



How Broadband Enhances Local Economies

NTIA Webinar Series

*You can use the audio on your computer OR use your phone to dial into:
562-247-8422 Passcode: 169-114-034*

November 18, 2020

Participants

Moderator:

- Don Williams, PhD, Senior Specialist for Broadband Development, BroadbandUSA, NTIA, Department of Commerce

Presenters:

- Lauren Mathena, Director of Economic Development, Mid-Atlantic Broadband
- Indraneel Kumar, PhD, AICP, Principal Regional Planner, Purdue Center for Regional Development
- Josh Seidemann, Vice President of Policy, NTCA - The Rural Broadband Association

Helpful Information

Questions

- Please type questions in the Q&A box on the right hand side of the screen. Questions will be taken after the final presenter.

Presentation

- The presentation along with a transcript and recording will be available on the BroadbandUSA website within 7 days of this webinar under Events/past events.
- <https://broadbandusa.ntia.doc.gov/past-event>

Technical Assistance

- Guides, products, publications, and other tools are available to assist you with the planning, funding and implementation of your broadband project.
- <https://broadbandusa.ntia.doc.gov>



How Broadband Enhances Local Economies

November 18, 2020

Lauren Mathena, Director of Economic Development and Community Engagement

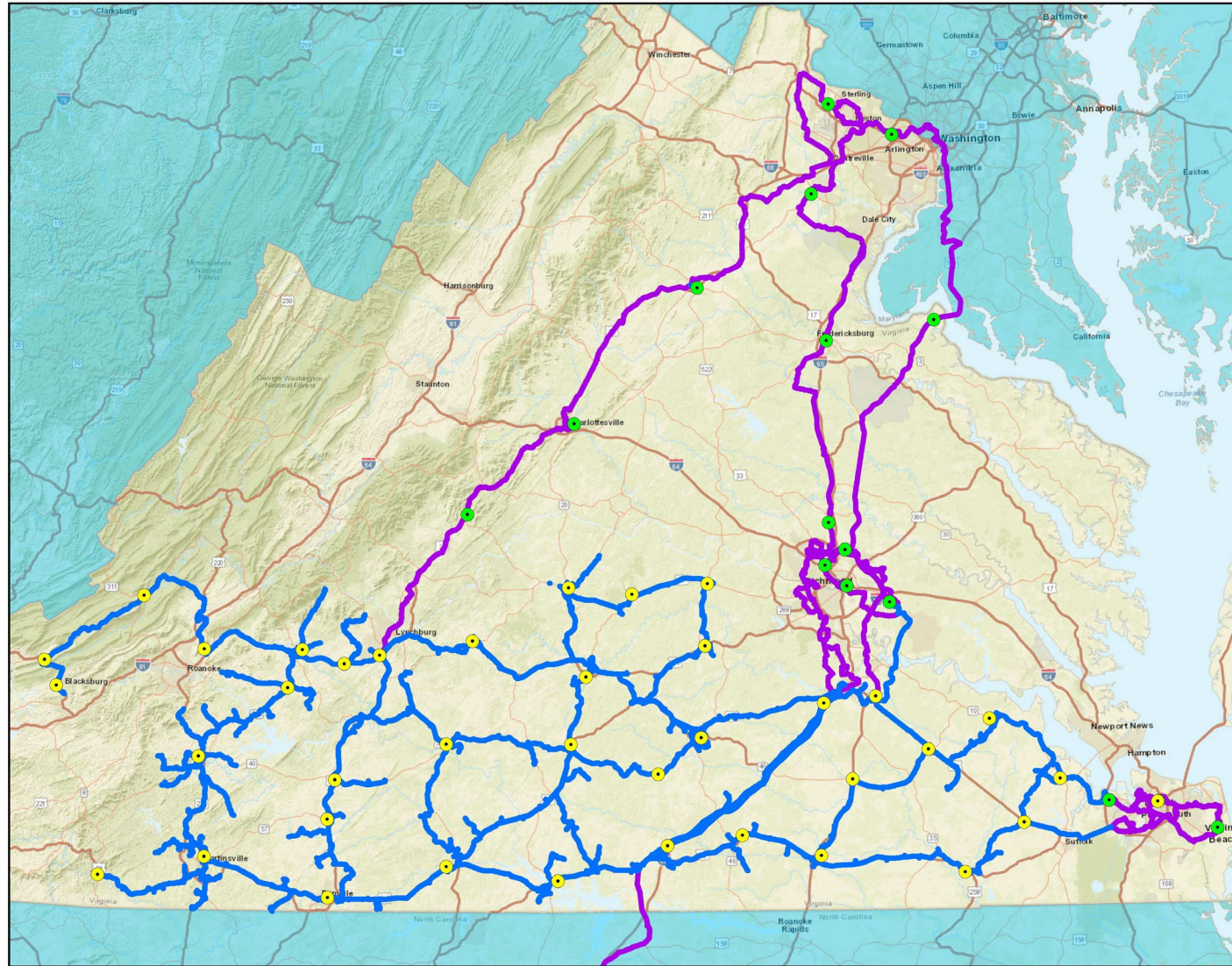
“If there is one thing we’ve all learned from COVID, it is that broadband connectivity is not a ‘nice to have’, it is an absolute necessity.”

