



# **BROADBAND FUNDING:**

## **IF YOU'RE ON TIME, YOU'RE LATE**

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**VANTAGE POINT SOLUTIONS**

**Wednesday, October 12th, 2022**



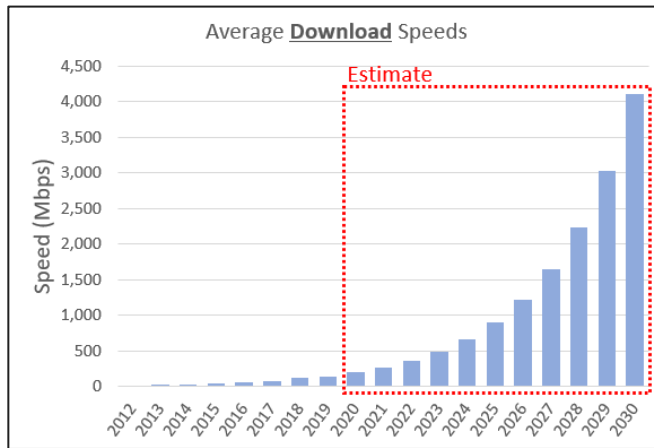


# **Broadband Funding: If You're on Time, You're Late**

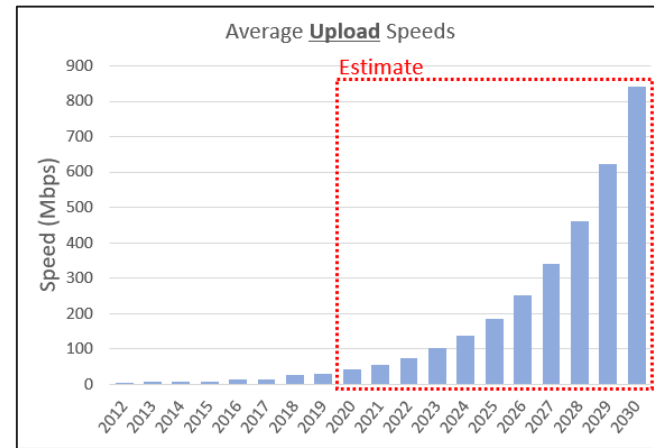
# FutureScape

WHAT DOES BROADBAND LOOK LIKE?

# Where is Broadband Headed?



- Ave Annual Increase: 35%
- US Ave Speed is 10x FCC's Broadband Standard
- No expected "plateau" in broadband demands
- Will exceed 500Mbps by 2024 & 1Gbps by 2026
- In 2018, Acting FCC Chairperson Rosenworcel believed the standard should be 100 Mbps



