Federal Funding for Broadband Access & Adoption: New Policy, New Market Dynamics

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Broadband Education Consultants, LLC
New Broadband Funding Policy

- Goals of federal broadband funding policy
  - Availability/Access
  - Adoption

- New Broadband Policy/Funding Sources
  - ARRA
  - National Broadband Plan
  - USF Reform
Introduction

New Broadband Funding Policy

- Common themes - departure from past
  - Unserved and underserved
  - Encourage and fund public and non-profit broadband networks and providers in addition to traditional incumbents
  - Encourage and fund Tribal, local, state, regional, national networks
  - Focus on broadband to community anchor institutions
  - Attention to middle mile, backhaul
  - Focus on adoption
- Influence of SHLB Coalition
- Effect: Changing Marketplace
Direct Broadband Funding Provisions

- $7.2 B for direct grant and loan programs for deployment and adoption
  - NTIA: $4.7B for BTOP
    - $3.89B for competitive grants focused on community networking
      - Provide access to broadband service in unserved and underserved areas
      - Provide access to “high value targets” - schools, libraries, healthcare providers, higher ed institutions, & other community support entities - to facilitate greater use of broadband service “by or through these organizations”
      - Improve access to, and use of, broadband service by public safety agencies
Direct Broadband Funding Provisions

- NTIA: $4.7B for BTOP (cont’d)
  - $200M for competitive grants for “expanding public computer center capacity, including at community colleges and libraries”
  - $250M for competitive grants for “innovative programs to encourage sustainable adoption of broadband service”
  - $350M for broadband mapping
  - $10M for program administration
- 20% matching requirement
- Round One: Residential, Last Mile; Round Two: CAIs, Middle Mile
Direct Broadband Funding Provisions

- **RUS**: $2.5B for programs similar to existing Community Connect Grant Program, Rural Development Broadband Loan Program
  - Generally, funds to be used for broadband infrastructure
  - 75% of area served must be rural area w/o sufficient access to high-speed broadband service
  - Priority to previous RUS program recipients
  - Loan programs: 4% loans (max amount $7.5M) and treasury-rate loans (no max amount). Minimum loan: $100,000
Indirect Broadband Funding Opportunities

- Transportation Infrastructure
  - $46.5B to state DOTs for highway/rail/transit infrastructure improvements
- Public housing infrastructure
  - $12B to local housing agencies to rehabilitate public housing and stabilize neighborhoods
- Energy efficient housing retrofits
  - $.25B in competitive grants to upgrade HUD low-income housing to increase energy efficiency
Indirect Broadband Funding Opportunities

- School Construction
  - $21B for renovation, modernization, energy efficiency, and technology improvements ($6B for higher ed)
- Smart Grid Investment Program
  - $11B for R&D and pilot projects to modernize the electricity grid
- Health Information Technology
  - $19B for widespread adoption and use of interoperable health information technology, including e-health records, e-pharmacy, etc.
Related Provisions

- Directed FCC to develop a National Broadband Plan within one year
- Authorized up to $350M for NTIA for development and maintenance of a broadband inventory map
  - Broadband Data Improvement Act
  - NTIA to make map available within two years
## Florida BTOP (NTIA) Awards

<table>
<thead>
<tr>
<th>Grantee</th>
<th>Total Award</th>
<th>Type</th>
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<tbody>
<tr>
<td>City of Tallahassee</td>
<td>$1,212,020</td>
<td>Sustainable Adoption</td>
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<tr>
<td>Communications Service for the Deaf, Inc.</td>
<td>$14,988,657</td>
<td>Sustainable Adoption</td>
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<tr>
<td>Florida A&amp;M University</td>
<td>$1,477,722</td>
<td>Public Computing Centers</td>
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<tr>
<td>Florida Department of Management Services</td>
<td>$8,877,028</td>
<td>Broadband Data &amp; Development</td>
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<td>Florida Rural Broadband Alliance</td>
<td>$23,693,665</td>
<td>Infrastructure</td>
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<tr>
<td>Level 3 EON, LLC</td>
<td>$2,066,250</td>
<td>Infrastructure</td>
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<tr>
<td>North Florida Broadband Authority</td>
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<td>Infrastructure</td>
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<td>One Community</td>
<td>$18,701771</td>
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<td>One Economy Corporation</td>
<td>$28,519,482</td>
<td>Sustainable Adoption</td>
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<td>School Board of Miami-Dade County</td>
<td>$3,473,498</td>
<td>Sustainable Adoption</td>
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<td>Tampa Housing Authority</td>
<td>$2,131,322</td>
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<tr>
<td>University Corporation for Advanced Internet Development</td>
<td>$62,540,162</td>
<td>Infrastructure</td>
</tr>
</tbody>
</table>
Internet2 BTOP (NTIA) Award

US Unified Community Anchor Network

- $62,540,162
- All fifty states
- Partner: National LambdaRail
- Goal: connect community anchors across all disciplines into virtual communities, including colleges, universities, libraries, major veterans and other health care facilities, and public safety entities, with additional benefits to tribes, vulnerable populations, and government entities
- Provide advanced backbone capacity to more than 121,000 community anchor institutions nationwide through their state networking collaborators (RONs), while enabling the potential to serve up to an additional 97,000 institutions
# Florida BIP (RUS) Awards

