Broadband: The Critical Infrastructure for Sustainable Prosperity

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Broadband *is the principal tool to address our top societal challenges.* Some call it a utility, a civic right.

National Applications

Health Care	Energy/ Environment	Education	Government Operations	Economic Opportunity	Public Safety
• Electronic health records • Remote/ home monitoring • Mobile monitoring • Telemedicine • Health information exchange	• Smart grid • Smart home applications • Smart transportation • Telework	• American Graduation Initiative • STEM • Nat'l Ed Tech Plan • eBooks and content • Electronic student data management	• Service delivery and efficient government • Improved performance • Transparency • Civic engagement • Policy	• Job creation and economic development • Job training and placement • Community development	• Interoperable, mission-critical voice and broadband network • Next-gen 9-1-1 • Alerts • Cybersecurity

Innovation and Investment → Inclusiveness → Consumer Welfare

From Blair Levin, architect of federal broadband plan

Innovative Social Enterprise

- Founded 2003 as 501(c)(3)
- Provide robust internet to thousands of:
  - Public-interest sites via fiber optics for a small fee
  - Underserved residents with free WiFi/WiMax
- Open-access network shared with carriers who then serve businesses/consumers (wired and wireless)
- Dedicated program office to drive adoption and use

Our Regional Community Network

Serving NEO market (>$170 billion GDP and pop. 5 MM)

Ohio Middle-mile Consortium

Critical Economic Development Asset

- Provide nearly unlimited digital infrastructure to thousands of regional “public interest” sites
- Raised more than $150 million to support hundreds of local direct jobs and capital build
- Led the training and equipping of >19,000 households on how to use the internet for jobs and better health; 43% trained this year already have better employment conditions

Vision for a Smarter Community

Dedicated staff to catalyze regional planning or centers of excellence for IT use/innovation:

- Health Care
- Education/Workforce
- e-Government & Public Safety
- Energy and Transportation
- Economic Development
  - Jobs, productivity
  - Innovation, R&D
  - Attract businesses, talent, and capital

Leveraging our assets and resources to serve as a competitive advantage for our economy

Case Study: Education/Workforce

- Program office:
  - Develop and support IT strategies for regional schools
  - Developed/executed IT restructuring plan for Cleveland public schools
  - Revamped Academic Transformation Plan, infusing best practices in IT
  - Develop and support parent-engagement strategies with IT
- Connect region's higher ed and PK-12 systems (>1,000) and their content partners via 1 Gbps fiber

Education:
Public-Private Partnership

CLEVELAND METROPOLITAN SCHOOL DISTRICT
Vision to Victory

Cleveland Clinic

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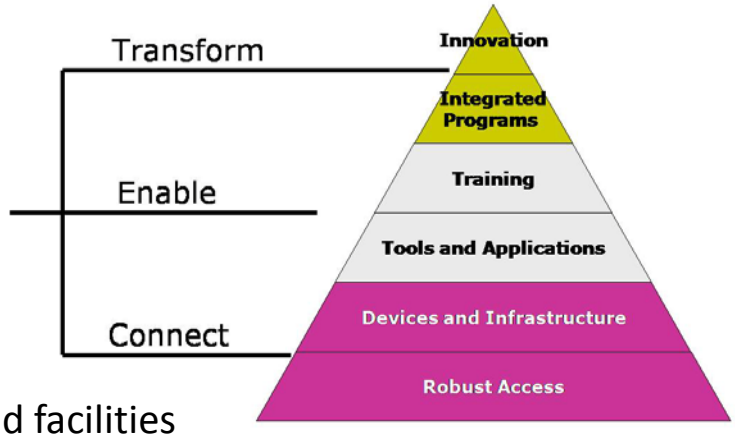
Technology to drive improved educational outcomes:

– Raised private funds for:
  - Broadband ($10 million)
  - Teacher training on digital tools ($2 million)
  - Community Tech Executive (CIO for >3 years)
  - Refurbished PCs for schools program (10,000+)
  - Student assessment tools, accelerated learning systems
  - Distance learning and internships

– Graduation rates up > 10%, attributed to new IT tools

Case Study: Digital Divide

- Developed a consortium of diverse regional training centers
- Transformed them into a collaborative regional system focused on digital literacy
  - Provided:
    - Common curriculum
    - Advanced IT tools and equipment
    - Funding for expanded staffing, systems and facilities



- In past year, trained more than 19,000 households
  - Provided affordable computers and access solutions
- Already, almost half have new or better jobs

Connected Community: Challenges

- Demand side:
  - Non-users don't see the relevance or importance
  - Public sector lags in IT adoption, talent, capital
- Supply side: U.S. poor regulatory/policy history
- Resistance to change – infrastructure requires time and capital:
  - Inevitable political shifts
  - Well-resourced special interests
- Few leaders have the vision and are able to manage all of these issues simultaneously

Lesson: This is not a tech project, it's change management

Need holistic approach:

- Diverse champions, common vision
- Public/private governance structures
- Dedicated human resources for project and change management
- Driving toward cohesive, collaborative systems that share

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Recommended Action Plan

- Agree on top social priorities to rally around
- Resource a dedicated team to convene, coordinate, and problem solve
- Develop broad, rather neutral leadership group that is action-oriented and collaborative
- Collectively envision how each institution can contribute toward this 21st-century vision
- Engage local providers and tech co's early
- Align and share existing resources to drive win-win strategies and outcomes

Critical Success Factors

- Winners are:
  - Most committed and resourceful
  - Broad, neutral, distributed and empowered leadership
  - Outcome-oriented
  - Listen well and create sustainable, win-win strategies:
    - Aggregate and increase demand
    - Lower barriers to entry (i.e. costs, time, effort)
    - Incent and catalyze supply side