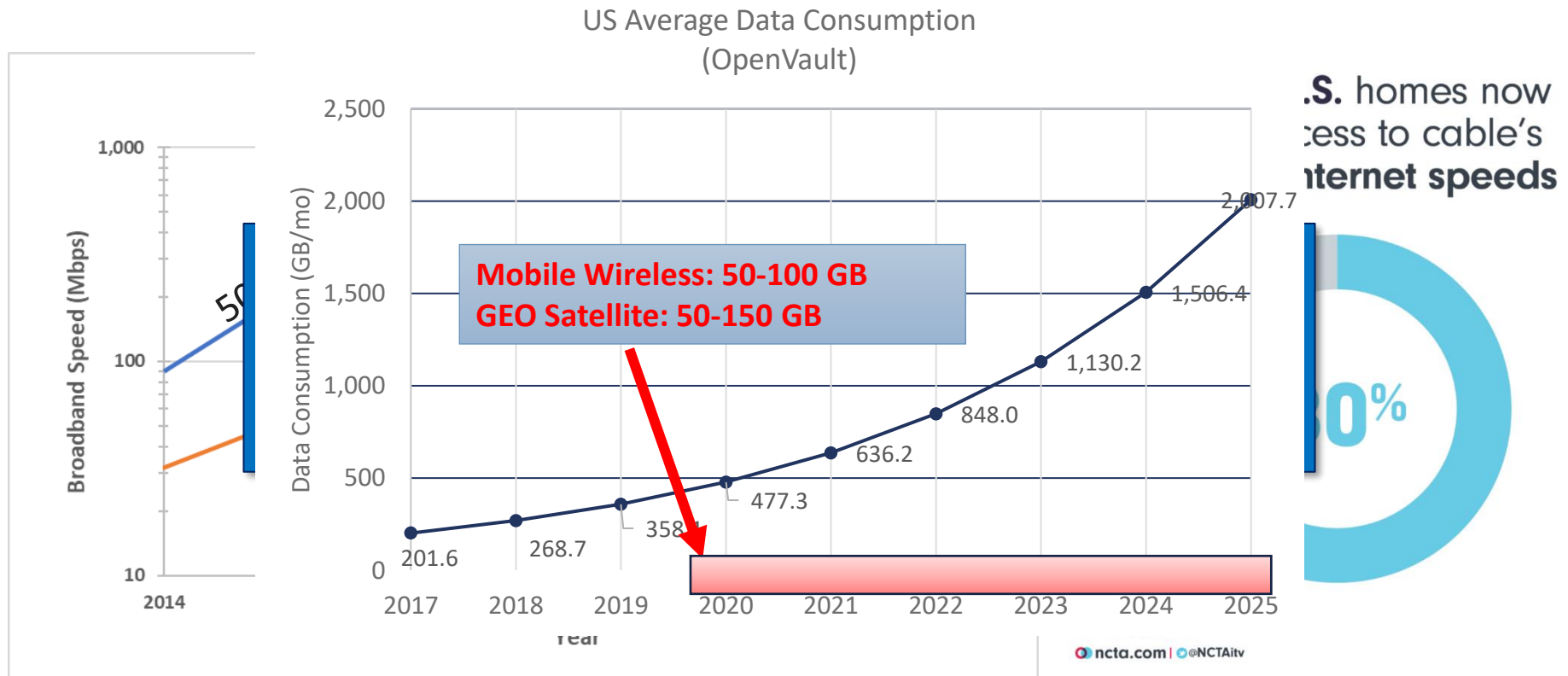
- Ave Annual Increase: 35%
- US Ave Speed is 10x FCC's Broadband Standard
- Upload speed becoming increasingly important (telecommuting, telehealth, and remote learning)
- Will exceed 100Mbps by 2023 and 600Mbps by 2029

# Great Broadband Will Be Needed By All

Upstream and Downstream Speeds		Enabled Applications
Single Device	500 kbps – 1 Mbps	Simple messaging Basic e-mail & simple web browsing Low quality, small screen video
	1 Mbps – 5 Mbps	Web browsing (complex sites) Limited Standard Definition video Basic file sharing
	5 Mbps – 25 Mbps	Limited telecommuting Limited HD video (single channel) Basic gaming Building control & management
	25 Mbps – 100 Mbps	Telemedicine Surveillance and security Educational services / Remote learning Basic telepresence Smart/intelligent building control/security
Many Devices	100 Mbps – 1 Gbps	Advanced telecommuting Advanced HD telemedicine Virtual reality Remote Computer Aided Design/ Modeling Educational services Gaming (immersion)
	1 Gbps – 10 Gbps	Research applications Live event digital cinema streaming Telemedicine remote control of instruments Movement of terabyte datasets Remote supercomputing

