Office of the Governor
Economic Development & Tourism

Governor's Broadband Development Council Meeting

May 20, 2021

AGENDA
Governor's Broadband Development Council

May 20, 2021
1:30 PM

VIDEOCONFERENCE MEETING

Governor's Broadband Development Council (" Council ") members will be meeting via videoconference. Members of the public who would like to attend the meeting may join by videoconference using the following information:

Free Web Link for Videoconference:

https://teams.microsoft.com/l/meetup-join/19%3ameeting_YWNlNjM1ZDgtYTBlZi00NmUzLTllMmYtOTNiMTk1NWZmMTU5%40thread.v2/0?context=%7b%22Tid%22%3a%2254cb5da6-c734-4242-bbc2-5c947e85fb2c%22%2c%22Oid%22%3a%22cdb0f7cb-fec3-45b3-bee8-c349e50e5cb2%22%7d

Members of the public attending the meeting via the videoconference information provided will be able to hear audio of the meeting and can provide comments during the Public Comment portion of the meeting. The Council will also record the meeting. That recording will be made available to members of the public upon request.

All agenda items are subject to possible discussion, questions, consideration, and action by the Council. Agenda item numbers are assigned for ease of reference only and do not necessarily reflect the order of their consideration by the Council. Presentations may be made by the identified staff or Council member or others as needed.

ITEM

I. Call to Order

II. Chair welcome, remarks and roll call

III. Discussion and Possible Action on Approval of Minutes from the Council meeting on April 15, 2021.

IV. Comments by T-Mobile staff providing information relating to council's areas of research, identification, study, and analysis under Tex. Gov't Code § 490H.006, including information relating to distribution of broadband in unserved areas of Texas, and council review, discussion, consideration and/or possible action regarding same.

V. Comments by National Telecommunications & Information Administration staff providing information relating to council's areas of research, identification, study, and analysis under Tex. Gov't Code § 490H.006, including information relating to distribution of broadband in unserved areas of Texas, and council review, discussion, consideration and/or possible action regarding same.

VI. Comments by Community Tech Network staff providing information relating to council's areas of research, identification, study, and analysis under Tex. Gov't Code § 490H.006, including information relating to distribution of broadband in unserved areas of Texas, and council review, discussion, consideration and/or possible action regarding same.

VII. Review, Discussion, Consideration and/or Possible Action on Council Next Steps for Following Meeting(s) - Chairman Sproull

VIII. Comments without Deliberation:

Public comment may be received on any matter under the Council's jurisdiction without regard to whether the item was posted on the agenda.

IX. Adjournment.

Link to May 20, 2021 Council meeting documents:

https://gov.texas.gov/business/page/governors-broadband-development-council

Persons with disabilities who plan to attend this meeting, who may need auxiliary aids or services, or who need assistance in having English translated into Spanish, should contact Philip Rocha at 512-936-0246 at least 2 days before the meeting so that appropriate arrangements can be made.

Personas con discapacidades que asistirán a esta reunión y requieren servicios o instrumentos especiales, o necesitaran traducción al español, por favor de comunicarse con Philip Rocha al 512-936-0246 por lo menos 2 días antes de la reunión para hacer los arreglos necesarios.

Tab

1

Minutes of April 15, 2021 Meeting

Videoconference Meeting

1:30 PM

VIDEOCONFERENCE MEETING

GOVERNOR'S BROADBAND DEVELOPMENT COUNCIL MEMBERS IN ATTENDANCE:

William "Bill" Sproull (Chair), Juli Blanda, Frank Moreno, Lindsey Lee, Marshall Harrison, Marty Lucke, Greg Pittman, Jennifer K. Harris, Kenny Scudder, Mike Easley, Edward Smith, Kirk Petty, Thomas Kim, M.D.

STAFF IN ATTENDANCE:

Joseph Behnke, Philip Rocha, Fauye Bennett, Michael Treyger, Larry McManus,

The Governor's Broadband Development Council ("Council") proceeded on posted agenda items in the order as follows:

Agenda Item I.   CALL TO ORDER

Bill Sproull, Chairman of the Governor's Broadband Development Council, called the meeting to order at 1:33 PM. A quorum was present online.

Agenda Item II.   CHAIR WELCOME, REMARKS, AND ROLL CALL

Chairman Sproull welcomed the Council for the meeting and briefly outlined the agenda for the meeting.

Agenda Item III.   DISCUSSION AND POSSIBLE ACTION ON APPROVAL OF MINUTES FROM THE COUNCIL MEETING ON March 18, 2020

The Council reviewed and approved the minutes from the meeting held on March 18, 2021.

Agenda Item IV.   COMMENTS BY TEXAS LEGISLATOR PROVIDING INFORMATION RELATING TO THE COUNCIL'S AREAS OF RESEARCH, IDENTIFICATION, STUDY, AND ANALYSIS UNDER Tex. Gov't Code 490H.006, INCLUDING INFORMATION RELATING TO DISTRIBUTION OF BROADBAND IN UNSERVED AREAS OF TEXAS, AND COUNCIL REVIEW, DISCUSSION, CONSIDERATION, AND/OR POSSIBLE ACTION REGARDING SAME

Adrianne Fore from Representative Charles "Doc" Anderson's office provided some insight on the broadband efforts within their office as it relates to the House of Representatives. Ms. Fore emphasized her support for the council and their efforts and left the office available for future collaboration.

Agenda Item V. **COMMENTS BY UT AUSTIN STAFF PROVIDING INFORMATION RELATING TO COUCIL'S AREAS OF RESEARCH, IDENTIFICATION, STUDY, AND ANALYSIS UNDER TEX. GOV'T CODE 490H.006, INCLUDING INFORMATION RELATING TO DISTRIBUTION OF BROADBAND IN UNSERVED AREAS OF TEXAS, AND COUNCIL REVIEW, DISCUSSION, CONSIDERATION AND/OR POSSIBLE ACTION REGARDING SAME**

Professor Sharon Strover and Professor Kenneth Flam of UT Austin presented slides touching on several topics relating to broadband during the pandemic. Both speakers engaged in discourse with members of the council.

Agenda Item VI. **REVIEW, DISCUSSION, CONSIDERATION AND/OR POSSIBLE ACTION ON COMMITTEE NEXT STEPS FOR FOLLOWING MEETINGS – CHARIMAN SPROULL**

Chairman Sproull emphasized the importance of speakers for future meetings and welcomed suggestions from members of the council going forward.

Agenda Item VII. **COMMENTS WITHOUT DELIBERATION:**

Public comment may be received on any matter under the Council's jurisdiction without regard to whether the item was posted on the agenda.

No public comment.

Agenda Item VIII. **ADJOURNMENT**

Chairman Sproull called the meeting to a close at 2:53 PM.

