The Economic & Social Benefits of Investing in Digital Infrastructure in Schoharie County, New York

Improved digital infrastructure will bring broadband to households and businesses without access and will enhance the quality of broadband, bringing the county up to speed with the state.

Schoharie County is uniquely positioned to benefit from investments in digital infrastructure

Momentum

High tech job growth is accelerating faster than the state overall. The five-year change in the share of high-tech jobs in Schoharie County is nearly 6x the average for a county in New York State.

Change in Share of High-Tech Jobs Over 5 Yrs

Innovation

Latent innovation -local improvements in products and processes- is 21% higher in Schoharie County compared to the average county in New York state.

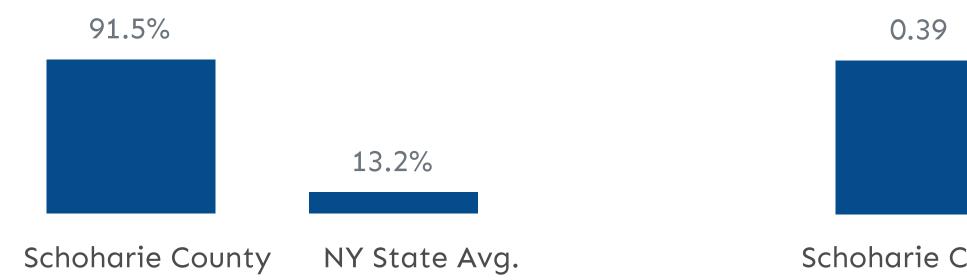
Latent Innovation Index

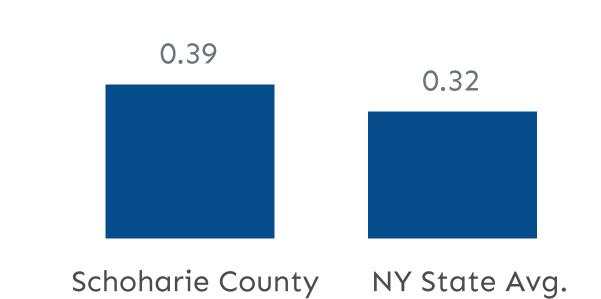
Location & Knowledge Creation

The county is located in a research triangle and benefits from access to three leading researchfocused colleges and universities which contribute to human capital and knowledge creation.

Research Triangle:







SUNY Poly: Environment & Energy

SUNY Cobleskill: Agriculture & Tech

SUNY Binghamton: Engineering { 〇 11

Investments will boost economic growth

Over 80% of businesses in Schoharie County are small. Better access to digital tools and technology has the potential to increase small business sales by <u>at least</u> 31% and employment by more than 36% over three years.



Expanded Reach

Share of small businesses in surrounding rural counties that gained new customers outside of the community using digital tools and technology



Potential increase sales generated by small businesses over 3 years as a result of better access and use of digital tools and technology





Broadband access and adoption in rural areas is linked to increased job and population growth, higher rates of new business formation and home values, and lower unemployment rates. Unlike with many other types of infrastructure, the long-run benefits of broadband access could grow

exponentially, given the potential for innovation and productivity gains it provides.

Potential new jobs at small businesses as a result of better access and use of digital tools and technology

Total annual wages of new workers hired by small businesses

Federal Reserve Bank of Richmond



Improved Tax Revenues Create Opportunities for the County

Tax contribution to Schoharie County from small business sales generated by increased adoption of digital tools and technology over three years. This revenue creates opportunities to support local programs and reduce property tax rates to be more competitive with surrounding areas.

Source: Pham Nam, Ph.D. and Mary Donovan. 2023. "Schoharie County is Uniquely Positioned to Benefit from Investments in Digital Infrastructure." ndp analytics.



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Farm productivity will increase

Better access to digital tools and technology has the potential to improve farming output and costs.

Internet Access

Only 76% of farm operations in Schoharie County have access to broadband.

Operations Without Broadband

1 in 4 Farms in Schoharie County

Increased Productivity

Access to broadband improves crop yields and creates cost savings for farmers.

Annual Net Gain Per Farm

\$4,908

From increased yields & lower costs

Precision Ag Opportunities

Precision agriculture relies on broadband and has a wide range of benefits.

Potential benefits:



Improved crop quality & yield

Efficient use of resources

Increased sustainability

Residents will benefit from better access to broadband

Better access to digital tools and technology results in higher home values, costs savings, and better jobs.

Higher Home Values

Implementation of fiber-based home internet has the potential to increase home values by 3.1%.

Increase in median home price



\$5,425

In Schoharie County

Household Cost Savings

Broadband provides consumers with access to a greater variety of products at different price points, allowing them to save money.

Savings Per Household

\$1,850

From the ability to shop online

More Jobs Opportunities

Improving digital infrastructure will provide residents with higher-paying job and the ability to better identify new opportunities.

Potential to earn higher wages:

- At local businesses that expand & new businesses attracted to the area
- íð From remote work opportunities



Via online job searches

The community will be stronger with better access to broadband



Improved Education Opportunities & Outcomes

- Since the COVID-19 pandemic, broadband has been an essential part of education.
- Rural areas have less access to e-education compared to the nation as a whole.



• Reliable internet access is necessary to improve learning outcomes and for teachers and education support professionals to reach vulnerable populations.



Improved Health Outcomes & Reduced Healthcare Costs

- Broadband access is considered a public health issue and a "super determinant" of health.
- Virtual visits with medical professionals can improve patient outcomes at lower costs.
- Broadband access expands access to mental health services and can address gaps in mental health and substance abuse treatment.



Improved Safety & First Response Services

- Broadband access improves the ability for people in need to call for help.
- Police, fire, and ambulatory services can respond faster and more effectively with broadband and 5G mobile technology.
- In rural areas where hospitals can be over an hour away, faster response times can result in more saved lives.

Source: Pham Nam, Ph.D. and Mary Donovan. 2023. "Schoharie County is Uniquely Positioned to Benefit from Investments in Digital Infrastructure." ndp analytics.

