be used to provide access to electronic databases, computer				
	instruction, homework centers, summer reading programs, digitization of special				
	collections, access to e-books and adaptive technology, broadband connectivity,				
	bookmobile service, development of outreach programs to the underserved, and				
	related efforts. Priorities are established by each State Library Administrative Agency				
	and are detailed in state-specific Five-Year Plans (see				
	https://www.imls.gov/grants/grants-state/five-year-plans).				
Institute of Museum	National Leadership Grants for Libraries: The National Leadership Grants for Libraries	Multi-Use		Х	Х
and Library Services	Program (NLG-L) supports projects that address critical needs of the library and archives	Widiti-03e		^	Α
and Elbrary Services	fields and have the potential to advance practice in these professions to strengthen				
	library and archival services for the American public. Successful proposals will generate				
	results such as new models, new tools, research findings, services, practices, and/or				
	alliances that can be widely used, adapted, scaled, or replicated to extend and leverage				
	the benefits of federal investment.				
Institute of Museum	Native American Library Services: Basic Grants: This program is designed to assist Native	Multi-Use		X	
and Library Services	American tribes in improving core library services for their communities. Reflecting	Multi-03e		^	
_ '	IMLS's agency-level goals of championing lifelong learning, strengthening community				
₹	engagement, and advancing collections stewardship and access, the goals for this				
	program are to:				
	Improve services for learning and accessing information in a variety of formats to				
	support needs for education, workforce development, economic and business				
	development, health information, critical thinking skills, digital literacy skills, and				
	financial literacy, and other types of literacy skills.				
	 Enhance the skills of the current library workforce and leadership through training, 				
	continuing education, and opportunities for professional development.				
	continuing cadation, and opportunites for professional acvelopment.				
Institute of Museum	Native American Library Services: Enhancement Grants: This program is designed to	Multi-Use		Χ	Х
and Library Services	assist Native American tribes in improving core library services for their communities.	Multi-Ose		^	^
	Reflecting IMLS's agency-level goals of championing lifelong learning, strengthening				
₹	community engagement, and advancing collections stewardship and access, the goals				
	for this program are to:				
	 Improve digital services to support needs for education, workforce development, 				
	economic and business development, health information, critical thinking skills,				
	and digital literacy skills				
	Improve educational programs related to specific topics and content areas of				
	interest to library patrons and community-based users				
	Enhance the preservation and revitalization of Native American cultures and				
	languages.				
	languages.				
Institute of Museum	IMLS American Rescue Plan Grants: The IMLS American Rescue Plan grants program	NA. del III	Х	X	Х
and Library Services	supported museum and library services in addressing community needs created or	Multi-Use	^	^	^
and Library Services					
	exacerbated by the COVID-19 pandemic and in assisting with recovery. Projects could				
	continue, enhance, or expand existing programs and services, or launch new ones to address emergent needs and unexpected hardships.				
National Science	Project Overcome: The goal of the OVERCOME project is to select, launch, and oversee	Broadband			Х
Foundation	five proof-of concept efforts to deploy novel broadband technology solutions to both	Specific			^
Touridation	rural and urban underserved communities.	Specific			
National	Broadband Infrastructure Program: The Broadband Infrastructure Program makes grants	Broadband	X	+	1
Telecommunications	on a competitive basis to covered partnerships for covered broadband projects. The		^		
and Information	term "covered partnership" means a partnership between: (A) a State, or one or more	Specific			
Administration	political subdivisions of a State; and (B) a provider of fixed broadband service. A covered				
Aummistration	partnership may include more than one provider of fixed broadband service. A covered				
	its application. Additionally, a provider of fixed broadband service as part of				
	more than one covered partnership. A provider of broadband service that is part of a				
	covered partnership is not required to be designated as an eligible telecommunications				
	carrier pursuant to section 214(e)of the Communications Act of 1934 (47 U.S.C. 214(e)).				
	NTIA encourages municipalities, nonprofits, or cooperatives that own and/or operate				
	broadband networks to participate in this program as part of a covered partnership.				
	2. 24. 24. 24. 24. 24. 24. 24. 24. 24. 2	1		1	1

NATIONAL TELECOMMUNICATIONS AND INFORMATION ADMINISTRATION 2022 FEDERAL BROADBAND FUNDING REPORT: INVESTING IN INTERNET FOR ALL