- US Senator Mark Warner (D-VA)

MBC Network

Nearly 2,000
miles of fiber
throughout
Southern Virginia

- NTIA grants assisted in placement of around 700 of these fiber miles



**The middle mile, open access
model is a proven strategy in
reducing costs of broadband
expansion**

- 2014 ASR Analytics Case Study for NTIA

Case Study: Data Center in Mecklenburg County

- Microsoft Gen4 data center in Mecklenburg County, VA – between Richmond and Raleigh
- \$499M initial investment
- 7 expansions since 2010 (~\$3B to date!)
- MBC provides diverse, high capacity, low latency routes to major carrier interconnection points throughout the eastern US including the subsea cable landings in Virginia Beach



Case Study: FDI in Martinsville, VA

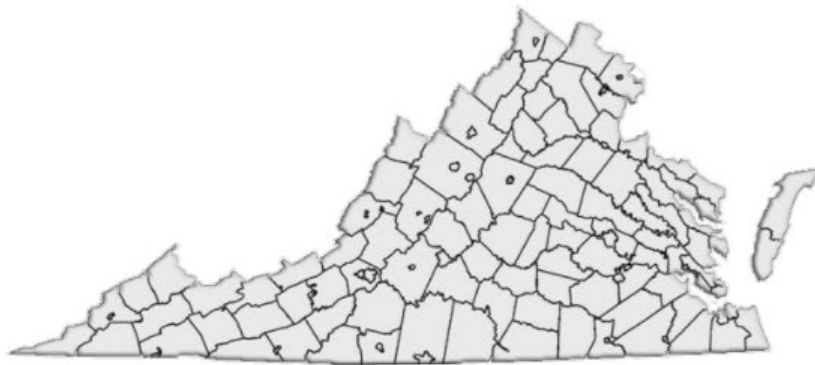
- Hardide Coatings develops, manufactures and applies advanced technology tungsten/tungsten carbide metal matrix coatings for a wide range of high wear/high value components
- Located in Oxfordshire, UK and Martinsville, VA
- MBC fiber was a deciding factor for Hardide to locate Southern Virginia



Case Study: Industrial Park in Danville/Pittsylvania, VA

- Cane Creek Centre is a 900-acre industrial park operated as a regional collaborative between Pittsylvania County and the City of Danville
- New 2020 tenants include Morgan Olson (advanced manufacturing) and Panaceutics (health startup)
- MBC partnered with ISP to deliver the services needed for these important economic development projects





**commonwealth
connect**

Virginia's **BROAD**band Resource



500,000

Unconnected Virginians



108,000

Connected since 2017



\$44 Million

Grants Awarded



\$105 million

2020 VATI Requests

Case Study: Locality-led Last Mile Expansion

- Halifax County is implementing a last-mile broadband plan in partnership with MBC and local ISPs
- Currently has 4 grant projects in progress, including construction of 3 wireless broadband towers and \$700k for fiber
- MBC provides open access middle mile fiber to the ISPs who will serve residents and businesses



Case Study: Electric Cooperatives

- Regional electric cooperatives are getting into the last mile broadband business
- Member-driven, non-profit model
- MBC provides open access middle mile fiber to the co-op's broadband subsidiaries which will in turn serve residents and businesses



Thank you!

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Jobs Creation from Rural Broadband Companies



Presented by Indraneel Kumar, PhD, AICP
November 2020



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Jobs Creation from Rural Broadband Companies

Partners



Jobs Creation from Rural Broadband Companies

Objectives:

- Evaluate economic effects of small, **rural communications providers** in the U.S.
- Prepare an **economic impact snapshot** for a single year.
- Assess the **ripple effects** of jobs created by rural broadband companies.

Characteristics:

- Rural broadband providers serve 35% of the nation's landmass and less than 5% of the country's telecom subscribers.



Jobs Creation from Rural Broadband Companies

What it is and What it isn't?

- **Static** and **not Dynamic** economic impacts.
- Data from the year **2017**.
- **Single-year** and **single-geography** economic input-output (IO) tables are used.
- The individual geography is a **state**.
- The IO table is comprised of **6-digit NAICS** (North American Industry Classification System) industry sectors.
- It is **not a general equilibrium analysis**.