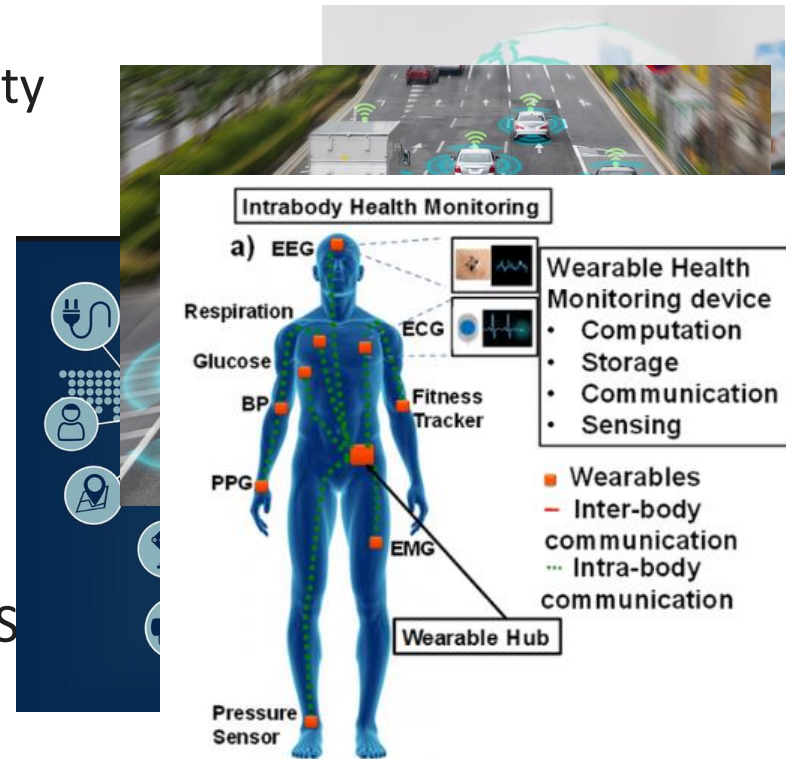
- Future user demand has always seemed “excessive” at any point in time
- Some expect a “plateau” which never happens
- Today’s broadband will be tomorrow’s narrowband
- Those without world-class broadband will be second-class broadband citizens

# All Depends on Broadband – and Fiber



# What Will Drive Broadband in the Future?

- AI, Virtual Reality and Augmented Reality
  - 80-100Mbps or more required
  - 600Mbps required for 360 view
- Advanced Gaming
- Internet of Things (IoT)
  - Limitless, rapidly growing
- Intelligent Transportation Systems and S
- Continuous Health Monitoring
  - Wearables and Nanotechnology
- Intelligent Digital Assistants





# Smart Farms

**Robot milking machines**  
save farmers time and give cows the freedom to be milked when they want



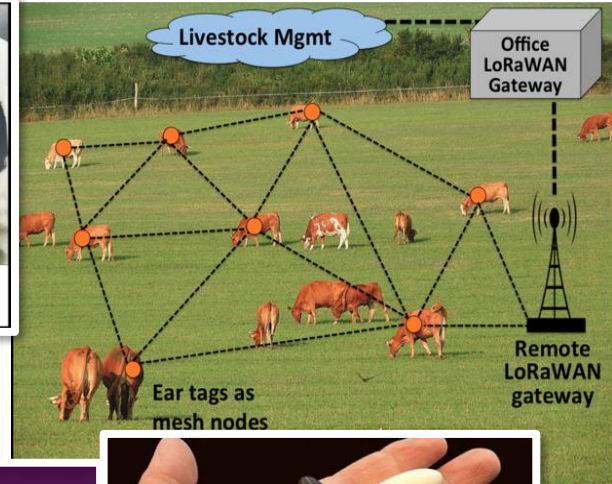
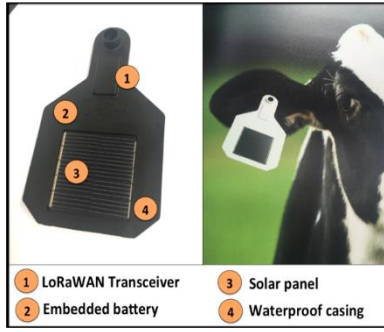
**Robot livestock feeders**  
save farms money and consistently feed a herd



**Cow heat detection devices**  
increase pregnancy rates



**Electronic ear tags**  
identify domestic livestock



**Aerial drones**  
used to spot weeds, calculate fertilizer needs and scare pigeons

**Combine harvester yield meters**  
monitor, display and record grain yield



**Smartphones**  
used by farmers to communicate, check soil depth, register animals and more

**Driverless tractors**  
not yet commercially available but could save farmers time



**Farm management software**  
is used to manage all aspects of a farm

**GPS Steering systems**  
guide tractors in straight lines to save seed, fertiliser and fuel





# How to Capitalize on New Opportunities .....

- Strategic Plan on the Desk!

