

# Bridging The Digital Divide

Telecommunications and Rural Development

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By Theodore Alter, Michael Fortunato, Jeffrey Bridger,  
William Shuffstall, Glenn Sterner  
The Pennsylvania State University

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# Research Problem



- Broadband penetration has not been even in US
  - Profit-driven model makes urban areas more attractive markets for broadband development
    - Many rural areas “left behind”
- Which broadband delivery models are most efficient and effective in providing rural residents, schools, governments, and businesses with access to high-speed internet?

# Alternative Delivery Models



- Community-driven models have enabled broadband development where previously impossible
  - Public-Private Partnership (P3)
  - Municipal Delivery Model
- Which model is more effective...
  - ... for deployment?
  - ... for customer satisfaction?
  - ... for community engagement?

# Objectives



- Compare rural broadband deployment models in terms of affordability, customer satisfaction, and financial viability
- Determine which local cultural and institutional factors enhance or impede broadband deployment in rural areas
- Develop deeper understanding of local issues facing broadband development
- Develop policy solutions, and associated outreach and educational materials

# Methods



- Site Selection
  - 1 P3 and 1 municipal model in each of three states
  - Maine, Pennsylvania, Wisconsin
    - We are based in Pennsylvania
    - Maine and Wisconsin had similar rural penetration levels at beginning of research
- Written survey
  - Attitudes/knowledge about broadband
  - Broadband use patterns
  - Customer satisfaction
- Key informant interviews
  - How did local process develop?
  - How did partnerships form?
  - What have the outcomes been?

# Progress



- Quantitative and Qualitative data collected and analyzed
  - 953 resident and 281 business responses for written survey
  - 26 key informants interviewed
- Next Steps:
  - Compile research final report
  - Drafting of academic and practitioner publications
  - Implementation of outreach component

# Findings: The Broadband Development Process



- What are the common *process* elements in these initiatives?
  - A recognized, current need
  - A champion or champion organization
    - willingness to take risk
    - manage and recruit diverse players
    - develop a common vision
    - communicate
    - embrace an investment mentality
    - keep the initiative going
  - A local solution
  - An inclusive, representative governing body

# Findings: Is One Model Better?



- May be the wrong question!
  - Where are the needs?
    - Locally, county-level, or regional?
  - Where are the collaborators?
    - Who will provide leadership and expertise?
    - Is there citizen support?
  - Is it *legal*?
    - Municipal model outlawed in many states
      - Act 183: Pennsylvania's Verizon Law
- Emphasis on *partnership*
  - A nod to the flexibility and broad scope of the P3 model
    - Multiple partners, roles

# Findings: Implications for Development



- Opportunity forgone
  - What is the cost of inaction?
- Community development
  - Broadband is not development
    - It is a useful tool
  - Importance of local strategy and community vision for broadband
- Issues of fairness
  - Is broadband a public or private good?
  - Who is responsible for broadband development?
- Distributive Justice
  - Implications for citizens, workers, companies, government
  - Broadband not the same everywhere

# Expected Impacts/Outreach



- Improve understanding of alternative broadband delivery models and their impacts
  - Inform policy to facilitate deployment
  - New community-driven entrepreneurial models
    - Substantial economic development at state level
    - New economic models for rural America
      - Entrepreneurship, e-biz, telecommuting, agri-tech

# Questions?



- Theodore R. Alter
  - The Pennsylvania State University
  - [tra2@psu.edu](mailto:tra2@psu.edu)
  - (814) 863.8640