Jobs Creation from Rural Broadband Companies

Data Sources and Preparation:

- Data for this analysis were obtained from JSI and Foundation for Rural Service (FRS) including ReferenceUSA.
- Data were culled from members of NTCA- The Rural Broadband Association (NTCA), which represents **nearly 850 independent**, community-based telecommunications companies that serve sparsely populated rural areas of the country.
- Approximately **two-thirds of NTCA members in 44 states** could be identified including their sales activities.
- The economic impacts are based on the companies information.



Jobs Creation from Rural Broadband Companies

Economic Input Output (IO) Analysis:

- Economic IO models were established for each of the **44 states** separately.
- JobsEQ by CHMURA Economics & Analytics is a **SAAS** (software as a service) and its IO modeling component was used for this analysis.
- IO models are capable of assessing the **ripple effects of jobs creation, sales or outputs, earnings, etc.**, through the regional economy.
- The **three types** of impacts include:
 - Direct jobs present within members
 - Indirect jobs created in supplier and allied industries
 - Induced jobs created in services or support industries

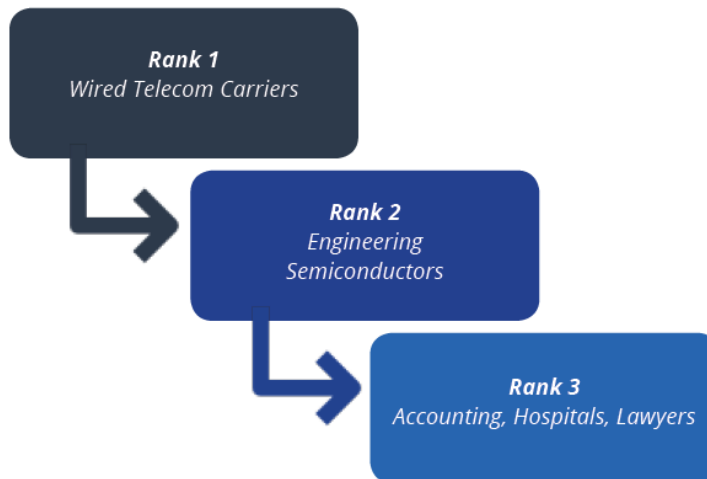


Jobs Creation from Rural Broadband Companies

Results:

Direct + Indirect + Induced Effects

Figure 1. Industry Ripple Effect Illustration of Rural Telecom Sales



Jobs Creation from Rural Broadband Companies

Results:

- During 2017, these firms created and supported more than 77,000 jobs across different industries.
- The total economic impacts are tied to the total economic output of \$10 billion and almost \$2.5 billion in compensations.
- The affected industries varied from communication carriers to supplier industries, such as manufacturers of semiconductors, engineering services, certified public accountants, and legal counsel.
- Rank one industries include wired telecom carriers, cable and other subscription programming, computer systems design services, etc.



Jobs Creation from Rural Broadband Companies

Conclusions:

- NTCA members- rural broadband companies- are significant economic drivers in their communities. Note that large economic impacts can happen not only due to the jobs but also the “catalyst” role of broadband services in industries.
- For every job created by an NTCA member, almost two additional jobs were created in the economy. The job multiplier for individual states varied, such as 3.4 in Arkansas and 2.2 in Alaska.
- Note that these impacts are a single-year snapshot.



Jobs Creation from Rural Broadband Companies



Access the report:

<https://pcrd.purdue.edu/wp-content/uploads/2020/09/007-Job-Creation-From-Rural-Broadband-Companies-3.pdf>

Thank you!

Contact

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This report is created by the Purdue Center for Regional Development.