Short Term Growth Opportunities

Long Term Growth Opportunities

# THINK BIG!!!!

# How to Capitalize on New Opportunities .....

- Network Layout Thought Out!

Fiber Layouts

Buried or Aerial?

Make – Ready??

Engineering Design

# How to Capitalize on New Opportunities .....

- Capital Expenditure Estimates!

Cost to Build

Services to be Offered

Buildout Obligations

Prevailing Wage

# How to Capitalize on New Opportunities .....

- Financial Feasibility!

Project Specific

10 Year View

CapEx / OpEx

End User Revenues

Funding Needs

# How to Capitalize on New Opportunities .....

- Engaged with Community Leaders!

Economic Development

County - Townships

Needs - Impact







# What Typically Happens.....

- Funding Program is Announced!!
- Start to Panic!!

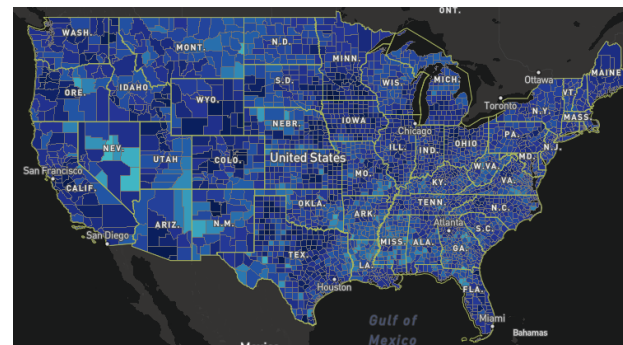
**What?**

**How?**

**Why?**

# Eligible Areas – Program Defined

- Unserved
  - Lacking Broadband Services
  - Current Speeds less than 25M / 3M
- Underserved
  - Broadband Services at 25M / 3M but < 100M / 20M
  - Applicant Responsible to Verify Eligibility
  - May use State Broadband maps – FCC 477 map – *Reliable?*
  - FCC – Broadband Fabric
    - Broadband Data Collection – BDC



# Type of Network

- Engineering Layout
  - Existing Network
  - Proposed Network
  - Design Parameters used in Engineering the System
- Description of any Licenses / Agreements Required to Construct / Operate the Network
- Network Diagram
  - Strongly recommend the system design be prepared by a registered engineer licensed in project area state
- Environmental Compliance

# Financial Feasibility

- Provide 5 Year – 10 Year Financial Forecast
  - Prove sustainability of the project
    - Consolidated vs. Stand-Alone
  - Income Statement / Balance Sheet / Cash Flow
- Potential covenants to be met
- Detailed narrative to support grant request
- Audited Financial Statements – 2 Years
- Matching Contribution



# Application Development Preparation

- Application preparation
  - Dependent on Program Rules
- Network build and system design
  - Professional Engineer licensed in the State
- Budget development
  - Capital Expenditure Costs
- Pro forma financial projections
- Regulatory compliance
- Ongoing reporting obligations



**Items to Consider.....**





# PFSA Needs

- Economic Characteristics
  - Poverty Levels / Out Migration
- Educational Challenges
  - Ability to distance learn
  - Access at the home
- Health Care Needs
  - Telehealth
  - In home health care
- Public Safety Needs
  - Connected facilities





## Community Support

# Community Support

- Residential and Businesses
- Community Anchor Institutions (CAIs)
  - Public Safety – police, fire departments, county sheriff, first responders
  - Health Care – hospitals, clinics, urgent care
  - Schools – Colleges
  - Libraries
- Economic Development Offices
- State Legislatures



# Management & Operational Experience

# Management & Operational Experience

- Building and deploying broadband
  - Fiber / Wireless
- Other grant program experience
- Team Bios to reflect depth of experience
- Experience in services being offered



