



Leveraging Broadband as an Economic Development Tool for the North Country

Presented by
Economic Development Research Group
2 Oliver Street, Boston, MA 02109
617.338.6775
www.edrgroup.com

**OPEN
ACCESS
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NETWORK**
of Northern New York

 Economic
Development
RESEARCH GROUP



Presenters

Glen Weisbrod

President

EDR Group

gweisbrod@edrgroup.com

Steven Landau

Director, Strategy Planning

EDR Group

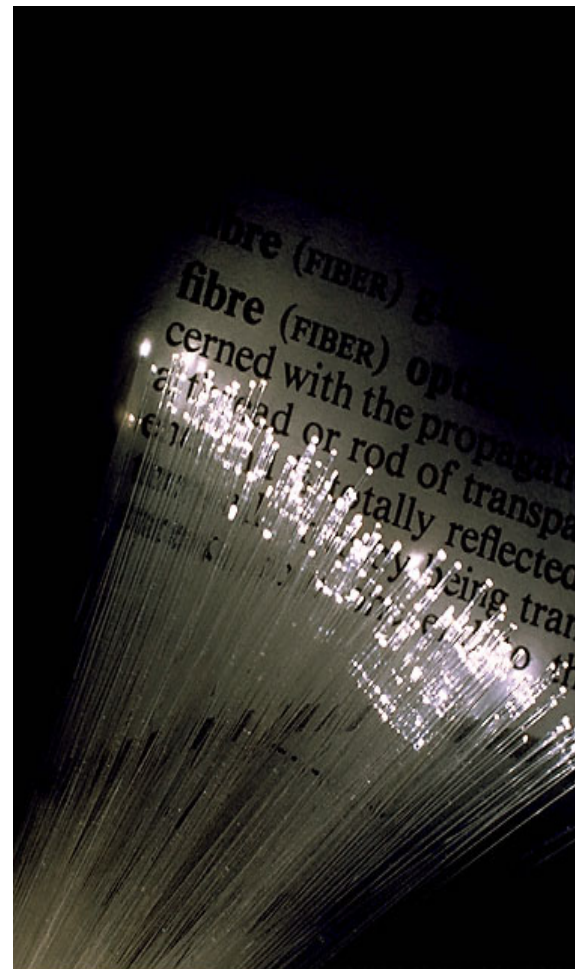
slandau@edrgroup.com



What is Broadband?

To be considered a broadband service, the transmission vehicle must support 200 kbps in both directions.

(downstream from the Internet to the user and upstream from the user to the Internet)



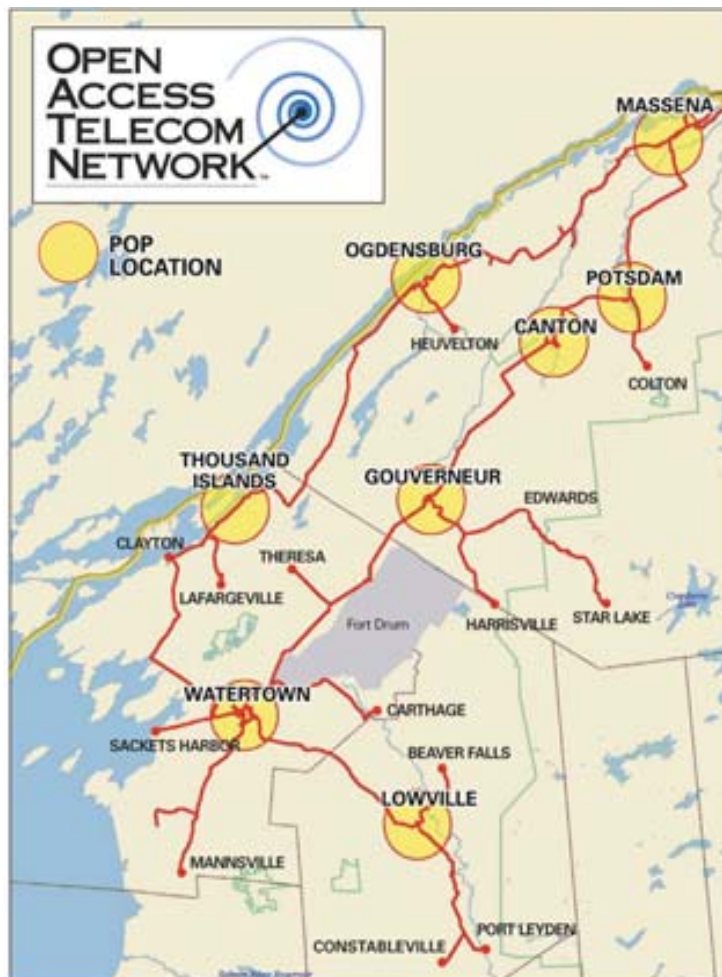


This Morning's Topics

- ✓ Introduction
- What's Happening in the North Country
- New Economic Development Opportunities
- Case Studies Where Broadband is Making a Difference
- Tools to Make it Happen
- Next Steps for Economic Development



