Institute for Local Self-Reliance

- Formed in 1974
- Located in Minneapolis
- Focuses
  - Community Banking
  - Decentralized Energy
  - Main Street Businesses
  - Recycling – Waste to Wealth
- Telecommunications as Commons Initiative
  - MuniNetworks.org

www.muninetworks.org
Agenda

- How much is enough bandwidth?
- Private sector investment
- Community Network Highlights
- A Real Scenario
- Different Models
- Q&A
Six Infrastructure Musings

- 3 Things I Don’t Know
  - How Much Electricity Can I Use in my House?
  - How Much Natural Gas Can I Consume?
  - What would I do with a Gig?

- 3 Things I Do Know
  - Plenty of Electricity
  - Plenty of Gas
  - Broadband Regularly Limits Me

- Cable and DSL Are Not Good Enough
- If Electrical Nets were Built Like Broadband,
  - No Air Conditioning
HOPING FOR ECONOMIC DEVELOPMENT AT THESE PRICES?
Help is Not on the Way

- FiOS and U-Verse are Done Expanding
- AT&T CEO, Jan 2012:
  - [W]e’re looking at rural America and asking, what’s the broadband solution? We don’t have one right now.
- Federal and State Governments in Budget Crunch
Wireless

- Complement, Not Substitute
- Less Reliable
- Slower Speeds
- Bandwidth Caps
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4G Cannot Save Us

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National Broadband Plan

- Restoring Intention of the ‘96 Telecom Act
- Recommendation 8.19: Congress should make clear that *Tribal, state, regional and local governments can build broadband networks.*
EPB Fiber Optics

- Chattanooga, Tennessee
- Largest Muni Fiber Network
  - 170,000 HH and Businesses Passed
- 1 Gbps Anywhere
- MENSA Grid
- Street lights
- 1/3 New Jobs in Tennessee are in Hamilton County
  - HomeServe
  - Knoxville
Lafayette Utilities System

- Lafayette, Louisiana
- 4 Years Legal Wrangling
- 10/10 Mbps for $28/month
- 100 Mbps to all inside network
- PixelMagic Jobs
BVU Authority

- Bristol, Virginia
- One of the First
- Over $10 Million in Savings from 2003-2008
- No Phone/Broadband Price Increases
- Focus on Business Services
Hometown Utilicom

- Kutztown, Pennsylvania
- One of first FTTH communities in US
- One of the smallest
- Over $1.5 million in community savings
Community Networks Would Love a Level Playing Field

Whenever communities decide to build their own networks, massive companies like Time Warner Cable lobby state governments to restrict broadband competition. They say they just want a "Level Playing Field" but the reality is that they already have most of the advantages, which is why there is so little competition in broadband. To learn more, visit MuniNetworks.org or watch this video: http://bit.ly/TWC-Salisbury

Time Warner Cable vs Salisbury Fibrant

**Advantages**

- **User Base:** Large number of subscribers across the United States
- **Cross-Subsidize:** Draw revenue from other markets or mobile phones
- **Cost Advantages:** Economies of scale advantages in advertising, volume discounts on physical equipment, etc.
- **Service Area:** Can build networks anywhere in the state and in other states
- **Leverage:** Millions of subscribers gives greater leverage in negotiating content costs and internet peering
- **Paid Off:** The capital costs of the network are largely amortized already

**Salisbury Fibrant**

- **Tax-Exempt Financing:** Lower interest rate
- **Secrecy:** Private companies operate behind closed doors
- **Tax-Exempt:** Largely a red-herring. Public Utilities make payments in lieu of taxes and do not make profits
- **Discrimination in the Right-of-Way:** Another red-herring. This practice would violate numerous laws already.

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Generic Scenario

- Status Quo
  - Cable Triple Play: $130/month
- Community Fiber Network Built
  - Triple Play: $105/month
- Cable Response
  - Triple Play: $99/month
- Resident “Dilemma”
- What Defines Success or Failure?
Considering Community Networks

- Do you have muni electric?
- Do you have a Champion?
  - If no, Draft one
  - Empower the community
- Start Researching
  - Talk to other communities, vendors, me, others
  - Spend more time *listening* than talking
  - Identify local assets, get creative
- Talk to your Incumbent Providers
- No surprises
Consider All Your Options

- FTTH Tomorrow is *One* Option
- Connect Schools, Libraries
- Fiber-to-the-Business

- Incremental Builds
  - Danville, Virginia
  - Santa Monica, California
  - Sandy, Oregon
Potential Follow Up

- Economics of Building a Network
  - Do we have to offer Cable Television?
- Financing
- Public v. Private
- Competition (Looming Cable Monopoly)
- Economic Development
- Benefits of Local, Public Ownership
Broadband at the Speed of Light

• Case Studies
  • Bristol, VA
  • Lafayette, LA
  • Chattanooga, TN
• Lessons Learned
• Advice

http://www.ilsr.org/broadband-speed-light/

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Thank you

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If the National Broadband Plan Succeeds Beyond Wildest Dreams
Tech Migration

• Mayor Durel of Lafayette
  • “I often say with tongue firmly planted in cheek that I hope that the other 49 states do outlaw what we are doing. Then I will ask them to send their technology companies to Lafayette where we will welcome them with open arms and a big pot of gumbo.”

Business Services

Figure 2
Speeds and prices based on published, non-promotional rates.
Recent Preemption Attempts

- 2011 - Preemption Legislation
  - North Carolina
  - South Carolina
  - Wisconsin
  - Arkansas

- 2012 Likely to see more Preemption Battles

- 2011 - Good Legislation Killed
  - Tennessee
  - Washington
  - New Hampshire