_____   _____

Bill Sproull, Chair   Date
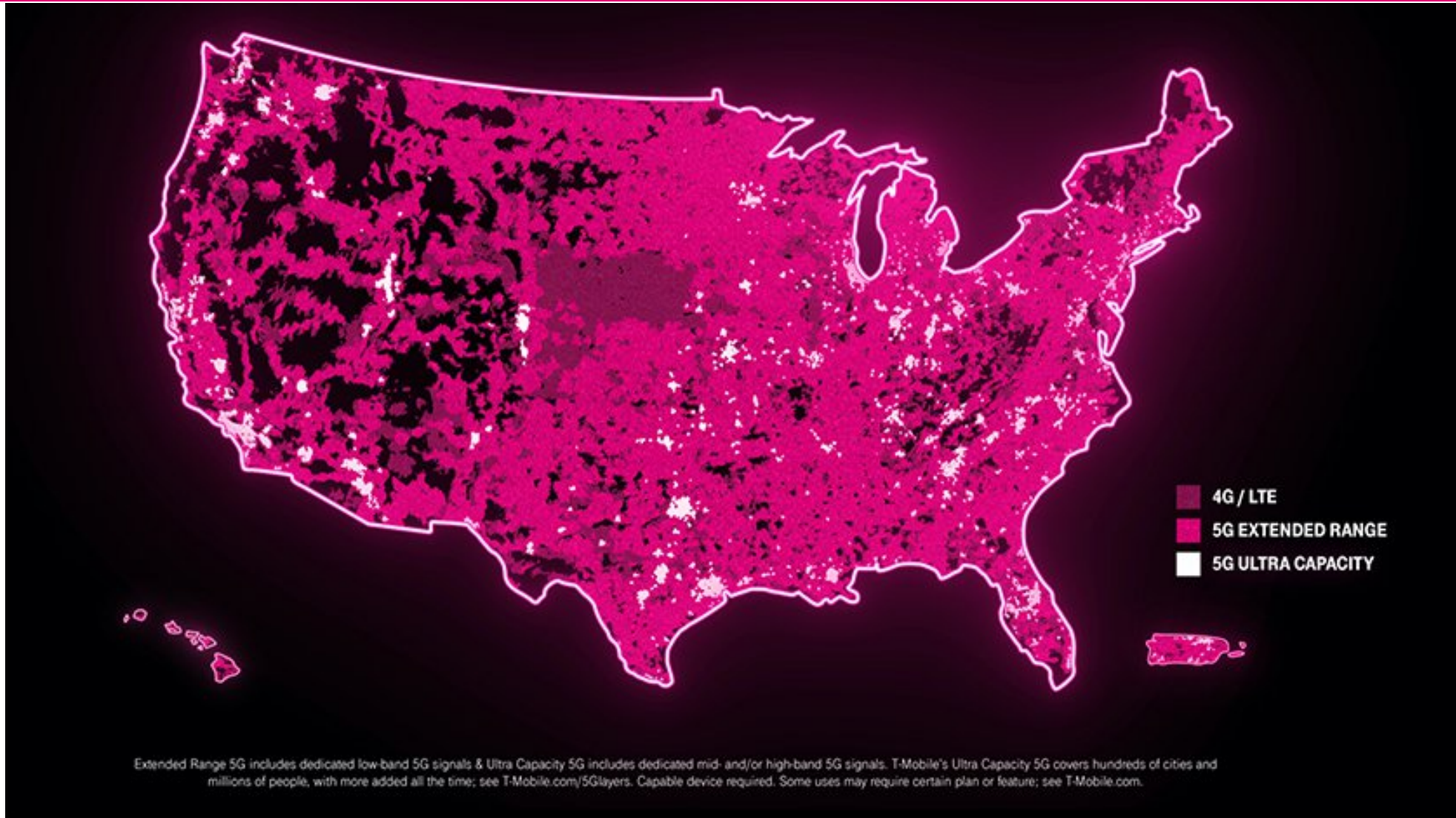
Tab 2

Investing in Rural Texas.

- Invested billions of dollars in network infrastructure across **Rural America** to provide **5G coverage and high-speed internet**.

- **Hiring people** to specifically help bring high speed internet access to rural Texas.

- **99% of U.S population** is covered by our **4GLTE Network**

- 80% of Americans are now covered with 5G – **93% of Texans are covered with 5G.**

- We are now providing **High-Speed Home Internet** on top of our other wireless products (Ex. Phones, Hot Spots, Tablets, etc.)

- We have individual, business and government plans/programs that can help **reduce the connectivity gap**.

- We can help **accelerate** 5G coverage in rural areas of Texas.

5G Coverage

4G / LTE
5G EXTENDED RANGE
5G ULTRA CAPACITY

Extended Range 5G includes dedicated low-band 5G signals & Ultra Capacity 5G includes dedicated mid- and/or high-band 5G signals. T-Mobile's Ultra Capacity 5G covers hundreds of cities and millions of people, with more added all the time; see T-Mobile.com/5Glayers. Capable device required. Some uses may require certain plan or feature; see T-Mobile.com.

https://www.t-mobile.com/coverage/coverage-map

5G Coverage

- Our **High-Speed Home** Internet is **different**! It is transmitted through our nationwide 5G network

- A more **efficient** way of reaching rural communities in Texas with High-Speed Internet.

- No need for communities to invest in fiber infrastructure.

- No need for residents to invest in additional equipment cost/cables

- **America's Largest, Fastest and Most Reliable 5G Network**

mmW
DENSE
URBAN

MID BAND METRO

LOW BAND NATIONWIDE

T-Mobile High-Speed Home Internet = $60

No price hikes.

When we make a promise to you, we stick to it.

No equipment fees.

What you see is what you pay, with no hidden costs or other add-ons.

No annual service contracts.

Long-term commitment not required.

High-speed internet.

The speed you need, to surf, stream, and explore.

Reliable connection.

Our network delivers a strong, reliable connection.

Simple setup, 24/7 support.

Getting started is easy. If you need help, we're here for you.

Tab

3

GOVERNOR'S BROADBAND DEVELOPMENT COUNCIL

KAMI GRIFFITHS, EXECUTIVE DIRECTOR/CO-FOUNDER

AGENDA

- Introduction
- Pre-COVID Programming
- Post-COVID Programming
- Funding for Senior Connect
- A Vision for Texas

ABOUT ME

- Passion for closing the digital divide started 15 years ago when I was a computer instructor for the Parks Department in NYC

- 2006 moved to SF Bay Area and started working for TechSoup

- Interviewed 200 librarians to learn how they maintained their public computers

- Started working on a project - CTN Bay Area

- Volunteered for steering committee to launch CTN Bay Area as a nonprofit

- 2008 CTN Bay Area received nonprofit status

- 2009 was hired as the Executive Director

- Moved to Austin in 2017 to expand impact

ABOUT COMMUNITY TECH NETWORK (CTN)

- Work entirely in partnership with nonprofits and government agencies
- Provide basic/intermediate digital literacy training for low-income adults and seniors
- Develop curriculum teaching basic/intermediate digital skills for computers, tablets and smart speakers
- Help learners acquire devices and enroll in home internet
- Provide capacity building support for agencies interested in offering digital inclusion programming

Our mission is to transform lives through digital literacy.

CTN
community
TECH NETWORK

OUR PARTNERS

California

Asian Pacific American Community Center

Bayview Senior Services

Bernal Heights Neighborhood Centers

Catholic Charities

Center For Elders' Independence

Centro Latino

Children's Council of San Francisco

Chinatown Community Development Center (CCDC)

City of Oakland

City of Sunnyvale

Curry Senior Center

Department of Disability and Aging Services

Episcopal Community Services (ECS)

FACES SF

Golden Gate Senior Services

Goodwill of San Francisco, San Mateo and Marin

HumanGood

IT Bookman Community Center

Mayor's Office of Housing and Community Development (MOHCD)

Mission Neighborhood Centers

OnLok

PRC (Positive Resource Center)

St. Francis Living Room

San Francisco Housing Development Corporation (SFHDC)

San Francisco Public Library

Sequoia Living

Sunset Neighborhood Beacon Center

Tabernacle Community Development Corporation (TCDC)

Tenderloin Housing Clinic

Twitter NeighborNest

YMCA

Texas

AGE of Central Texas

Austin Free-Net

Austin Independent School District

Austin Public Library

Capital IDEA

City of Austin Innovation Team

Family Eldercare

Foundation Communities

Housing Authority of City of Austin (HACA)

Latinitas

Senior Access

Round Rock Public Library

PROGRAMMING IN TEXAS BEFORE COVID

Connect @ Home program in partnership with Family Eldercare at North Loop Apartments in Austin (January 2019)

- Offered programming in person at partner locations:
  - Senior centers
  - Housing developments
  - Libraries
- Structured classes
- Drop-in help

- Video of Mary

CTN
community
TECH NETWORK

PROGRAMMING IN TEXAS BEFORE COVID

Digital Device Drop-in in partnership with the City of Austin Innovation Team and Austin Public Library (January 2019)

Digital Parents in partnership with Austin Independent school District and Latinitas (November 2019)

PROGRAMMING IN TEXAS BEFORE COVID

Tech Teach-in with Adobe (April 2019)

Tech Teach-in with Google Fiber (October 2019)

PROGRAMMING IN TEXAS BEFORE COVID

Computer Distribution Events in partnership with PCs for People and the City of Austin (March 2018 & December 2019)

Train the Trainer – Lab Apprentice Program in partnership with the Housing Authority of the City of Austin (Nov. 2017 to May 2018)

PROGRAMMING AFTER COVID

Basic computer classes and computer distribution to 40 residents of Foundation Communities Cardinal Point property (June 2020)

- All partner agencies closed

- We converted in-person classes to virtual

- Focus changed to providing devices, internet and training to older adults at risk of social isolation

- <u>Home Connect video</u>

HOME CONNECT IMPACT (SINCE APRIL 2020)

451 REFERRALS TO THE PROGRAM

53 NEWLY CONNECTED TO HOME INTERNET

332 DEVICES DISTRIBUTED

113 WORKING WITH A TRAINER/DIGITAL COACH

238 COMPLETED BASIC TRAINING

2420 HOURS OF INSTRUCTION PROVIDED

SOCIAL INCLUSION TASK FORCE

- Part of the Aging Services Council of Central Texas
- Conducted a <u>technology needs survey</u> of 654 seniors in Central Texas
- Survey suggests that older adults of Central Texas:
  - Want mobile technology
  - Want internet access at home
  - Are beginner or intermediate level technology users
  - Want someone to train them on how to use a device at home
  - Are interested in a free tech training program provided via telephone

SCALING HOME CONNECT

- Began licensing the Home Connect curriculum and offered training for trainers:
    - Austin Free-Net
    - Senior Access
    - AGE of Central Texas

SENIOR CONNECT – CENTRAL TEXAS COLLABORATIVE

- Lead Partners: Senior Access & AGE of Central Texas
- Program Stats (since 3/11/21):
  - Referrals to the program: 13
  - Completed 5-hours of training: 2
  - Currently in training: 9
  - Tablet shipped, waiting for training: 2
- Funding secured to support connecting 150 seniors
  - All Together ATX
  - City of Pflugerville
  - CAPCOG
  - City of Austin/GTOP
  - Consumer Technology Association Foundation

A VISION FOR TEXAS

FCC indicates broadband is not available to 1.8M people

* FCC fixed broadband has or "could" provide greater than or equal to 25Mbps / 3Mbps

FCC broadband availability
0% | >0% to <=20% | >20% to <=40% | >40% to <=60% | >60% to <=80% | >80% to 100%

Microsoft data indicates 14.6M people do not use the internet at broadband speeds

Broadband speed greater than or equal to 25Mbps

Broadband usage
0% | >0% to <=20% | >20% to <=40% | >40% to <=60% | >60% to <=80% | >80% to 100%

- Increased access to affordable broadband throughout the state
- Additional programs to help people apply for broadband and acquire devices
- Address the digital literacy gap:
  - If someone doesn't know how to use the internet they may not know the value and be less inclined to signup/pay for it
  - Lack of digital literacy, and internet safety, puts new users at risk of fraud and abuse

QUESTIONS?