## What Funding Programs Exist Today?



# Infrastructure Investment and Jobs Act

- \$1.2 Trillion Infrastructure Bill signed Nov. 15 - 2022
- \$65B for Broadband
  - Improve and expand broadband
  - Make more affordable for low-income families
- Defined unserved location as lacking access to 25 Mbps/ 3 Mbps
  - Latency
- Define underserved location as lacking access to 100 Mbps/ 20 Mbps



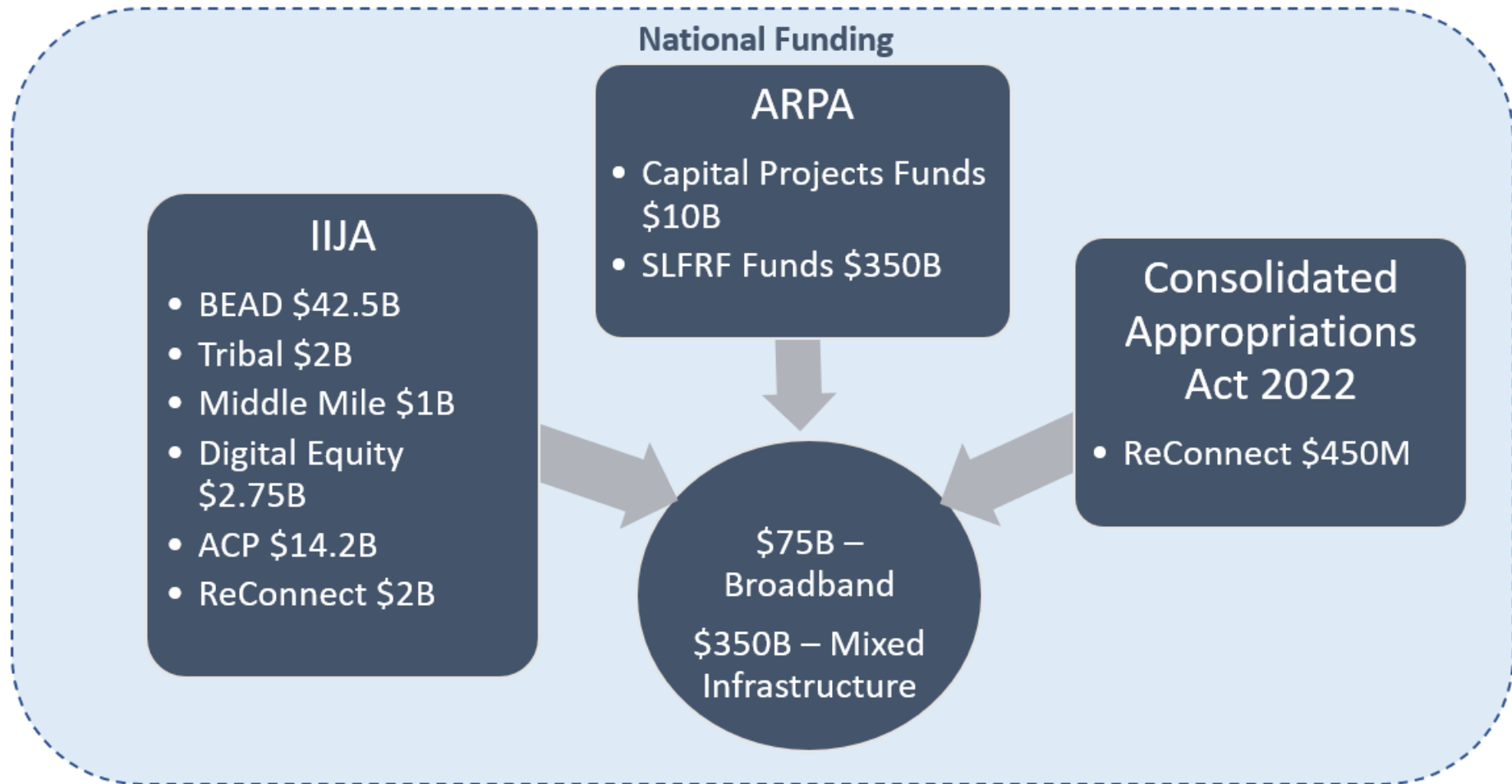
# Infrastructure Investment and Jobs Act

