

US Broadband Policy and the Underserved

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Advancing Broadband, Communities and Society: Getting from Here to There



American Recovery and Reinvestment Act of 2009 (ARRA)

- Also known as “The Stimulus Act”
- Passed by the House and the Senate on Friday, February 13, 2009
- Signed into law by President Obama on February 17, 2009
 - \$461 billion in spending (appropriations)
 - \$326 billion in personal/ business tax cuts
 - \$787 billion total
- There is some talk of a second stimulus act

Stimulus Act Broadband Provisions

- Two grant/loan programs totaling **\$7.2 billion**
 - Dept. of Agriculture Rural Utilities Service (RUS) Broadband Initiatives Program (BIP) **\$2.5 billion**
 - National Telecommunications and Information Administration (NTIA) Broadband Technologies Opportunities Program (BTOP) - **\$4.7 billion**
- ARRA tasks the Federal Communications Commission to prepare a National Broadband Plan (NBP) for Congress by February 10, 2010
- Updates at:
 - Broadband USA at <http://www.broadbandusa.gov/>

NTIA Grants – 3 Program Set-Asides

1. State broadband mapping - **\$350 million**
2. PCC - “Expanding public computer center capacity, including at community colleges & public libraries” - **\$200 million**
3. SBA - “Innovative programs to encourage sustainable broadband adoption...”to schools, libraries, medical & healthcare providers, community colleges, and other institutions of higher education” -- **\$250 million**

NTIA Broadband Technologies Opportunities Program (BTOP)

- **\$3.9 billion** left in general BTOP program
 - NTIA pays for 80%; cost share (“match”) of 20% □
 - Competitive grant program, technology neutral, wireline or wireless
 - Last mile, middle-mile, and long-haul grants
- Round 1 closed August 14, 2009
 - 2,300 grant applications received requesting \$28 billion
 - No awards yet but all to be announced by February 2010
 - Volunteer reviewers (not enough?)
- Round 2 NOFA comes out in February 2010
- Round 2 application window to close in April
- All funds must be obligated by September 30, 2010

BTOP Program Rules

- Eligible: state & municipal governments, non-profits, private companies, public -private partnerships
- All parts of the country – rural, suburban, urban
- At least one grant per state
- Projects must be completed within 2 years of award
- Equipment, instrumentation, networking capability, hardware & software, digital network technology, and infrastructure for broadband services
- Preference to “highest-possible next -generation broadband speeds” [not technology neutral to the extent that satellite broadband is excluded from definition of unserved and underserved]
- Non-discrimination & interconnection obligations (NTIA & FCC)
- Secretary of Commerce has almost unlimited discretion

USDA Rural Utility Services (RUS) Broadband Initiatives Program (BIP)

- \$2.5 billion more for existing programs to fund the deployment and construction of new broadband systems with measurable impact on residential service
- Grants, loans, & loan guarantees
 - 75% to rural areas lacking sufficient speed
 - Priority to: unserved areas, incumbent RUS borrowers, projects that give end users choice of providers, projects that will commence promptly & be completed.
- No double-dipping in both RUS and NTIA
- November 17, 2009 - Third Quarterly Report
<http://www.usda.gov/rus/telecom/arra/RUSARRABIPQtrRep11-17-09.pdf>
- More info at: <http://www.usda.gov/rus/telecom/index.htm>

Limited Progress So Far

- Round 1 NTIA demand exceeded available funding by 7 to 1 in (\$28 billion versus \$4.7 billion, *\$1.3 billion just from Alaska!*)
- Both BIP and BTOP have slipped behind schedule and now have 2 grant rounds, not 3
- No “Round 1” awards as of late November!
- Request for Information (RFI) on Round 2 policy and rule changes closed November 30

Who is “unserved” anyway?

- BIP/BTOP: one or more census blocks where at least 9 out of 10 households *“lack access to facilities-based, terrestrial broadband service, either fixed or mobile, at the minimum broadband transmission speed.”*
 - Excludes satellite from definition (because of speed, shared environment or “affordability” issues? No – because satellite is ubiquitous.
- And what is the minimum BIP/BTOP broadband speed?
 - “Two-way data transmission with advertised speeds of at least 768 kilobits per second (kbps) downstream and at least 200 kbps upstream to end users...”
- Basic broadband defined by the FCC is 768 kbps to 1.5 mbps
 - Broadband access speaks to “availability” rather than penetration, i.e., people are always free not to subscribe to broadband
 - May or may not include an “affordability” standard (e.g., 1-2% of annual income) in the future NBP

Who are the “underserved”?

- No general agreement yet - even between federal programs!
 - BIP/BTOP
 - 50% of households or less with access
 - 40% or less households subscribing
 - No land or mobile service offering broadband with at least 3Mbps
- In general, those who:
 - Have satellite broadband access only?
 - Have less than 3 broadband service providers?
 - Lack access to higher broadband speeds?
- Definition may change as speeds increase through the FCC’s seven broadband tiers which go from 768 kbps to 100 mbps

Dilemma of Small Communities

- Small and dispersed populations cannot attract or sustain broadband deployment investments, i.e., no business case without subsidy
- If not on a road system, it is unlikely these communities will ever get fiber
- Danger that support for broadband via satellite will be:
 - Excluded from NBP because it does not meet minimum speed goals
 - Included in the NBP because it does meet minimum broadband speeds, though without full potential of terrestrial broadband
 - Ignored in the NBP because it is considered ubiquitous



National Broadband Plan (NBP)

- Dozens of field hearings and workshops held
- More than 25 FCC *Requests for Information* with thousands of questions so far!
- Mid-term NBP presentation available
at:http://hraunfoss.fcc.gov/edocs_public/attachmatch/DOC-293742A1.pdf
- Final NBP due in Congress on February 17, 2010
- Still many opportunities to comment
- Universal service reform is the sleeping tiger

Universal Service Fund (USF) Reform

- Federal Communications Commission (FCC)
 - National Broadband Plan may recommend changes to 1996 Telecom Act which set up 4 universal service funds: High Cost, uncapped at about \$4.5 billion per year; E-rate, capped at \$2.25 million; Rural Health Care at \$60 million; and Low Income at \$800 million
 - E-Rate (for schools and libraries) and Rural Health Care (RHC, for health care centers) are the two on-going federal subsidy programs for Internet access
 - Currently, consumers pay for the 4 funds through a 12% surcharge on their telephone bills
 - National Broadband Plan RFI #19 and several others ask questions USF Reform
- Congress
 - Rep. Boucher (VA) has a general universal service reform bill <http://www.boucher.house.gov/images/usf%20discussion%20draft.pdf>
 - Rep. Matsui (CA) has HR3646, *The Broadband Affordability Act of 2009*, which establishes a Lifeline Assistance program to provide low-income Americans living in rural and urban areas assistance in subscribing to affordable broadband service. [http://thomas.loc.gov/cgi-bin/query/z?c111:H.R.3646.IH:](http://thomas.loc.gov/cgi-bin/query/z?c111:H.R.3646.IH)

“Life, liberty and the pursuit of happiness *through broadband!*” – Not.

- A “right” to broadband has yet to be established
- *Universal service* is never truly *universal*, e.g., National Health Plan bill only covers 96% of U.S. citizens
- “Accessibility” is not “affordability”
- BIP & BTOP are one-time programs. In the NBP’s frenzy over “*future-proof*” *fiber*, the unserved and underserved may be permanently left behind.
- Broadband goals are temporary, speeds are advancing, the digital divide broadens and narrows according to available technologies in any given area,