THANK YOU!

KAMI@COMMUNITYTECHNETWORK.ORG

Tab 4

(Slides were presented during the 05/20/21 meeting and were not included in the pre-meeting packet)

Governor's Broadband Development Council

May 20, 2021

Scott D. Woods
Senior Broadband Program Specialist
Manager, BroadbandUSA Technical Assistance

Broadband Overview

NTIA's Commitment to Connecting America

The Department of Commerce supports the Biden Administration's agenda and our partner agencies to ensure that every American has access to affordable and reliable broadband and has the skills and opportunities to participate fully.

Deploy broadband infrastructure to communities with the **greatest need**.

Support job creation and workforce development by ensuring that **all Americans have broadband, devices, and digital skills**.

Collaborate with states, Tribes, industry, and federal agencies to effectively expand broadband access and digital inclusion.

Use data to inform policies and investments in broadband at all levels of government.

Millions of Americans Don't Have Reliable Broadband

- **17 million Americans do not have** basic broadband @ 25/3 Mbps.

- **20.9% of Tribal lands and 17.2% of rural lands** do not have 25/3 Mbps broadband.

- While 95.6% of household have access to 25/3 Mbps broadband, **only 68.9% of households subscribe** to service at that level or above.
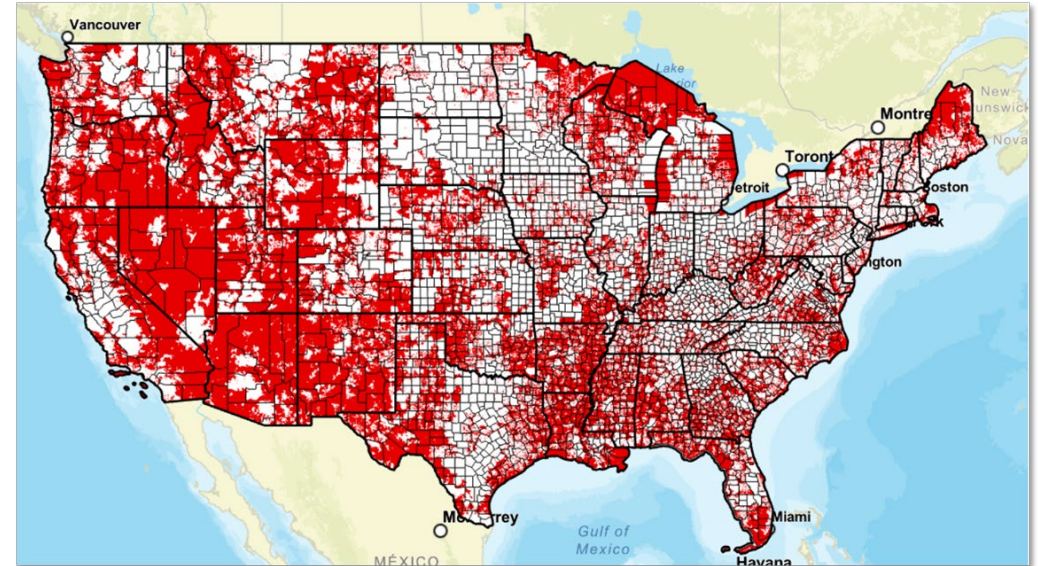
Red areas indicate where wireline broadband service is unavailable at the basic FCC benchmark speed of 25/3 Mbps based on FCC Form 477 carrier-reported data.

Visualization: NTIA National Broadband Availability Map (NBAM)
Source: FCC 2021 Broadband Deployment Report, based on ISP-reported Form 477 data

Broadband Adoption is Uneven Across Communities

- **65 million Americans** do not use the Internet at all.

- **10 million Internet users** rely solely on a mobile data plan.

- **5 Million households** not online identified **cost as their main reason** for not using the Internet.

- Under-connected Americans are disproportionally likely to be low-income, non-white, rural, Tribal, older, and differently-abled.
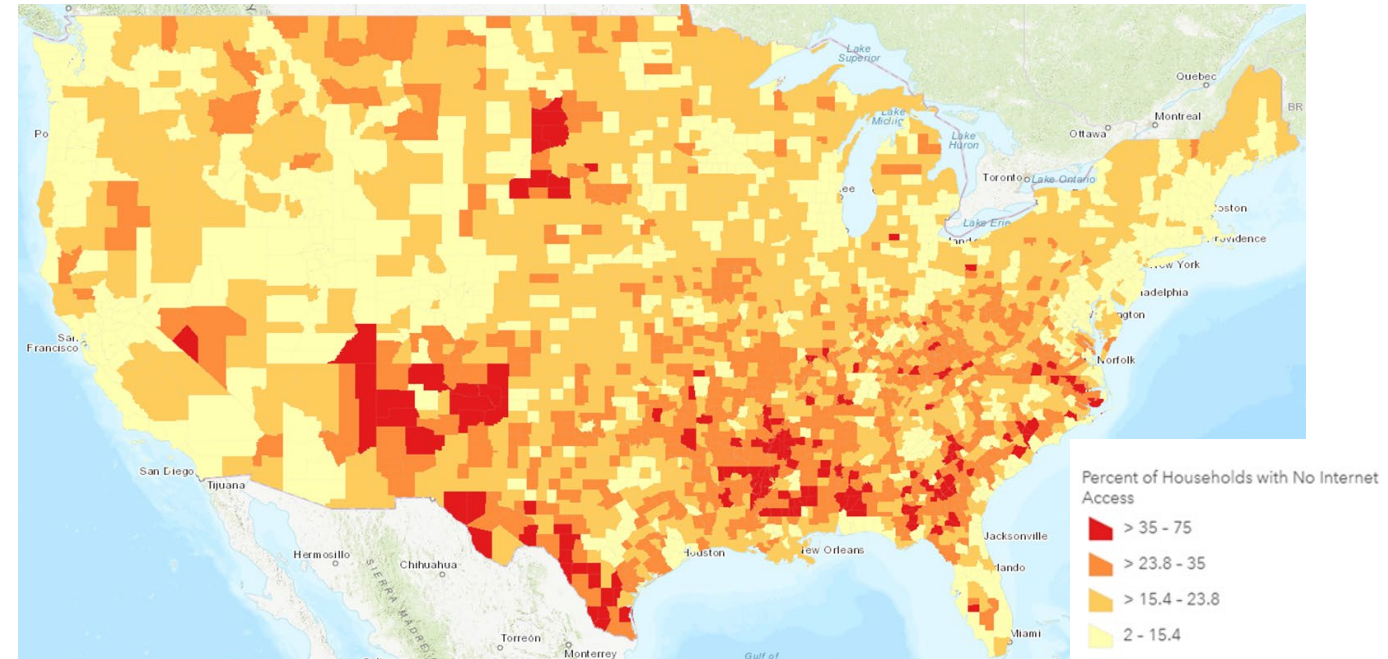
Red areas indicate places where more than 35% of the households have no Internet at all based on ACS subscription data.

It's Time to Invest in the American Workforce

- **77% of all jobs** require at least some technology skills.

- **48% of hiring managers** say that candidates lack the skills needed to fill open jobs.

- **29% of students without basic digital skills** say they won't consider post-secondary studies.