## ■ \$65B for Broadband

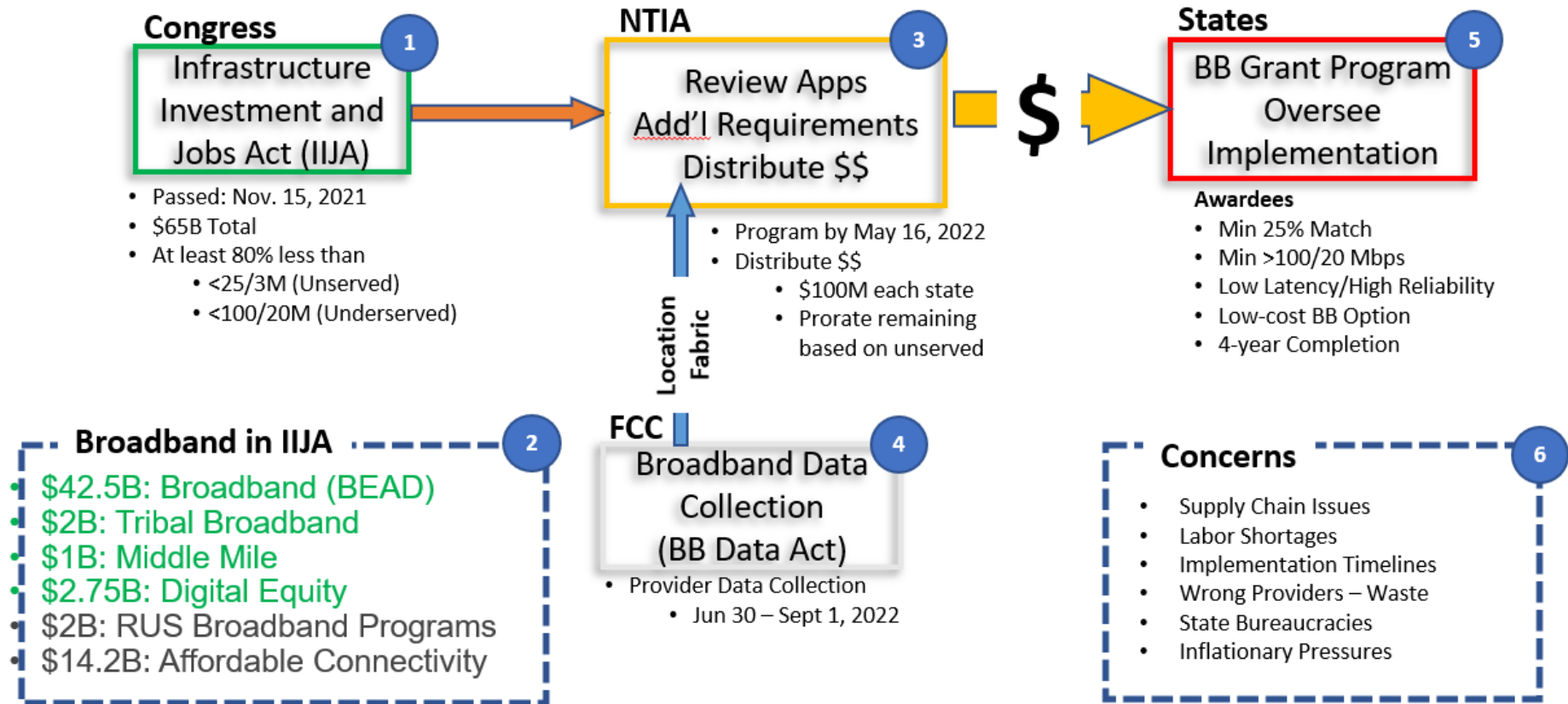
- \$42.45B for “Broadband Equity, Access and Deployment” grant program
- \$14.2B in additional funding for the FCC’s Affordable Connectivity Fund
- \$2.75B Digital Equity Act
- \$1.926B RUS ReConnect program
- \$2B Tribal Broadband Connectivity Program
- \$1B Middle Mile