What's Happening in the North Country



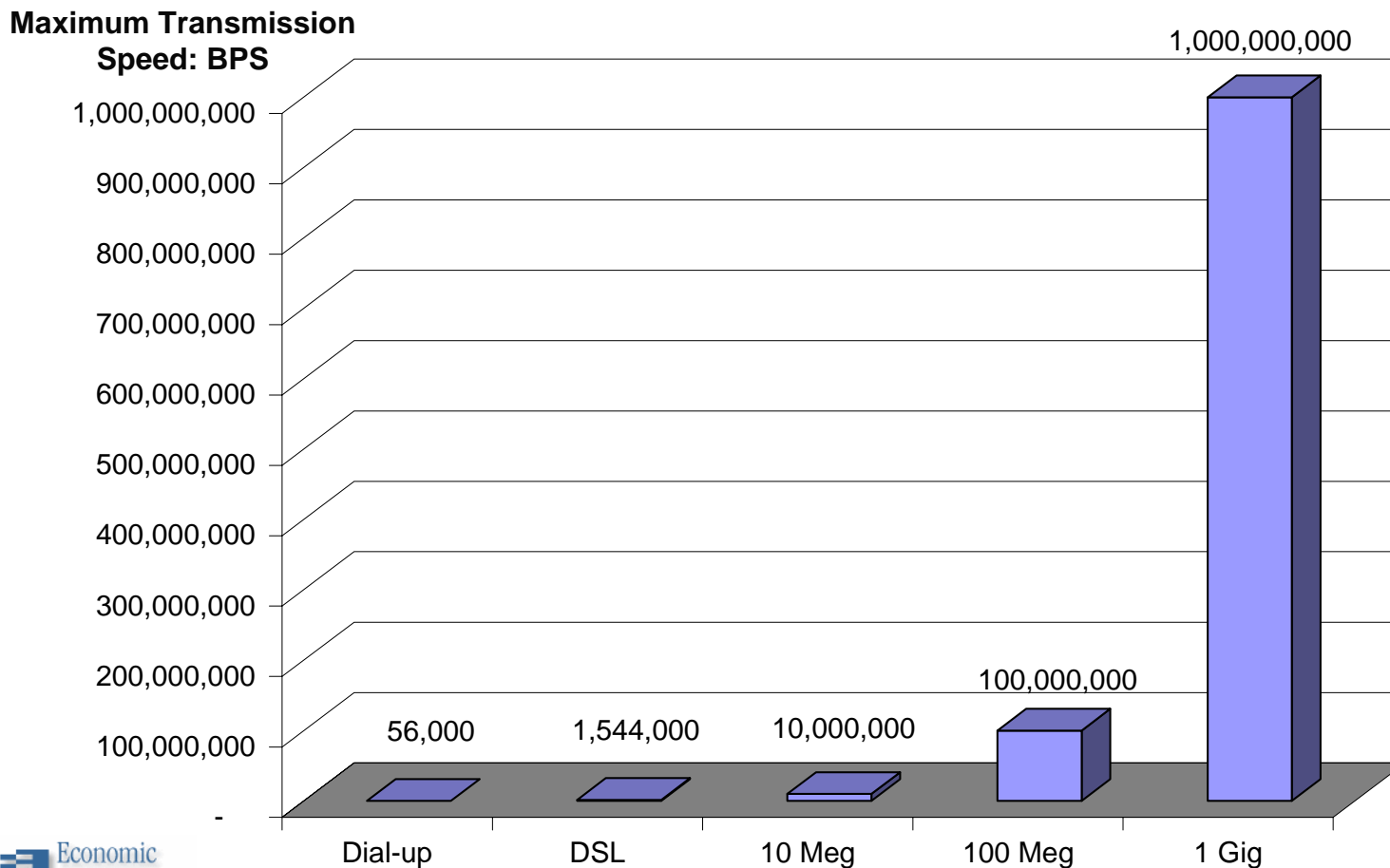


What's All the Fuss About?

- ❖ DANC is constructing a 450 mile fiber optic telecommunication highway.
- ❖ Objectives:
 - ✓ Create a low- user cost, state-of-the-art communications backbone
 - ✓ Allow multiple carriers to provide services in the region
 - ✓ ***Support existing businesses and support efforts to attract new business***



The New Broadband will be Capable of Transmitting up to 1 Gig. Per Second to Users





Links on the Information Super Highway

DANC WILL PROVIDE THE BACKBONE

- Analogous to a large interstate highway.
- Provides long-distance, high-capacity, high-speed transmission path for moving massive quantities of data
- This “backbone” will create **Points of Presence:**
Alexandria Bay, Canton, Gouverneur, Lowville, Massena, Ogdensburg, Potsdam and Watertown