- **More than 12 millions households** lack access to a computer, tablet or smartphone.
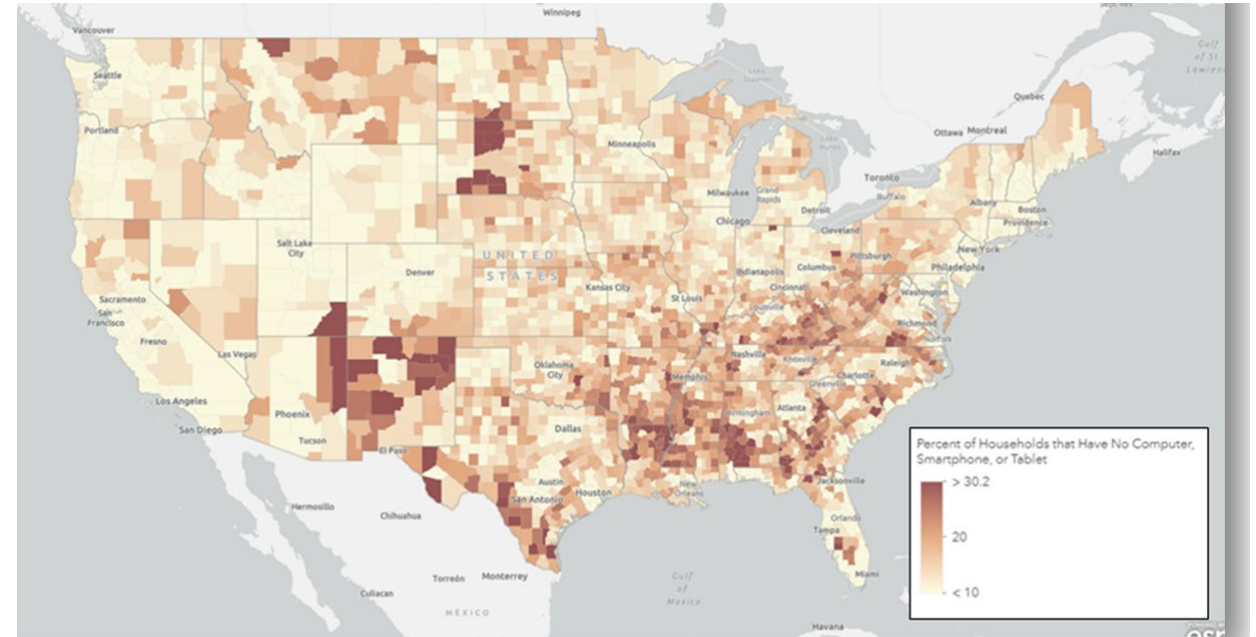
Residents without devices have fewer opportunities to hone their digital skills, access educational opportunities, and advance in the workforce.

Visualization: NTIA National Broadband Availability Map (NBAM)
Source: American Community Survey Device Ownership data 2015-2019

Consolidated Appropriations Act, 2021 Grant Programs Overview

1 | **$1 billion**

Tribal Broadband Connectivity Grants:

Grants to expand access to and adoption of: (A) broadband service on Tribal land; or (B) remote learning, telework, or telehealth resources during the COVID-19 pandemic: $1 Billion.

Consolidated Appropriations Act, 2021

2 | **$300 million**

Broadband Infrastructure Deployment Grants:

Grants for covered broadband projects, defined as competitively and technologically neutral projects for the deployment of fixed broadband service in a census block with at least one household or business that does not have access to 25/3: $300 million.

3 | **$285 million**

Connecting Minority Communities Pilot Program:

Grants to eligible recipients in anchor communities for the purchase of broadband internet access service or any eligible equipment, or to hire and train information technology personnel, $285 million.
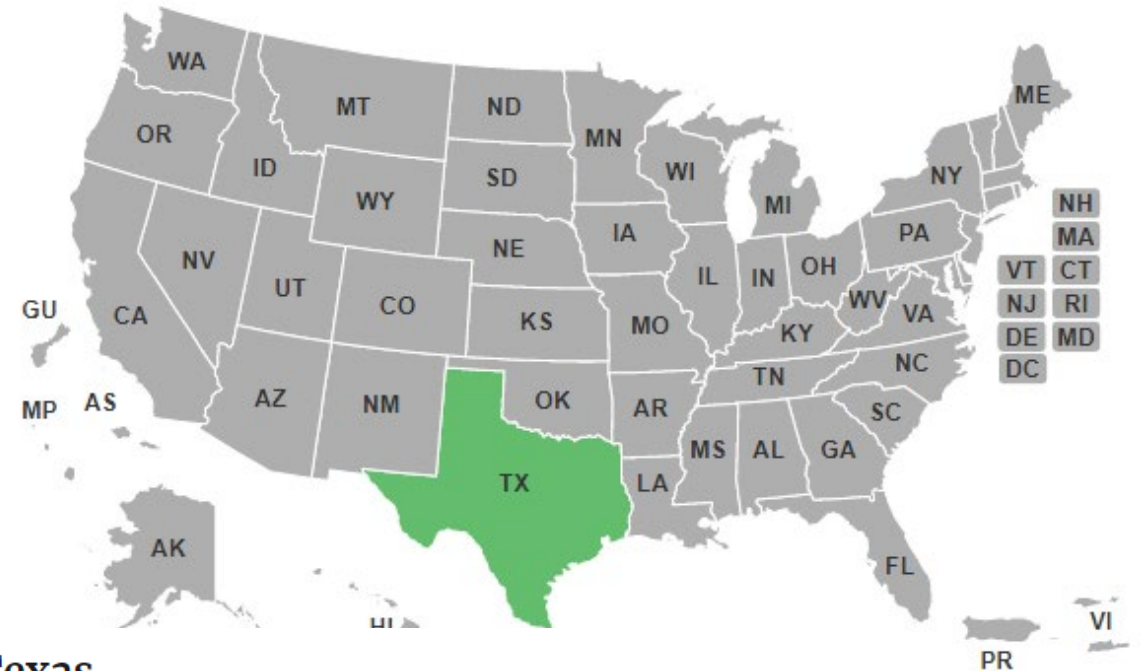
Broadband Planning Resources

State Broadband Leaders Network

—

One-stop shop for resources on state broadband efforts

—

Active network of state leaders leading state-level broadband efforts

—

Channel for communication and review of polices between federal agencies and states

Texas

State broadband website(s):

- Connect Texas

State broadband contact(s):

- Philip Rocha, III
  Industry Specialist
  Office of the Governor, Economic Development & Tourism
  philip.rocha@gov.texas.gov
  (512) 936-0246

- Jennifer Harris
  State Program Director
  Connected Nation Texas
  jharris@connectednation.org
  (512) 962-8032

One-Stop Permitting Information

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The federal government controls 640 million acres or 28% of U.S. land. Federal lands and assets play a critical role in telecom networks – through rights-of-way access.

——

Federal agencies collaborated to streamline processes, identify points-of-contact, and publish a one-stop shop for permitting information at BroadbandUSA.

——

A number of agencies are also using a common SF-299 Common Application Form for permitting applications.

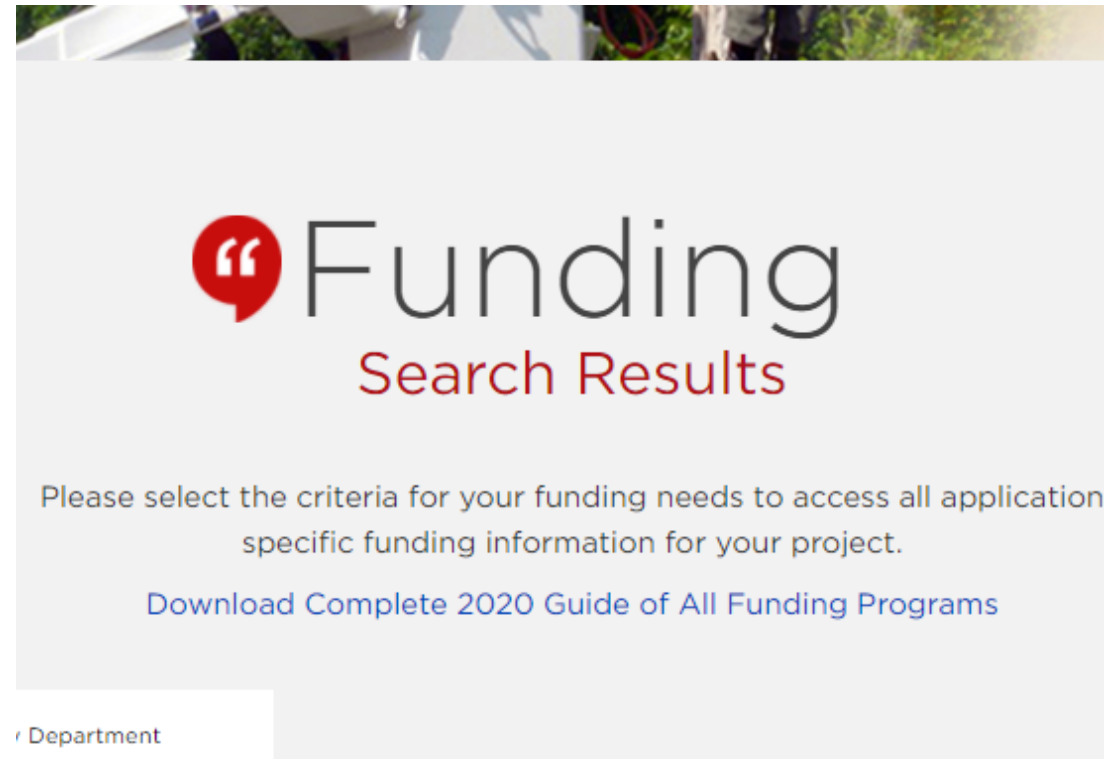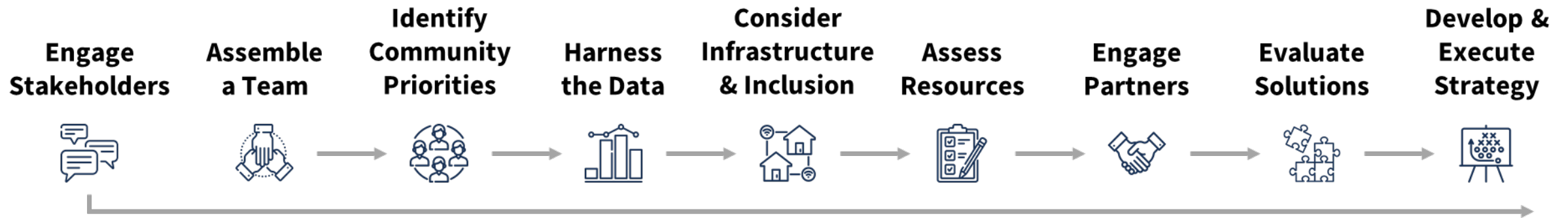| Departments: |
| --- |
| • Department of Agriculture (USDA) |
| • Department of Defense (DOD) |
| • Department of the Interior (DOI) |
| • Department of Transportation (DOT) |
| • General Services Administration (GSA) |
| • Department of Energy (DOE) |
| **Relevant Agencies:** |
| • Federal Permitting Improvement Steering Council |
| • Advisory Council on Historic Preservation (ACHP) |
| • Council on Environmental Quality (CEQ) |
| • Federal Communications Commission (FCC) |