# Broadband Funding Opportunities



# Following the Broadband Money



# BEAD Timeline – States

- Letters of Intent Due: 7/18/22
- Initial Planning Funds Request Due: 7/18/22 - 8/15/22 – up to \$1M
- 5 Year Action Plans Due: No later than 270 days after receipt of Initial Planning Funds request
- Notification of Funding Formula Allocations Date: TBD
- Initial Proposals – 20% Due: No later than 180 days after formal notification of funding formula allocations
- Final Proposals – Remaining 80% Due: No later than 365 days after approval of Initial Proposal

Anticipate seeing \$\$\$ EOY 2023 / BOY 2024

# Treasury Capital Projects Fund

- Coronavirus Capital Project Fund - \$10B Nationwide
  - Projects Should Prioritize
    - Connecting Locations with Poor / Inadequate Access
    - Supporting Recovery from COVID for Health / Telework by Improving Infrastructure
    - Providing Reliable – Affordable Broadband
  - Deadline for States to Submit Grant Plan – September 24, 2022
  - Nebraska's Allocation – \$128.7M
    - \$87.7M Awarded – 21,000 locations to be served – (Aug. 30<sup>th</sup> Announced)
  - Kansas's Allocation - \$143.4M
    - \$83.5M Awarded – 21,300 locations to be served – (July 14<sup>th</sup> Announced)
  - Arkansas's Allocation - \$158M
    - \$47.5M Awarded – 5,500 locations to be served - (Aug. 30<sup>th</sup> Announced)
  - Oklahoma's Allocation - \$167.7M
  - Missouri's Allocation - \$196.7M



U.S. DEPARTMENT OF THE TREASURY



# RUS Reconnect – Round 4

## ■ \$1.15B Budget – Funding from IIJA

- Projects in rural areas where at least 50% of the households lack sufficient access to broadband
  - Defined as 100/20 Mbps
- Sets aside funding where 90% of households lack broadband access for 100% Grant
- Allows pole attachment fees and replacement pole costs charged by electric utility coop – *New eligible cost*
- Application Window
  - **Sept. 6<sup>th</sup> – Nov. 2<sup>nd</sup> (11:59am ET)**



# RUS Reconnect – Round 4



- Application Process – Heavy Load
  - Total Company View – 5 Year Plan
    - CapEx Budgets / Subscribers / Financials
- Applications with Grant Component – Competitively Scored – Total 175 Points

Criteria	Scoring
Rurality of PFSA	25 points
Level of Existing Service (PFSA where at least 50% does not have 25 Mbps / 3 Mbps service)	25 points
Economic Need of Community (Based on county poverty percentage)	20 points
Affordability	20 points
Labor Standards (Prevailing wages)	20 points
Tribal Lands	15 points
Local Govt – Non-Profits - Cooperatives	15 points
Socially Vulnerable Communities	15 points
Net Neutrality	10 points
Wholesale Broadband Services	10 points