Agency	Description (From 2021 Federal Funding Guide)	Program Type	1	DI/A	P/D/M
National	Connecting Minority Communities Pilot Program: The Connecting Minority Communities	Broadband		Χ	
Telecommunications	(CMC) Pilot Program provides grants to eligible HBCUs, TCUs and MSIs in anchor	Specific			
and Information	communities for the purchase of broadband Internet access service or any eligible				
Administration	equipment, or to hire and train information technology personnel: (1) to facilitate				
ੵ	educational instruction and learning, including through remote instruction; or (2) to				
	operate a minority business enterprise; or (3) to operate a tax-exempt organization				
	described in section 501(c)(3) of the Internal Revenue Code. Grant funds may be used				
	to:(1) purchase broadband internet access service, including the installation or upgrade				
	of broadband facilities on a one-time, capital improvement, basis to increase or expand				
	broadband capacity and/or connectivity at the eligible institution; (2) purchase or lease				
	of eligible equipment and devices for student or patron use, subject to any restrictions				
	and prohibited uses; and (3) hire and train information technology personnel who are a				
	part of the eligible anchor institution, MBE or Tax-Exempt Organization.				
National	Tribal Broadband Connectivity Program: The Tribal Broadband Connectivity Program will	Broadband	X	Χ	
Telecommunications	provide grants to expand access to and adoption of (a) broadband service on Tribal	Specific			
and Information	land; or (b) remote learning, telework, or telehealth resources during the COVID-19				
Administration	pandemic. The program, authorized by the Consolidated Appropriations Act, 2021,				
হ	Division N, Title IX, Section 905, Public Law 116-260, 134 Stat. 1182, makes grants				
	available to eligible entities, which include Tribal Governments, Tribal organizations,				
	Tribal Colleges or Universities (TCUs), the Department of Hawaiian Homelands on behalf				
	of the Native Hawaiian Community, and Native Corporations as defined under Section 3				
	of the Alaska Native Claims Settlement Act. These funds will provide new sources of				
	broadband funding that can assist Tribal entities in mitigating the effects of the COVID-				
	19 pandemic exacerbating the digital divide across Indian Country.				
Northern Border	State Economic & Infrastructure Development Investment Program: The State and	Multi-Use		X	
Regional Commission	Economic & Infrastructure Development Program funds economic development and				
	infrastructure projects throughout designated counties in the NBRC's four-state service				
	area. The NBRC provides investments to job-creating projects that help reduce poverty,				
	unemployment, and outmigration, within 7 statutorily defined funding areas.				





Table 2

MULTI USE BROADBAND FUNDING BY AGENCY (in millions)			
Agency	Appropriated	Obligated	Outlayed
Appalachian Regional Commission		\$22.4	\$6.7
Delta Regional Authority		\$0.1	
Department of Agriculture			
Department of Commerce, EDA		\$32.5	\$32.5
Department of Education		\$7.4	\$22.7
Department of Housing and Urban Development		\$2.9	
Department of the Treasury			
Institute of Museum and Library Services		\$13.5	\$13.5
Northern Border Regional Commission		\$2.6	\$0.2
Department of Labor			
TOTAL		\$81.5	\$75.6

Table 3

BROADBAND SPECIFIC FUNDING BY AGENCY (in millions)			
Agency	Appropriated	Obligated	Outlayed
Denali Commission			\$0.8
Department of Agriculture	\$1,360.0	\$426.3	\$270.5
Department of Commerce	\$1,536		
Department of the Interior	\$1.5	\$1.5	\$1.5
Federal Communications Commission	\$10,557	\$7,556.9	\$6,346.2
TOTAL	\$13,454.5	\$7,984.8	\$6,619





Table 4

FY21 Education Programs Where Broadband is an Eligible Expense

21st Century Community Learning Centers (Title IV, Part B of ESEA)

Adult Education National Leadership Activities - Workforce Innovation and Opportunity Act, Title II, Adult Education and Family Literacy Act

Adult Education and Literacy - Workforce Innovation and Opportunity Act, Title II, Adult Education and Family Literacy Act

Alaska Native & Native Hawaiian Serving Program

Alaska Native Education Program

American Indian Vocational Rehabilitation Services Program

American Rescue Plan Homeless Children and Youth

Asian American and Native American Pacific Islander

Carl D. Perkins Career and Technical Education Act (Perkins V) - Title I Basic Grants to States

Early Intervention for Infants and Toddlers with Disability

Education Stabilization Fund I Allocations to the Outlying Areas- Governors

Education Stabilization Fund I Allocations to the Outlying Areas- SEAs

Education for Homeless Children and Youth

Elementary and Secondary Schools Emergency Relief Fund

English Language Acquisition State Grants (Title III, Part A of ESEA)

Full Service Community Schools

Governor's Emergency Education Relief Fund

HSI STEM and Articulation program

Higher Education Emergency Relief Fund

Improving Basic Programs Operated by Local Educational Agencies (Title I, Part A of ESEA)

Magnet Schools Assistance Program

Native American-Serving Nontribal Institutions Program

Native Hawaiian Education Programs

Native Youth Community Project (Discretionary)

Office of Indian Education, Title VI(A)(1) Formula Grants

Office of Migrant Education

Preschool Grants for Children with Disabilities

Prevention and Intervention Programs for Children and Youth who are Neglected, Delinquent, or At-Risk (Title I, Part D of ESEA)

Promise Neighborhoods

Rural and Low-Income School Program

Small, Rural School Achievement Program

Special Education - Grants to States

State Supported Employment Services Program

State Vocational Rehabilitation Services Program

Statewide Family Engagement Centers

Strengthening Institutions Program

Student Support and Academic Enrichment Program, Title IV, Part A

Title III, Part B: Strengthening Historically Black Colleges and Universities Program

Tribally Controlled Colleges and Universities