BroadbandUSA Resources and Funding Search

One-Stop for information on broadband funding across all federal agencies through searchable database.

- **BroadbandUSA Funding Search**

- BroadbandUSA: Broadband Glossary

- What Speed Do You Need

- Costs-at-a Glance: fiber and Wireless Networks

- Planning a Community Broadband Roadmap: A Toolkit for Local and Tribal Governments

Funding Search Results

Please select the criteria for your funding needs to access all application specific funding information for your project.

Download Complete 2020 Guide of All Funding Programs

Department

NTIA Broadband Planning Roadmap

Engage Stakeholders → Assemble a Team → Identify Community Priorities → Harness the Data → Consider Infrastructure & Inclusion → Assess Resources → Engage Partners → Evaluate Solutions → Develop & Execute Strategy
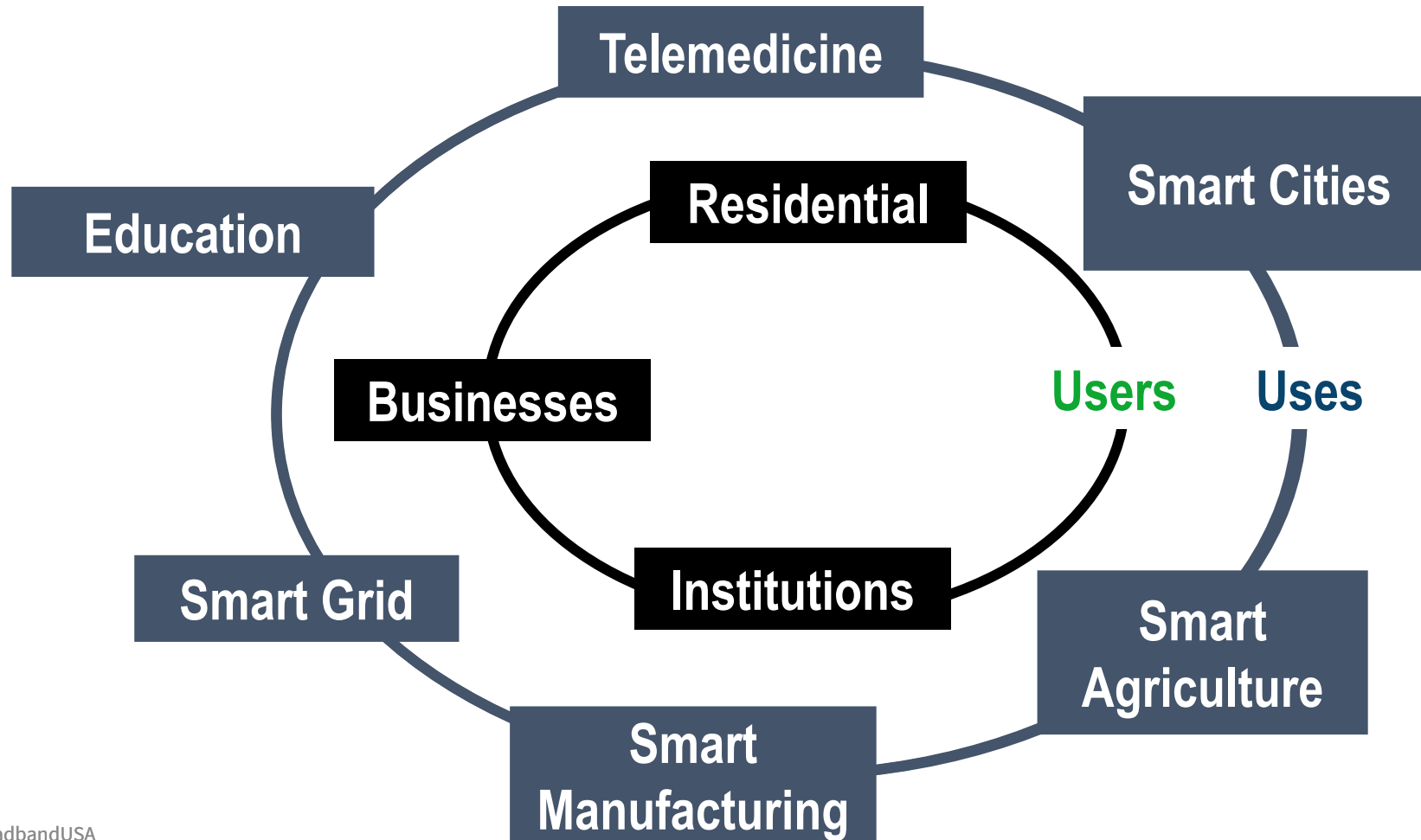
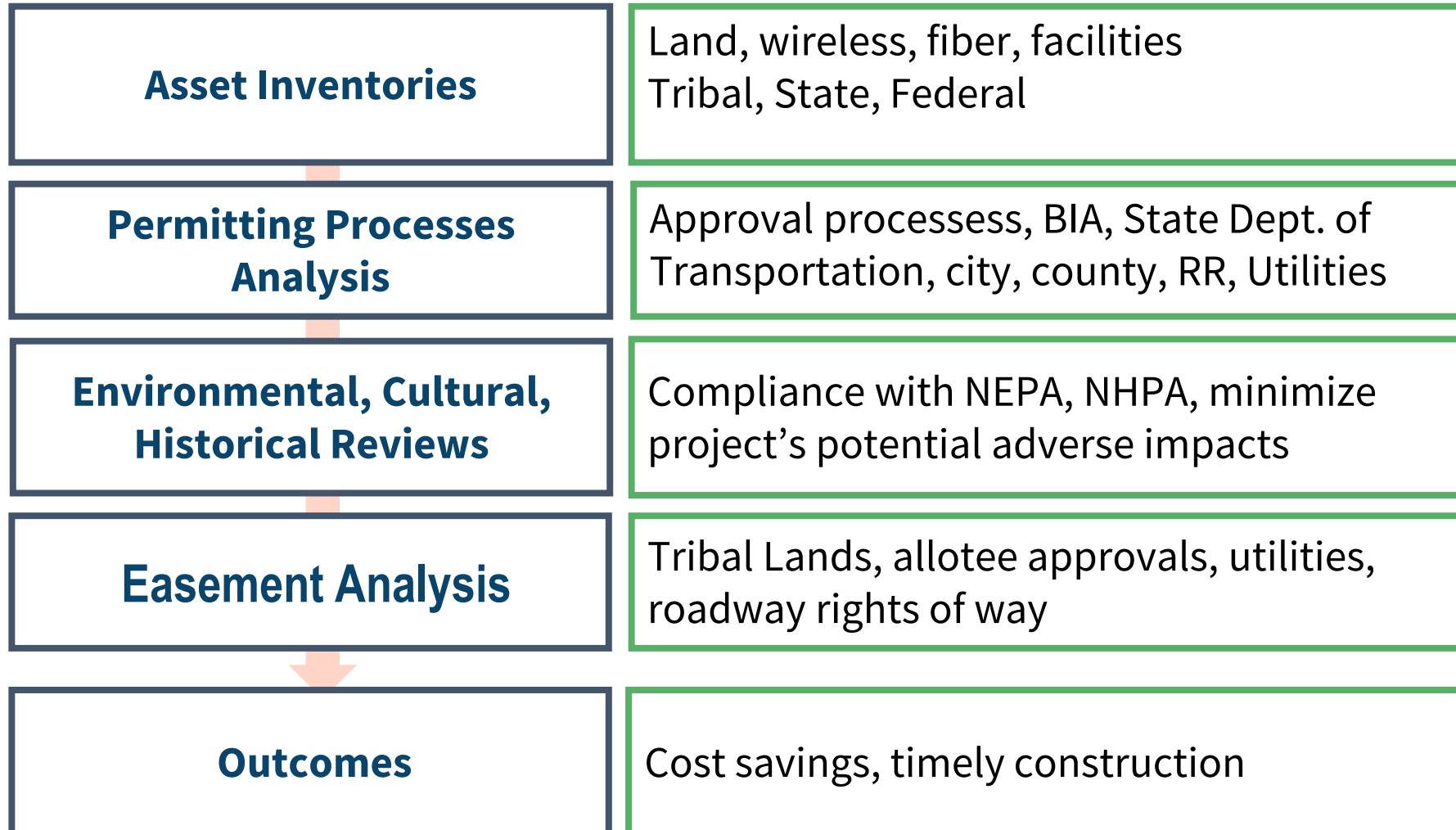Planning a Community Broadband Roadmap: A Toolkit for Local and Tribal Governments