Middle Mile/ Last Mile

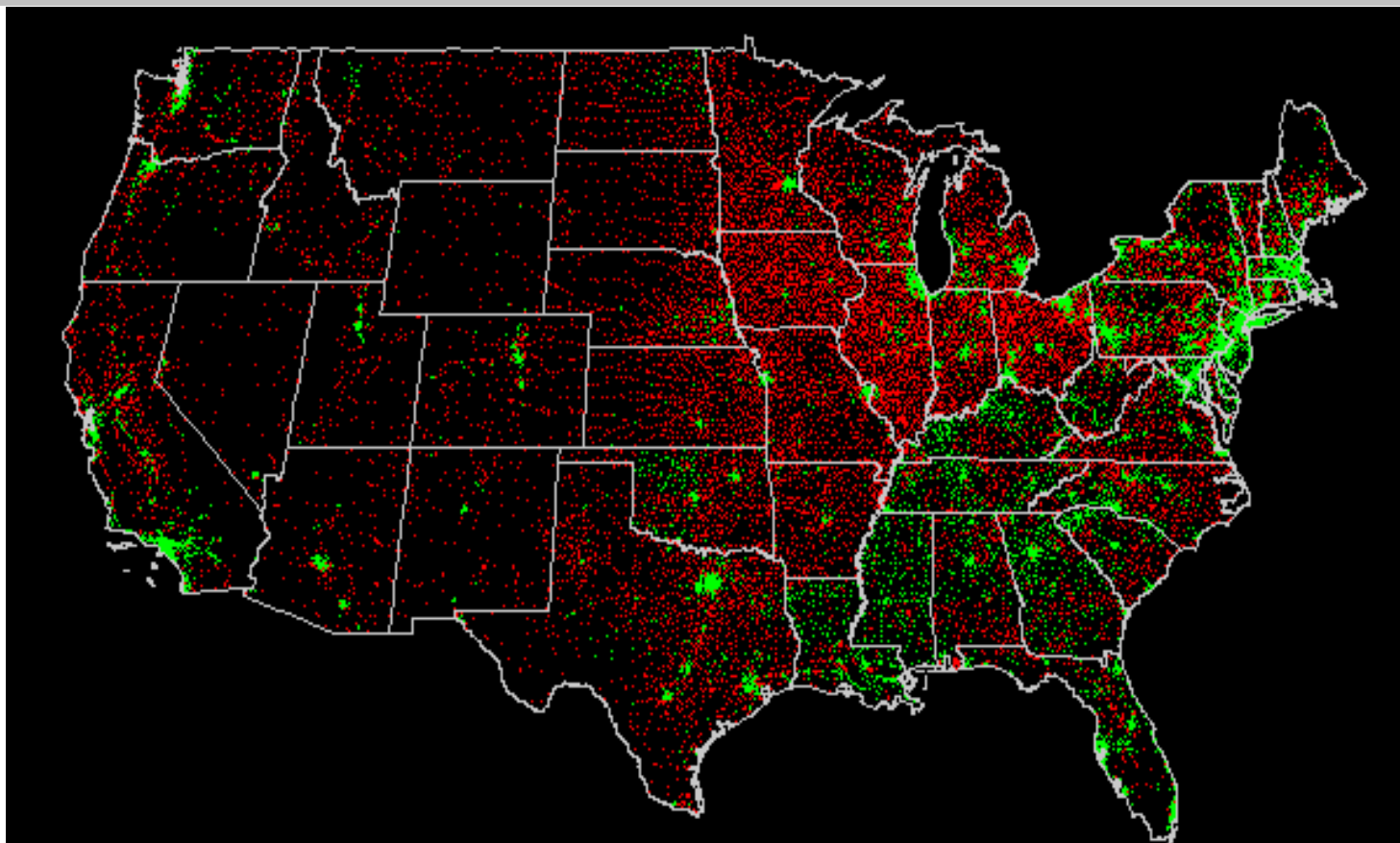
- Facilities provide fast, large-capacity connections between telecommunications backbone and last 100 feet to end-user’s PC or terminal
- Provided by ISPs and other retailers