# RUS Reconnect – Round 4

Type of Funding Available	Total Funding and Maximum Award Available	Key Funding Requirements
<b>100 Percent Grant</b>	<ul style="list-style-type: none"> <li>• \$150 million total funds</li> <li>• \$25 million maximum, per project</li> <li>• \$35 million maximum per project if the PFSA meets certain guidelines detailed in the FOA</li> </ul>	<ul style="list-style-type: none"> <li>• Competitive review based on scoring criteria</li> <li>• 25 percent cash match requirement</li> </ul>
<b>Loan-Grant Combination (50-50)</b>	<ul style="list-style-type: none"> <li>• Total funds: \$150 million for loans, \$150 million for grants</li> <li>• \$25 million maximum for the grant, per project</li> <li>• \$25 million maximum for the loan, per project</li> <li>• Loan and grant amounts will always be equal</li> </ul>	<ul style="list-style-type: none"> <li>• Competitive review based on scoring criteria</li> <li>• Interest rate set at the U.S. Treasury rate at the time of each advance of funds</li> </ul>
<b>100 Percent Loan</b>	<ul style="list-style-type: none"> <li>• \$150 million total funds</li> <li>• \$50 million maximum, per project</li> </ul>	<ul style="list-style-type: none"> <li>• Funds are awarded on a rolling basis until exhausted</li> <li>• Interest rate is fixed at 2 percent</li> </ul>
<b>100 Percent Grant for Tribal Governments, Alaska Native Corporations, Colonias, Persistent Poverty Areas, and Socially-Vulnerable Communities</b>	<ul style="list-style-type: none"> <li>• \$350 million total funds</li> <li>• \$25 million maximum, per project</li> <li>• \$35 million maximum per project if the PFSA meets certain guidelines detailed in the FOA</li> </ul>	<ul style="list-style-type: none"> <li>• Only available to those entities and areas defined in the FOA</li> <li>• No cash match is required if the applicant meets the requirements for this type of funding as set forth in the FOA</li> </ul>
<b>100 Percent Grant for projects where 90 percent of households lack sufficient access to broadband</b>	<ul style="list-style-type: none"> <li>• \$200 million total funds</li> <li>• \$25 million maximum, per project</li> </ul>	<ul style="list-style-type: none"> <li>• Must demonstrate that at least 90 percent of homes in the proposed service area do not have sufficient access to broadband as defined in the FOA</li> <li>• No matching funds required</li> </ul>

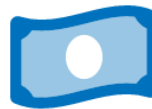
# RUS Reconnect – Round 3 – Awards to Date

- 8 Awards – 100% Grant – Tribal Govt and Socially Vulnerable Communities
- 6 Awards – 100% Grant (75% grant / 25% match)
- 3 Awards – 50% Grant / 50% Loan
- 3 Awards – 100% Loan



**20**

Entities with Active Awards



**\$356,003,695**

Amount Awarded



**11**

Total States and Territories

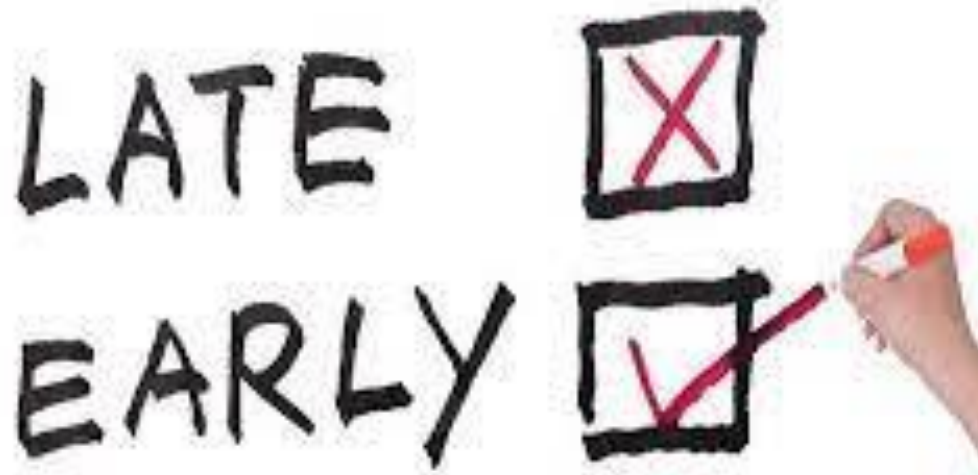
# Growing Grant Funding Challenges

- Many supply chain issues
- Material price increases (30-40%)
- Contractor shortages
- Labor shortages
- Permitting delays
- Too much money in too short of time greatly changes feasibility economics!

# Funding Considerations

- Program Covenants and Restrictions
  - Each Program Different
    - Build out obligation
    - Potential Davis Bacon Impacts
    - Procurement requirements
    - Financial covenants
    - Lien on assets
    - Reporting obligations
    - Tax Implications
- Funding assistance is beneficial to the build of the project – **DUE DILIGENCE** on requirements associated with the funding

# Closing Thoughts.....



# Here for all your questions:



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THANK YOU