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<tr>
<td>Litestream Holdings, LLC</td>
<td>$5,053,427 (grant)</td>
<td>Last Mile</td>
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<tr>
<td>Myakka Communications, Inc.</td>
<td>$1,963,930 (loan)</td>
<td>Last Mile</td>
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<tr>
<td></td>
<td>$5,891,796 (grant)</td>
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<tr>
<td>Quincy Telephone Company</td>
<td>$1,145,379 (grant)</td>
<td>Last Mile</td>
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<tr>
<td>Windstram Corporation</td>
<td>$38,288,349 (grant)</td>
<td>Last Mile</td>
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National Broadband Plan: Connecting America

Chapter 8: Availability

- As of October 09: 57 FTTH municipal deployments in 85 towns & cities, but 18 states have laws that restrict/prohibit municipalities from offering broadband services
- Recommendation
  - **Government should facilitate Tribal, state, regional and local broadband initiatives**
    - Congress: make clear that state, regional and local governments can build broadband networks
      - May discourage private investment; should only do so if none
    - Federal & state policies should facilitate demand aggregation and use of state, regional and local networks when that is the most cost-efficient solution for anchor institutions to meet connectivity needs
      - Example: E-Rate & RHC recipients + other CAIs
Congress: amend Communications Act to provide FCC discretion to allow anchor institutions on Tribal lands to share broadband network capacity funded by E-Rate and Rural Health Care programs with other community institutions designated by Tribal governments.

Federal and state governments should develop institutional framework that will help America’s anchor institutions obtain broadband connectivity, training, applications and services.

- One approach: give a non-profit the mission & capability to serve needs of CAIs, including health clinics, community colleges, schools, community centers, libraries, museums, and other public access points.
  - R&E networks should be expanded.
  - SHLB Coalition: UCAN should support & assist CAIs in obtaining & using broadband connectivity.
National Broadband Plan: Connecting America

Broadband Action Agenda (2010)

- **Accelerate Universal Broadband Access and Adoption, and Advance National Purposes Such as Education and Health Care**
  - Reform USF over next ten years to support broadband services
  - Upgrade E-Rate program by making broadband more accessible
  - Reform and upgrade Rural Health Care Program to connect more public health care facilities to Internet & foster telemedicine applications and services. Create a Health Care Infrastructure Fund to support deployment of dedicated broadband health care networks in underserved areas.
  - Create Connect America Fund to extend broadband service to unserved areas & ensure affordable broadband service
  - Create Mobility Fund to bring all states to baseline level of 3G (or better) wireless coverage
National Broadband Plan: Connecting America

E-Rate

● Sixth Report & Order (September 28, 2010) & Clarifying Order (December 15, 2010)
  ● Fiber - emphasizes use of *existing* fiber
    ● Lease of fiber, lit or dark, that crosses a right of way, is eligible *from any provider* in Telecom or Internet Access categories
    ● Lease of fiber, lit or dark, that does not cross a right of way, is eligible *from any provider* in Internal Connections category
    ● Generally, modulating electronics, excess capacity not eligible; must be lit immediately
    ● Providers of both dark and lit fiber can be telcos; state, regional or local government and nonprofit networks; R&Es; commercial networks (e.g., electric utilities)
    ● Any provider can provide telecommunications *over fiber* - voice phone service, distance learning, WANs, etc.
National Broadband Plan: Connecting America

**E-Rate**

- Sixth Report & Order (September 28, 2010) & Clarifying Order (December 15, 2010)
  - Fiber
    - Installation/Construction Charges
      - Installation of fiber (dark or lit) within and between buildings on the same property only eligible as Priority Two
      - Dark fiber: Installation/construction charges for leased dark fiber from school or library to the property line eligible as Priority One; installation/construction charges for leased dark fiber from school or library property line to a fiber network outside of property line not eligible.
      - Lit fiber: Installation/construction charges for leased lit fiber (e.g., WANs) eligible as Priority One
      - Not limited to unserved and underserved areas
National Broadband Plan: Connecting America

Rural Health Care

- NPRM (July 15, 2010)
  - Health Infrastructure Program
    - Build on Pilot Program: Support up to 85% of construction costs of new regional or statewide networks to serve public and non-profit HCPs in unserved or underserved areas
    - May be used to connect health care networks to Internet2 and National LambdaRail
  - Health Broadband Services Program - subsidize 50% of monthly IA charges
National Broadband Plan: Connecting America

Rural Health Care

- Florida Award (RHCPP)
  - Florida Panhandle Care Network
    - $9.6M to Big Bend Regional Healthcare Information Organization and Agency for Healthcare Administration to build broadband network connecting rural hospitals & clinics
    - Big Bend Health will act as ISP - offer VoIP, secure messaging, and VPN access through Florida LambdaRail - and provide Health Information Exchange services
  - Problems with getting project started - illustrative of problems with Pilot Program
Effects of New Direction

- Funding emphasis on government, non-profit networks/providers, CAIs, and adoption changing market dynamics, opportunities, risks:
  - More networks, providers, recipients
  - Emphasis on opportunities for public/private partnerships
  - Emphasis on fiber, wireless
  - New market for training, education to promote broadband
  - New products/services in health care, energy transportation
- Still new -- important policy yet to come. Impact will not be known for years
  - Is it good use of ratepayer/taxpayer money?
  - Is it sustainable?
    - Are projects overambitious?