Last 100 Feet

- Links to end-user’s terminal including in-house or in-office wiring

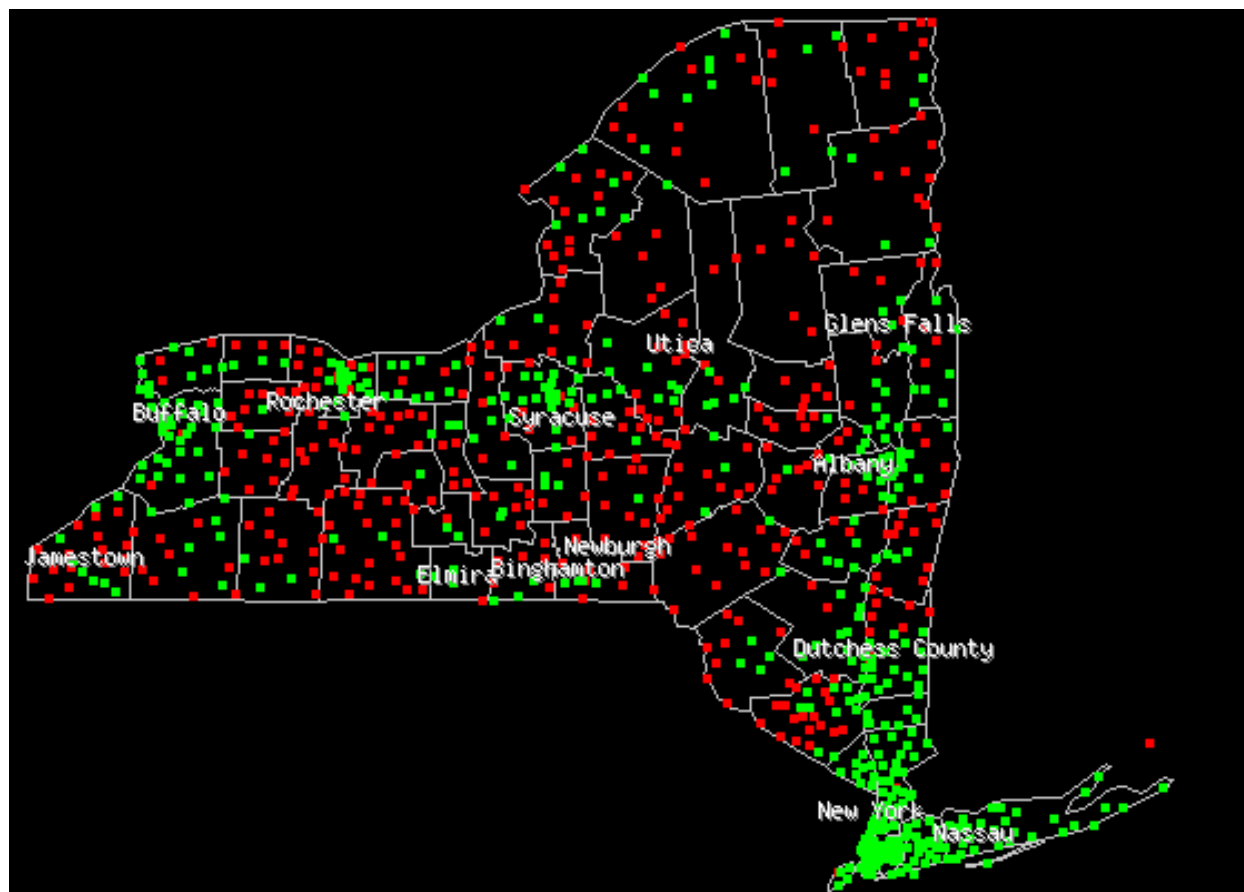


Broadband in the U.S.



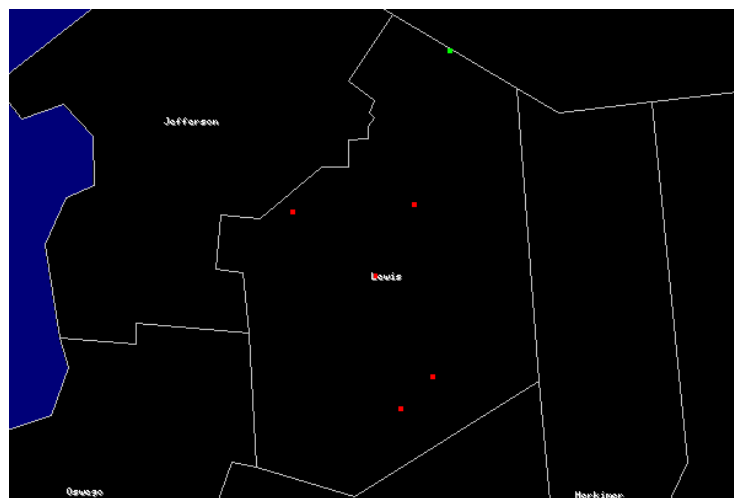
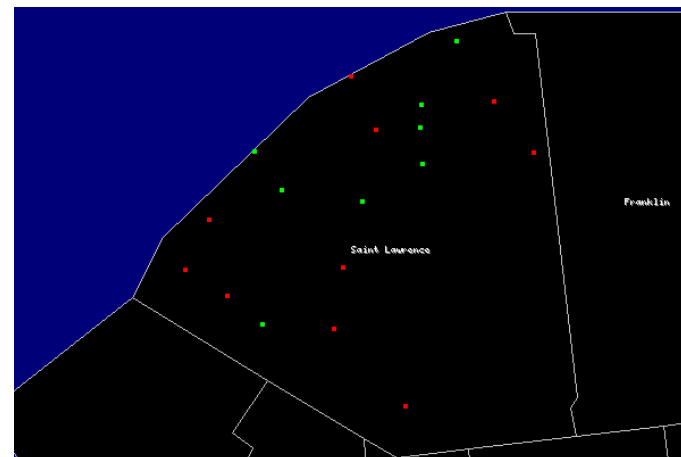
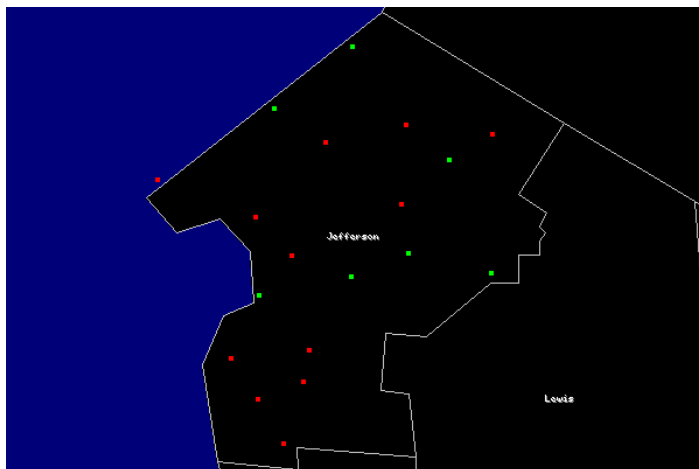