- **New NTIA Broadband Planning Roadmap modules coming soon!**

- **Check the BroadbandUSA website for the latest updates**

Broadband Planning

Community Priorities Shape a Project from Inception to Implementation

Telemedicine

Smart Cities

Education

Residential

Businesses

Users Uses

Smart Grid

Institutions

Smart Agriculture

Smart Manufacturing

Infrastructure - Best Practices

Asset Inventories	Land, wireless, fiber, facilities Tribal, State, Federal
Permitting Processes Analysis	Approval processess, BIA, State Dept. of Transportation, city, county, RR, Utilities
Environmental, Cultural, Historical Reviews	Compliance with NEPA, NHPA, minimize project's potential adverse impacts
Easement Analysis	Tribal Lands, allotee approvals, utilities, roadway rights of way
Outcomes	Cost savings, timely construction

Roadmap Considers Infrastructure and Digital Inclusion

New NTIA Broadband Planning Roadmap has increased focus on using data as a foundation for broadband planning and integrating digital inclusion, adoption, and digital skills planning into your strategy.
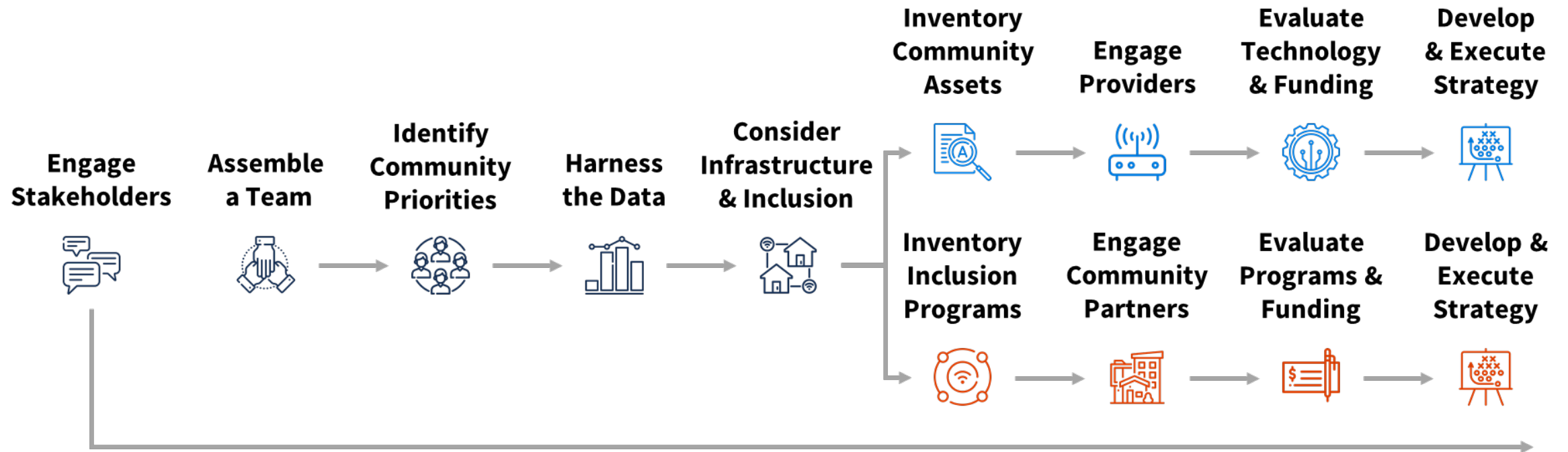
Digital Inclusion Resources

One-stop shop for resources on government inclusion programs

Searchable map of national programs examples

BroadbandUSA webinar archives:

- October 2020 Webinar: Digital Inclusion and K-12 Education: The Impact of COVID-19 on Students and Educators

- November 2019 Webinar: Building Digital Workforce Skills at the Local Level

- September Webinar: Digital Training and Workforce Development Discussion
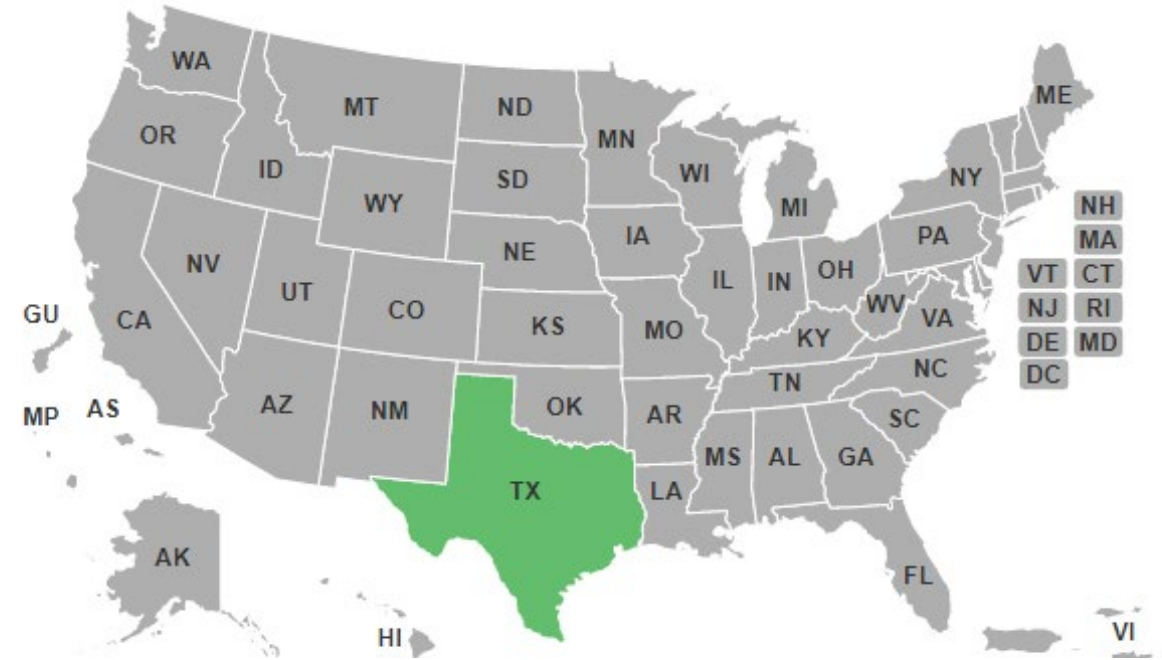
Texas

Local initiatives:

- Austin: Community Technology Services
- San Antonio: Digital Inclusion Alliance

Digital Inclusion - Best Practices

Partner with trusted organizations schools, libraries, TCUs, community health centers, workforce and community development organizations, community-based organizations and nonprofits.

✓**Access / Affordability**
- Utilize discount broadband subscription programs
- No one size fits all solution

✓**Devices**
- Provide technical support and help through community-based programs

✓**Technical Help and Support**
- Go to where people are

✓**Digital Skills and Training**
- Train community members
- Base digital training on community needs

Examples of Digital Inclusion Programs

Access / Affordability

- Discount Broadband, Public Wi-Fi, Cell on Wheels (COWs), Mobile Hotspots, Internet in Public / Affordable Housing, Wi-Fi Buses

Devices

- School Laptop Programs, Refurbished Computers, Discount Computers, Laptop Lending, Public Computer Centers, Mobile Computer Labs

Technical Help and Support

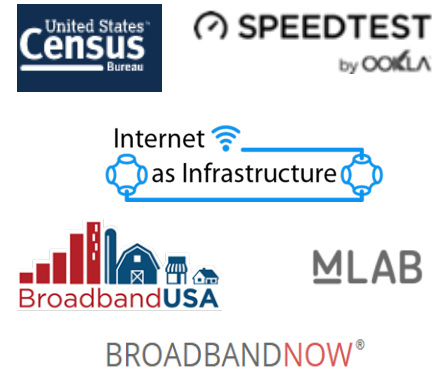- Tech Support Hotlines, Digital Connectors / Navigators, Technology Organizers, Volunteers, Community Tech Events