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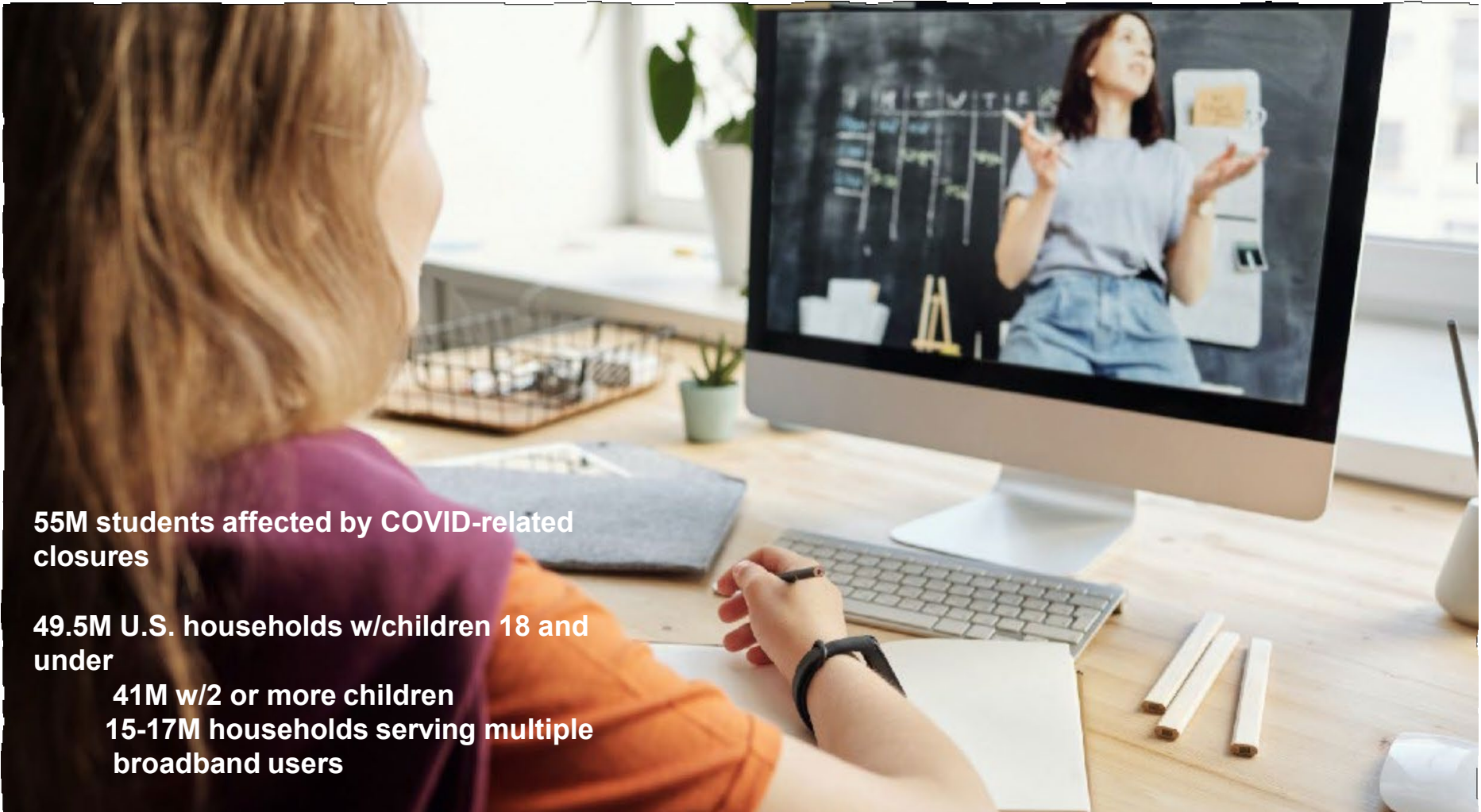
How Broadband Enhances Local Economies

Joshua Seidemann

VP Policy, NTCA-The Rural Broadband Association

NTIA - November 18, 2020





55M students affected by COVID-related closures

49.5M U.S. households w/children 18 and under

41M w/2 or more children

15-17M households serving multiple broadband users



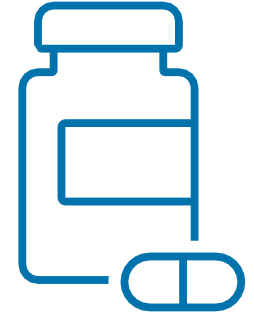
Save \$5,700 per facility, annually



Save \$3,400 per facility, annually



Save \$20,840 per facility, annually



Increase local lab revenues \$9,000-\$39,000 per year;
increase local pharm revenues \$2,300-\$6,200 per year

Rural telehealth

Telework

63M Americans can work from home

Employment declines, Feb-Mar: -2.7%
for non-telework capable jobs; -0.5%
for telework-capable jobs

40% Americans can telework . . . and
40% of Americans have teleworked



Precision ag





*Welcome
Back*

INDUSTRY

*All those things we
said we would do
someday?*

We're doing them now.



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BroadbandUSA

Thank you for attending.

Tune in for the next Practical Conversations Webinar

Data as the Foundation for Broadband Planning

February 17, 2021

2:00 pm EST

Registration is required for each webinar:

<https://broadbandusa.ntia.doc.gov/event>

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To Request Technical Assistance (TA):



Broadband TA Request Form -
<https://broadbandusa.ntia.doc.gov/ntia-common-content/how-we-can-help>

BBUSA Resources

- [Implementing a Broadband Network Vision: A Toolkit for Local and Tribal Governments](#)
- [Community Broadband Roadmap Toolkit](#)
- [Guide to Federal Funding of Broadband Projects](#)
- [Using Partnerships to Power Smart Cities](#)