Broadband in NY State



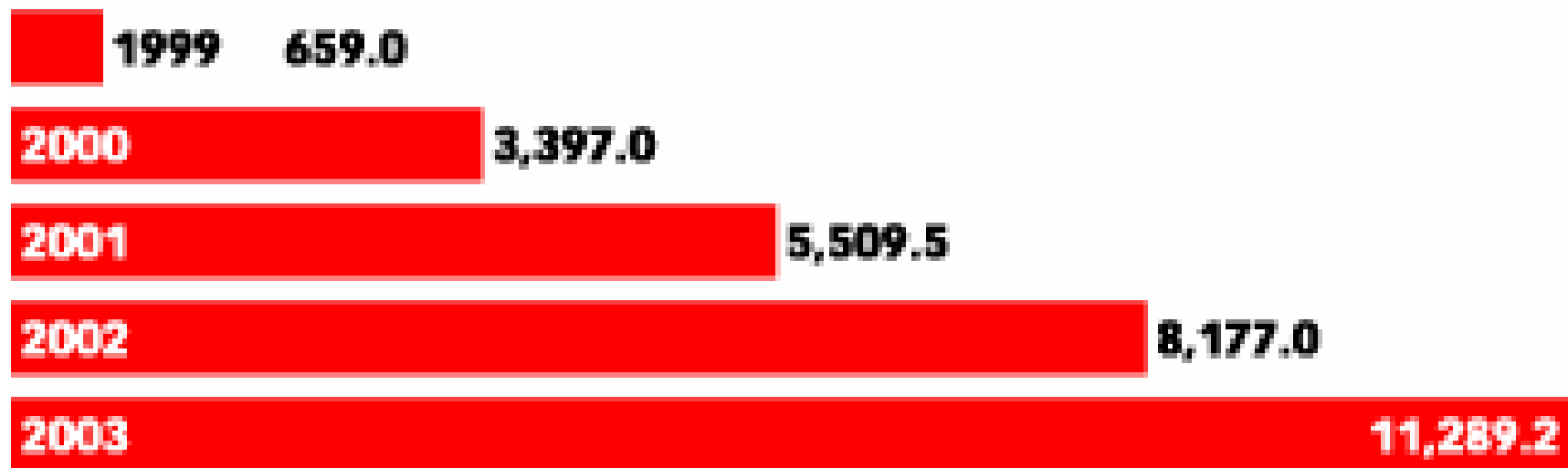


Broadband in Lewis, Jefferson & St. Lawrence Counties





Broadband Subscribers in North America, 1999-2003*



Source: *Point Topic*, March 2004

*DSL Portion



New Economic Development Opportunities in the North Country



Advantages of Broadband Connectivity

- ✓ Advertise/market community or business
- ✓ Find supplies and suppliers for current businesses
- ✓ Service current & new customers
- ✓ Attract new businesses
- ✓ Tele-work and telecommuting



Economic Applications

- Companies that produce/sell information technology products or services
- Back offices & front offices of companies that are heavy users of IT, such as financial institutions, hospitals and on-line catalogue stores
- Manufacturers & distributors that depend on supplier/buyer networks
- Retail & service companies that depend on advertising and customer service to grow



Sampling of Industries that Rely on Broadband

- Back offices, such as in finance, insurance & real estate
- Publishing
- Internet sales centers taking orders & providing service
- Logistics services
- CAD dependent companies
- “Technology industries” including software development, web services, IT manufacturers, video development & gaming
- Tourism industries, e.g., hotels
- Consultants



Local Business Broadband Benefits

- ✓ Training opportunities/technical assistance
- ✓ Access to partnership opportunities
- ✓ Purchasing and sales
 - Business to business
 - Business to customer
- ✓ Marketing
 - Web Presence
 - Interactive Customer Service



Agriculture

- ✓ Obtain wholesale and market prices
- ✓ Research & develop new markets
- ✓ Sell products on-line
- ✓ Purchase goods & services on-line
- ✓ Advertise through a web site



Financial Services

Security & Disaster Recovery	Helps companies guard against and recover from physical and electronic attacks
Customer Relationship Management	Drive sales opportunities, retain clients
Enterprise Resource Planning	Integrates departments and functions across a company onto a single computer system
Online Banking/Investment Services	Increase customer satisfaction and save time & money over transactions that use bank tellers, account execs, or call-center employees



Merging of Computer and Telephone Technologies

Functions

- ✓ Customer services
- ✓ Technical support/help desk
- ✓ Order processing
- ✓ Outbound telemarketing