Digital Skills Training

- Digital Literacy, Online Safety, Workforce Training and Apprenticeships, Health, STEM/STEAM

Use Data as a Foundation for Your Broadband Plan
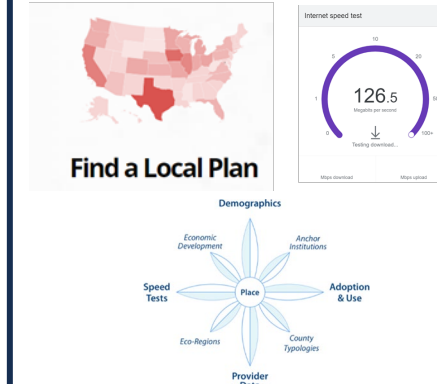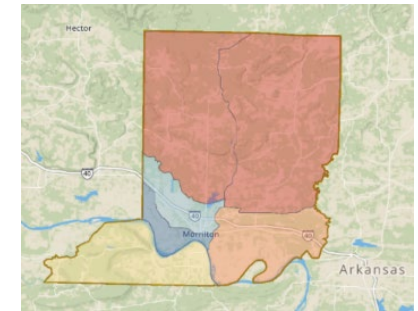
See BroadbandUSA webinar archive:

- [February 2021 Webinar: Data as the Foundation for Broadband Planning](#)

- [June 2020 Webinar: Utilizing Federal Data to Measure the Digital Divide](#)

Tools that Put Local Data in Your Hands

	NTIA Data Explorer	ntia.doc.gov/data
	American Community Survey	data.census.gov
	QuickFacts	census.gov/quickfacts
	BroadbandNow*	broadbandnow.com
	Speedtest by Ookla*	speedtest.net
	Measurement Lab*	speed.measurementlab.net
	I3 Connectivity Explorer*	i3connect.org

These are not federal tools. They are external tools or products, listed here because they are used frequently by our clients to access data when developing broadband plans.

OOKLA SpeedTest.Net
- Test Server, Download, Upload Latency, ISP (IP address), Survey
- Sub-census tract-level data (primarily cellular)
- Measures full extent of connection
- Commercial partnerships
- Limited public reporting
- Detailed data download available for purchase
- Data layer in BroadbandUSA National Broadband Availability Map (NBAM)

speedtest.net

Measurement Lab MLab
- Test Server, Download, Upload, Latency, Retransmission, ASN and IP address
- County level data
- Effective baseline of a user's performance
- Software is open source
- Reports, maps, visualizations open and public
- Data is free and downloadable
- Data layer in BroadbandUSA National Broadband Availability Map (NBAM)

speed.measurementlab.net

National Broadband Availability Map (NBAM)

- Multi-year program to improve understanding of broadband availability on a granular basis to aid broadband policy and investment decisions

- Key data sets: FCC Form 477, Ookla speed tests, ACS data, custom State datasets, federal grant and loan information, other private datasets

broadbandusa.ntia.doc.gov/map
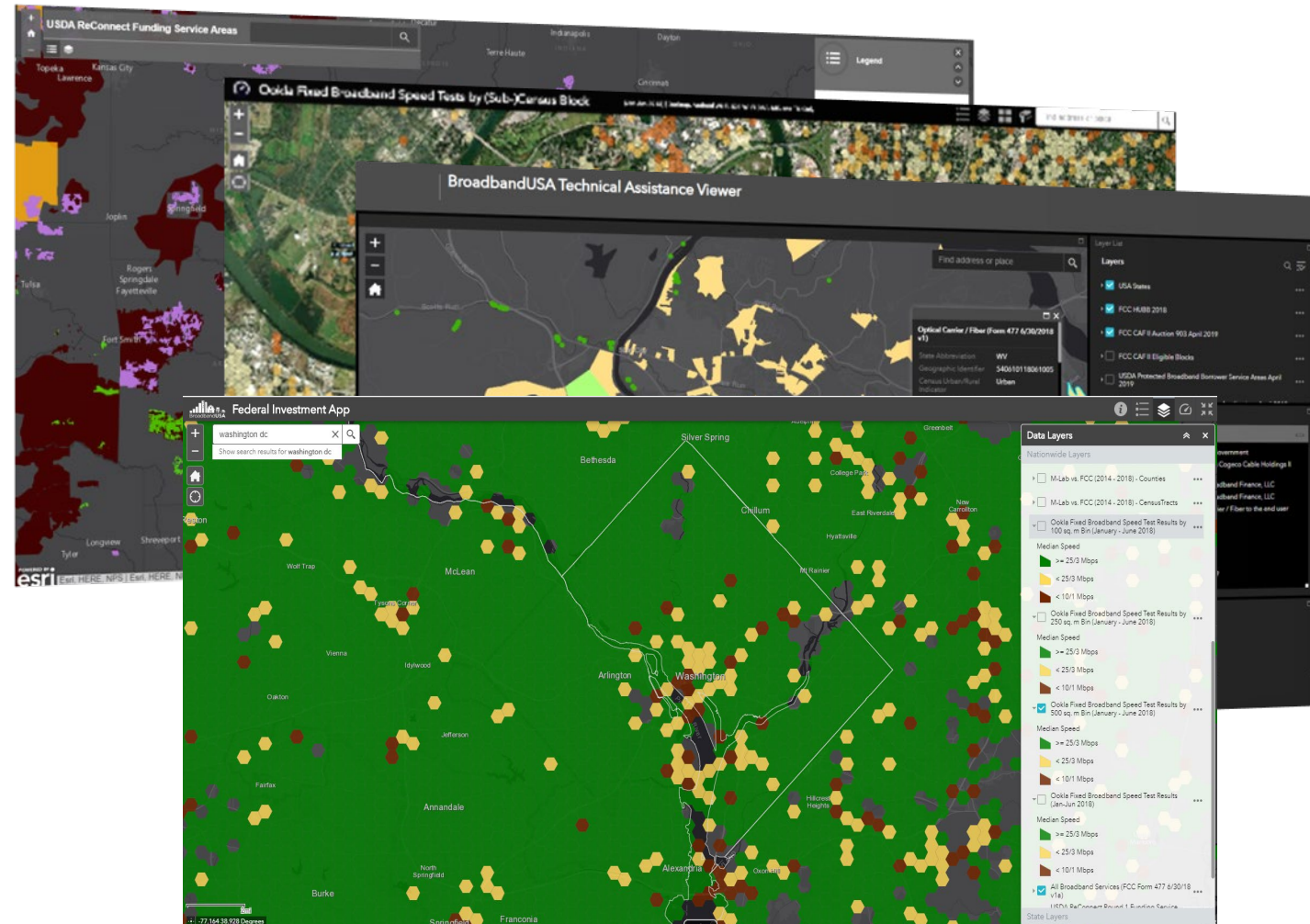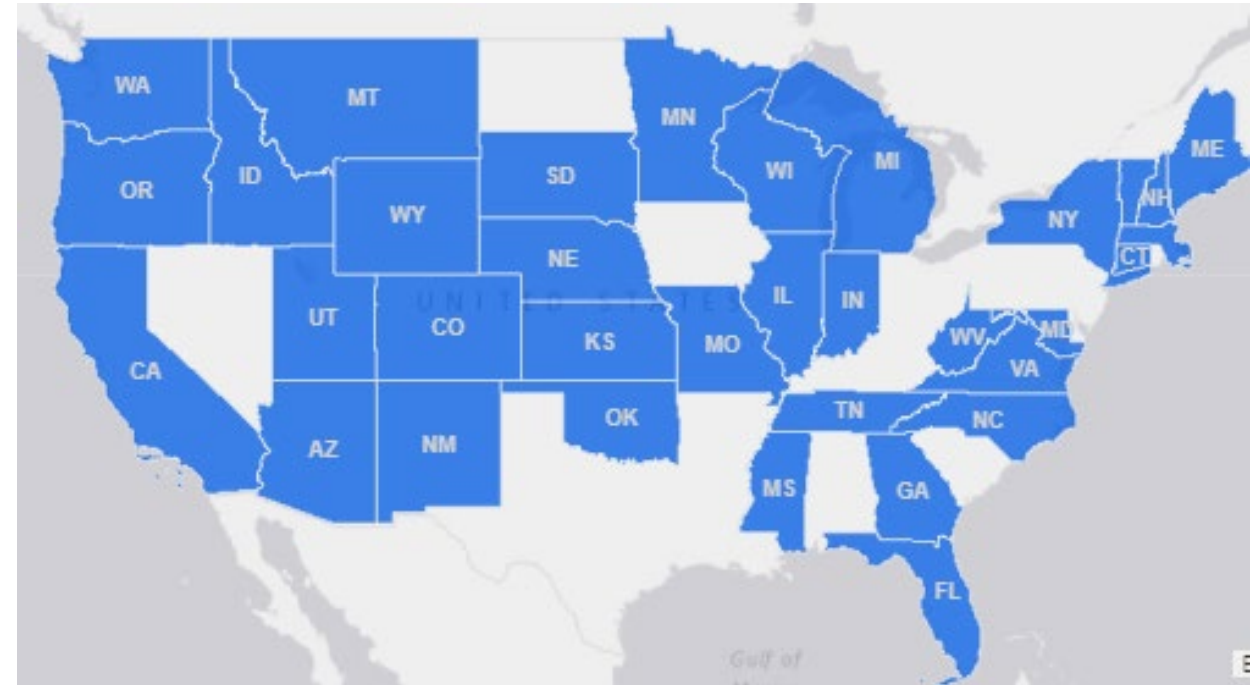
National Broadband Availability Map
A platform for the geospatial analysis of broadband data
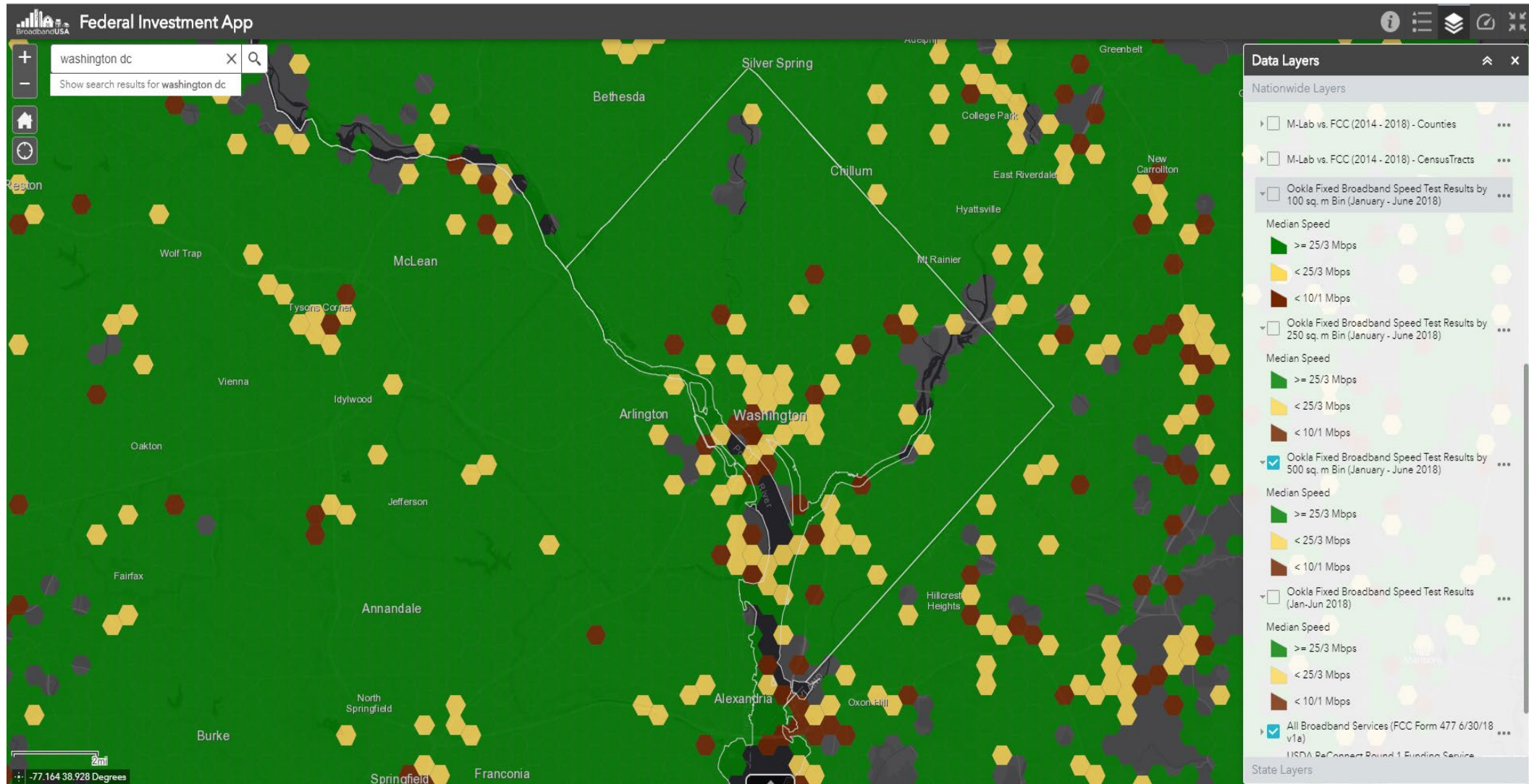
State Partners	September 2019: 8 State initial pilot May 2021: 36 States on board
Federal Partners	Current: USDA, EDA, ARC, BIA More Federal agencies coming on board