Technologies Used with Basic Phone

- ✓ Interactive voice response
- ✓ Automated fax-back for order confirmations
- ✓ Web interaction management



Index/Rating of ICT Dependence

Sector	Internet Connections		
	Dial-up	Broadband	Any*
Manufacturing/Util/Construction	36	21	57
Wholesale/Retail/Catering/Travel	36	11	47
Telecommunications	44	23	68
Computing/business services	54	39	93
Financial/Insurance	34	43	78
Other Services	50	16	66

*Discrepancies due to rounding



Education

- ✓ Schools
 - BOCES and Public School Districts are initial users of North Country's new broadband
- ✓ Distance Learning
- ✓ Workforce Training
- ✓ Entrepreneurial Training
- ✓ Basic Tool of Colleges and Universities



Civic

City of St. Cloud

Ken Robinson, Director of Public Utilities

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MORE SERVICES

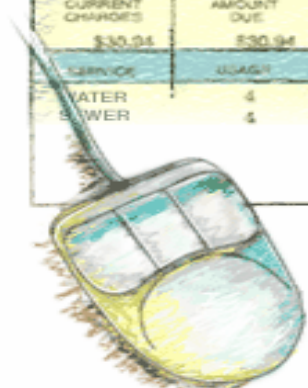
Pay Utility Bills

ONLINE



Click to verify

CURRENT CHARGES	AMOUNT DUE	CURR. READ DATE	DAYS	DATE BILLED
\$30.94	\$30.94	08/28/2009	20	10/20/2009
SERVICE	USAGE	UNIT OF MEASURE	CHARGES	
WATER	4	BCP	\$14.56	
SEWER	4	BCP	\$16.38	



AMOUNT DUE
DUE DATE

PAYING ONLINE IS EASY

Take care of General Utility bills -- quickly, safely and securely

Pay Now



Civic



PO Box 201
DeKalb Junction NY 13630

Serving **Hermon,**
Edwards, Russell, and
DeKalb

- Towns ▶
- Historical Societies ▶
- Schools ▶
- Alumni Associations ▶
- Churches ▶
- Organizations ▶

- Local Interest
- Local Websites
- Local Media

Personal Sites

Professional Sites

Business Sites

Jeff Davis, Artist

Schryver Web Design Service

HERD Community Network, Inc.

Web Site Changes

The HERD Board of Directors recently voted to sponsor web sites for several local organizations:

- The new town of Russell web site is located at www.russellny.us
- The Edwards History and Genealogy Center is located at www.edwardshistorycenter.org
- The Oswegatchie Valley Amateur Radio Club is now at www.ovarc.us
- The Edwards Arts Council can be found at www.edwardsartscouncil.org
- The Edwards Central School Alumni Association is now www.ecsalumni.org



Break Time





Case Studies Where Broadband is Making a Difference

Virginia

Oregon

Massachusetts

North Dakota

New Hampshire

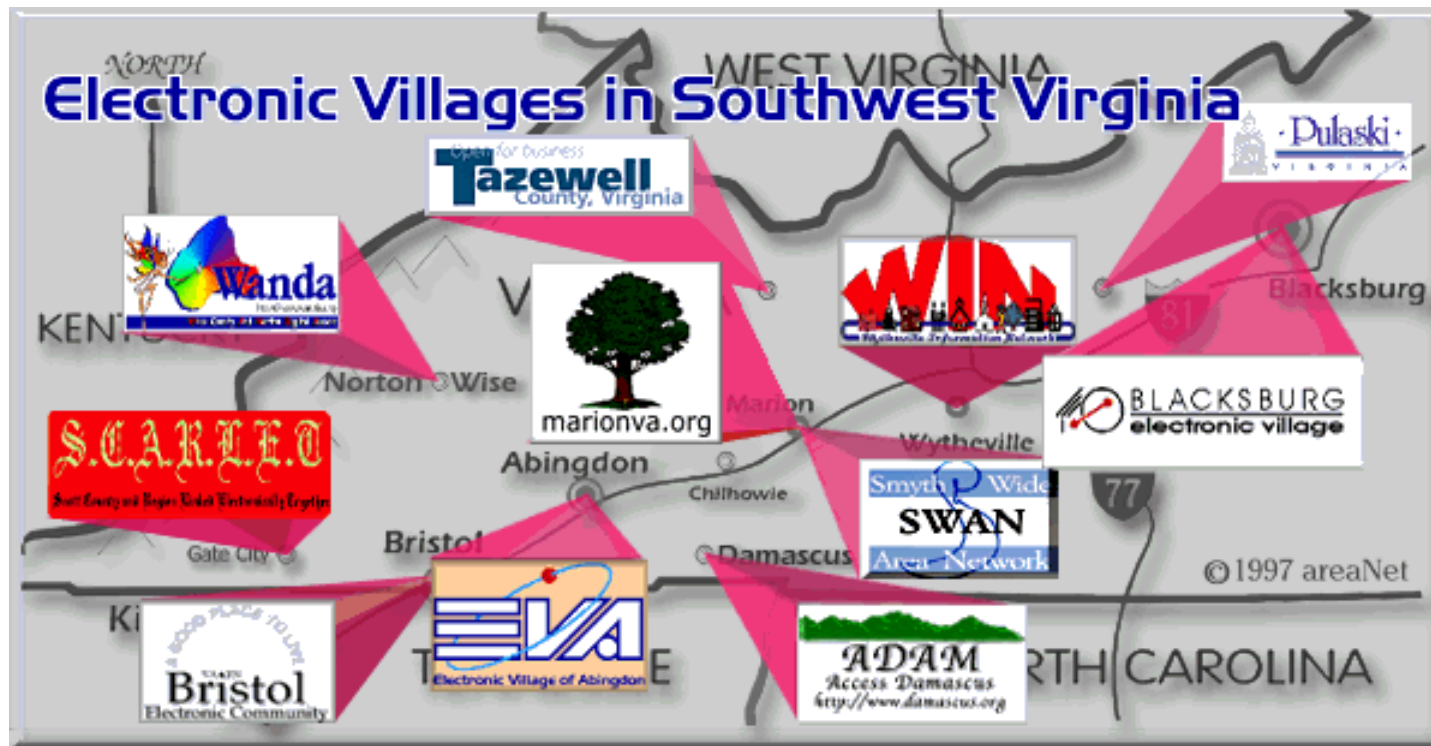
Montana

California

Maryland



Economic Development Electronic Villages in Southwest VA



Goal: To enhance competitiveness, increase profitability and improve economic opportunity for Southwestern Virginia's industry

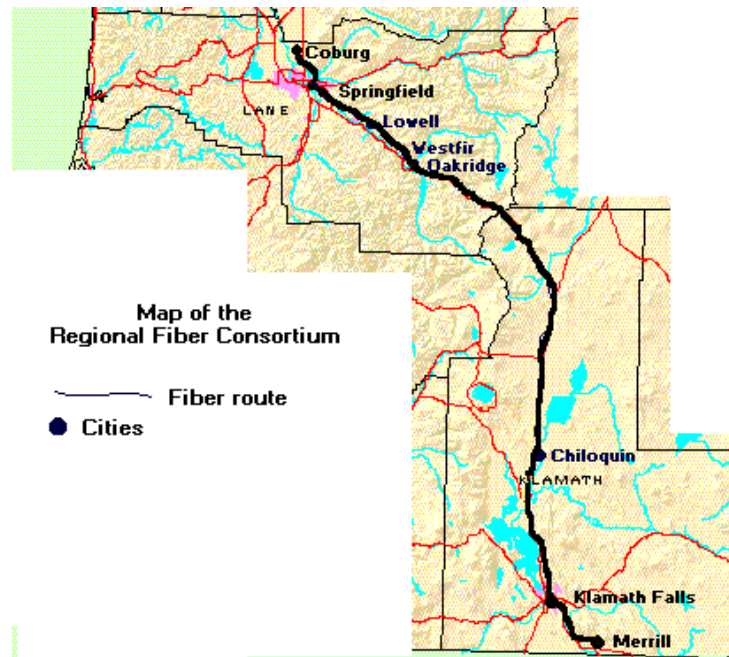
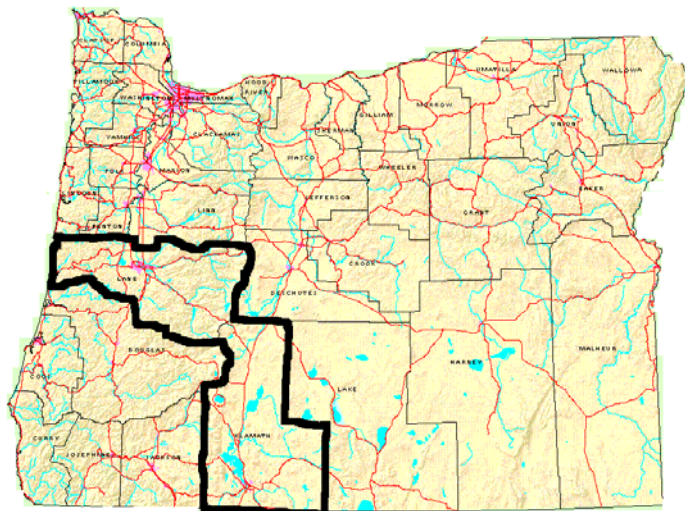


Economic Development Electronic Village of Abington, VA

- Only publicly owned fiber-optic network in VA
- Created 23 jobs in IT industries
- Distance learning job retraining for tobacco farmers
- Now developing 75 acre high-tech industrial park
- Computer training lab at public library for use by local businesses and non-profits, free of charge
- Other:
 - Telemedicine and other services to rural patients
 - Established electronic foundation center - next nearest is 140 miles away
 - Trained over 1,000 residents on how to use the internet



Economic Development Lane Klamath Regional Fiber Consortium (OR)



Goal: To reduce the cost and increase the availability of high-speed internet access for businesses and residents of rural Oregon.