Ookla Census and Sub-Census Data

NBAM
Broadband Data Example

BroadbandUSA Fixed Broadband Community Report

Texas (FIPS 48)

FCC Form 477 Terrestrial Speeds

Jan-Jun 2020

10,000
Max Advertised Download Speed (Mbps)

10,000
Max Advertised Upload Speed (Mbps)

25
Median Advertised Download Speed (Mbps)

5
Median Advertised Upload Speed (Mbps)

237
Broadband Providers

12
Transmission Technologies

Ookla Speed Test Results

Jan-Jun 2020

81
Median Download Speed (Mbps)

14
Median Upload Speed (Mbps)

994,079
Number of Devices

Internet Cost

$68.37
Average Minimum Monthly

AMERICAN COMMUNITY SURVEY KEY FACTS

28,260,856
Total Population

$61,874
Median Household Income

35
Median Age

HOUSEHOLD INTERNET CONNECTION

9,691,648
Total Households

82%
With Broadband of Any Type

15%
No Internet Access

3%
Internet Access w/o Subscription

0%
Dial-up w/No Other Subscription

HOUSEHOLD DEVICES

91%
Have a Computer

75%
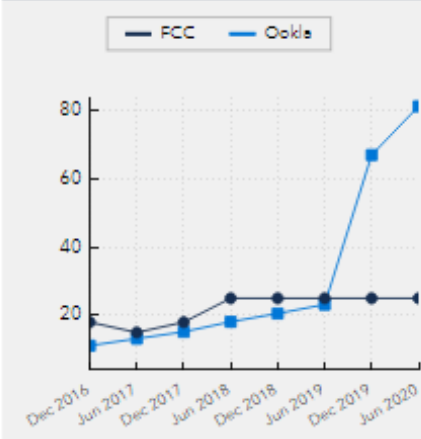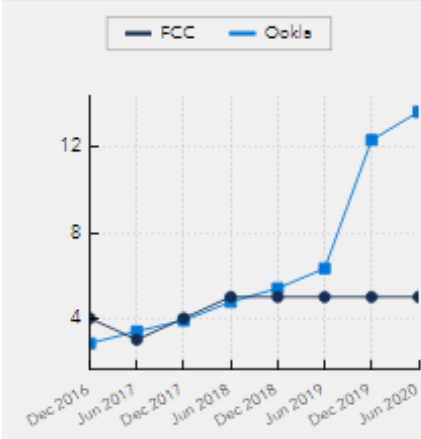Have a Desktop or Laptop

9%
No Computer

83%
Have a Smartphone

59%
Have a Tablet

4%
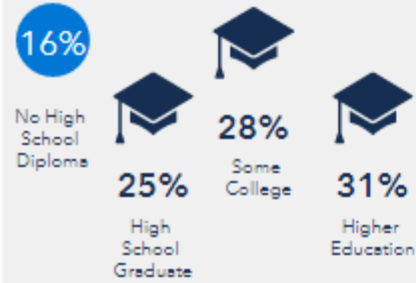Have an Other Computer

Median Download Speed (Mbps)

Legend: FCC — Ookla

Median Upload Speed (Mbps)

Legend: FCC — Ookla

Speed data from FCC Form 477 and Ookla Speedtests compare fixed broadband speeds only.

BroadbandUSA Fixed Broadband Community Report

Texas (FIPS 48)

June 2020

COMMUNITY INDICATORS

Education

16%
No High School Diploma

25% High School Graduate

28% Some College

31% Higher Education

School Enrollment

- Female
- Male

(Bar chart categories: Grad/Prof, College, Grade 9-12, Grade 5-8, Grade 1-4, Kindergarten, Preschool — axis 0 to 800,000)

Race & Ethnicity

(Donut chart categories: Hispanic, Two or More, Other, Pacific Islander, Asian, American Indian, Black, White)

Age Profile

- Female
- Male

(Bar chart, axis 0 to 800,000; age groups: Under 5, 5-9, 10-14, 15-17, 18-19, 20, 21, 22-24, 25-29, 30-34, 35-39, 40-44, 45-49, 50-54, 55-59, 60-61, 62-64, 65-66, 67-69, 70-74, 75-79, 80-84, 85+)

Other Facts

1,362,378 Households Below Poverty Level

5% Unemployed Population

$172,500 Median Home Value

Cost of Living

Index of 100 indicates the national average

149 2020 Housing Affordability

94 2020 Mortgage and Basics

106 2020 Rent Dwellings

100 2020 Food

99 2020 Health Care

102 2020 Transportation

Q & A