Economic Development Klamath County, Oregon

- Provided 23 communities with high-speed telecommunications infrastructure
- Developed new telecommunications providers
- Attracted Sykes Enterprises, 600-seat incoming-call center



Economic Development Cyber District of Lynn, MA



Goal: To develop Lynn's downtown where internet-related businesses locate and grow.



Economic Development Lynn Cyber District

- Anchored by four technology companies
- 20 private sector companies
- 11 companies have relocated to Lynn
- Members include web site designers, application developers, internet marketing specialists, network engineers, application service providers, ISPs, as well as businesses in the general economy that rely on technology, such as banks and real estate companies



Economic Development Technical Assistance TechLink (Ashley, North Dakota)



Goal: To assist rural business development by providing telecomm infrastructure & technology assistance.



Economic Development Technical Assistance TechLink

- Installed telecomm infrastructure
- Trained companies in technology applications to increase productivity and expand customer bases
- Trained over 65 people at Introduction to Computer classes. Educated a potential work force for a future call center or other technology-related business.



Economic Development Technical Assistance
Womens Rural Entrepreneurial Network (WREN)
(Bethlehem, NH)



Web site allows WREN to provide assistance without geographical constraints.

Web site averages 1,100 visitors per month.

Goal: To provide entrepreneurial support and training to rural women.



Community Services

Eastern Montana Telemedicine Network



Goal: To deliver specialized medical services & provide continuing medical and higher education, using two way interactive video conferencing technology.



Community Services

Eastern Montana Telemedicine Network

- Utilizes telecom to transmit real-time video, audio and medical images
- Provides telemedicine services in the specialty areas of cardiology, nephrology, diabetes education, emergency medicine, ENT, and radiology
- Other clinical services include registered dietician services, employee assistance counseling and geriatric assessment services.
- Related medical industry companies participate



Community Services

Eastern Davis Community Network (CA)



Goal: To bring local small business on-line



Community Services

Eastern Davis Community Network (CA)

- Provides free internet accounts, technical support, and web hosting in collaboration with Dynasoft (an internet consulting firm)
- More than 95 of small businesses have come on-line and more than 80 businesses' web sites are hosted through the program



Economic Dev. - Organized Business Advocacy & Program Support Charles County Technology Council (MD)

- Develop business parks with “smart buildings”
- Leadership in developing and providing digital business services, including Incubator Without Walls and the Technology Office Space Incubator
- Strong community advocacy for technology education/use of technology as a tool for education



Goal: Promote availability and use of technology in business and education in Charles County



Tools to Make it Happen

Leveraging
Broadband for
Economic Growth



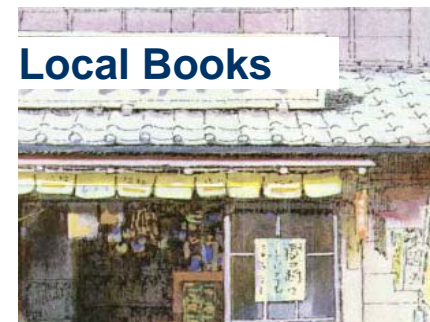
Ways to Maximize North Country's Broadband Advantage

- Web presence/effectiveness of local businesses
- Marketing/promotion initiatives
 - Outreach to promote region's business opportunities
- “Smart buildings”
- Specialized programs for business TA
- Home/business access to career centers/distance learning opportunities



The Information Super Highway is a Two-Way Street

- Broadband brings new economic development opportunities
 - But requires complementary initiatives*
- Potential for economic “outflow” as well as economic opportunities to the local economy
 - *Amazon.com and local books stores*
 - *International vs. local suppliers for North Country industries*





Putting Broadband to Work

- Workforce development capacity
- Interest in securing information-based jobs
- Business culture supportive of entrepreneurs
- Inter-firm and public-private cooperation
- Finance for innovation and new economic activity



Next Steps for Economic Development



Telecommunications Needs Assessment

- **Profile your community/region**
 - Types of employers/role in local economy
 - Technological skill level in your community
 - Local labor market
- **Conduct industry cluster (targeting) initiatives**
 - Opportunities to link broadband to economic development by developing/attracting businesses in the supply chains of local industries



Understand Who Needs/Wants Broadband & Why

How broadband can stimulate economic growth

- ✓ Retain & expand local companies
- ✓ Opportunities to attract new industries to link with new infrastructure/existing industries
- ✓ Attract technology service companies
- ✓ Add to skill base of workforce



Encourage E-Business Opportunities

- Access to online & virtual training and incubator projects
- Partner with hardware & software providers
- Develop joint marketing & promotion web sites
- Encourage real estate development & renovation - smart buildings



Social Infrastructure

This is not just about the economy – it's about peoples' lives

- Workforce Development Programs
 - Expand one-stop career training centers
- Industry specific training programs
 - Work with companies
- Community development/resources
 - Schools
 - Adult education
 - Public Libraries



To Get There From Here: the Basic Clichés

Form a local coalition

- Private-public cooperation

Develop a plan

- What does the community want
- What is realistic
- Assign responsibility

Go for it!

- Implement/evaluate
- Redesign based on lessons learned and new opportunities



Thank You For Your Attention

Steve and Glen

