



American Recovery and Reinvestment Act of 2009

*Internet2 Spring Member Meeting
April 28, 2009*

From the White House Web Page:

“President Obama and Vice President Biden understand the immense transformative power of technology and innovation and how they can improve the lives of Americans.

They will work to ensure the full and free exchange of information through an open Internet and use technology to create a more transparent and connected democracy.

They will encourage the deployment of modern communications infrastructure to improve America's competitiveness and employ technology to solve our nation's most pressing problems -- including improving clean energy, healthcare costs, and public safety.”

American Recovery and Reinvestment Act of 2009 (ARRA)

- Passed by the House and the Senate on 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

Some Highlights:

- **\$27.5 billion to states for highway, bridge & road projects**
- **\$8.4 billion for mass transit**
- **\$8.6 billion for inter-city high speed rail**
- **\$1.3 billion for Amtrak**
- **\$1.1 billion for FAA airport projects**
- **\$11 billion for electrical grid projects**
- **\$4 billion for Clean Water projects**

Science Programs

- **NSF:** \$3 billion
 - \$200 million Academic Research Infrastructure
- **DOE Office of Science:** \$1.6 billion
- **NOAA:** \$836 million
- **NASA:** \$1 billion
- **NIST:** \$600 million
- **NIH:** \$10 billion

Health Information Technology

- **\$18 billion for Medicare/Medicaid payments to doctors and hospitals to adopt electronic medical records**
- **\$2 billion to HHS Office of the National Coordinator for Health IT**
 - **\$300 million to regional health information exchanges**
 - **\$20 million to NIST for standards development**
 - **\$1.68 billion to be spent according to plan due to Congress by November 1.**

Energy and Other Programs

- **\$11 billion for an electric “Smart Grid”**
- **\$4.5 billion to upgrade & renovate Federal Buildings**
- **\$29 billion for highway & bridge construction**
- **\$850 million for IT upgrades at Social Security Administration, State Department, and Department of Agriculture**
- **\$650 million for Education Technology (DoEd)**

Broadband Programs - \$7.2 billion

- National Telecommunications and Information Administration (NTIA)
 - **\$4.7 billion**
- Department of Agriculture Rural Utilities Service (RUS)
 - **\$2.5 billion**

NTIA Broadband Grants – 4 Programs

- Broadband mapping - **\$350 million**
- “Expanding public computer center capacity, including at community colleges & public libraries” - **\$200 million**
- “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 Technology Opportunities Program”

- Balance of \$4.7 billion after other three programs & admin costs (3%) -- **\$3.7 billion+ for “infrastructure program”**
- NTIA pays for 80%; cost share of 20%
- Competitive grant program, technology neutral, wireline or wireless
- Last mile, middle-mile, & long-haul

NTIA: “Broadband Technology Opportunities Program”

- Eligible: state & municipal governments, non-profits, public-private partnerships, and *maybe* private companies
- All parts of the country – rural, suburban, urban
- At least one grant per state
- Projects must be completed within 2 years of award

NTIA: “Broadband Technology Opportunities Program”

- Equipment, instrumentation, networking capability, hardware & software, digital network technology, and infrastructure for broadband services
- Preference to “highest-possible next-generation broadband speeds”
- Non-discrimination & interconnection obligations (NTIA & FCC)

Rural Utility Service - \$2.5 billion

- Existing Ag Dept RUS “**Distance Learning, Telemedicine & Broadband Program**”
- 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.

What we know so far...

- NTIA will have three (3) grant rounds:
 - Apr-June 2009 NOFA
 - Oct-Dec 2009 NOFA
 - Apr-June 2010 NOFA
- Approximately 1/3 of funds for each round

What we know so far...

- Public Comments on Web:
 - <http://www.ntia.doc.gov/broadbandgrants/comments.cfm>
- Highlighted Comments from BroadbandCensus.com:
 - <http://broadbandcensus.com/2009/04/the-broadbandcensuscom-list-of-ntia-comments/>

“Unleashing Waves of Innovation: Transformative Broadband for America’s Future”

- A National Broadband Strategy should be lead by Higher Education
- Supported by Internet2, EDUCAUSE, The Quilt, StateNets, EPSCoR Foundation, National LambdaRail, Computing Research Association, SURA, and WICHE
- Authors: Ed Lazowska, Larry Smaar, Peter Lee, Chip Elliott, Doug Van Houweling, Tom West, David Lassner, Tim Lance, Gary Bachula, and others..

Microsoft Filing with NTIA/RUS/FCC:

- Focus limited \$ “to ensure all the nation’s schools, public libraries and hospitals have robust, affordable connections to the Internet.”
- “By robust connections, we mean at least 100 Mbps, symmetrical, capacity.”
- “By ‘schools’ we mean K-12 institutions, community colleges and at least those universities that engage in basic research and, often at the same time, serve as hubs for creating connections to other schools and colleges.”
- “By ‘hospitals’ we mean traditional hospitals, as well as the approximately 3,500 stand-alone ambulatory care facilities that often serve as stand-ins for hospitals in rural and inner city areas.”
- “Once these connections are pulled deeper into every community in the nation, ..the US government also will have created jumping off points (or interconnection points) for commercial providers to step up and use for the deployment of broadband to Main Street and to neighborhoods.”

What we know so far...

Issues to be resolved:

- Definitions of broadband, unserved, underserved
- Private sector eligibility
- Role of states
- Nondiscrimination & interconnection obligations

NSF “Academic Research Infrastructure” Program

- \$200 million in ARRA
- “Bricks & Mortar” OR IT Projects
- “Campus Cyberinfrastructure”
- One proposal/project per applicant
- 50 to 75 grants - \$1 - \$1.5 million
- 10 grants – up to \$10 million
- Notice coming soon...

NSF “Academic Research Infrastructure” Program

- Campuses: apply for \$1.5 million for campus network upgrades – “research ready”
- RONS: apply for \$10 million for RON upgrade *OR...* on behalf of a group of campuses

People

White House:

- **Science Advisor: John Holdren**
- **Chief Technology Officer - Aneesh Chopra**
- **Chief Information Officer – Vivek Kundra**
- **OSTP – Tom Kalil**
- **National Economic Council – Susan Crawford**
- **Presidential Personnel – Don Gips**

People

Federal Communications Commission:

- Chair – Julius Genachowski
- Republican Vacancy
- Democratic Vacancy

Federal Trade Commission:

- Chair – Jon Leibowitz

People

Department of Commerce

- **Secretary: Gov. Gary Locke**

National Telecommunications and Information Administration (NTIA)

- **Assistant Secretary – Larry Strickling**
- **Deputy – Anna Gomez**
- **Broadband Program – Mark Seifert and Bernadette Rivera**

People

Department of Agriculture

Rural Utilities Service

- Administrator – Jonathan Adelstein

HHS Office of the National Coordinator for Information Technology

- Director – Dr. David Blumenthal

People

National Science Foundation

- Director – Arden Bement – until Oct. 2010
- Deputy Director -- ??

Department of Energy Office of Science:

- Under Secretary for Science: Steven E. Koonin
- Director Office of Science: William Brinkman

For resources, see

<http://www.internet2.edu/government/stimulus>

To sign up for email updates,

<http://www.internet2.edu/government/signup.cfm>



Stimulus Sessions at Member Meeting

- *Tuesday, 8:45 am:* **“Regional and State Networks: Poised to Face Economic Challenges”**
- *Tuesday, 1:15 pm:* **“Issues in Rural Broadband Development”**
- *Tuesday, 1:15 pm:* **“Open Meeting with EDUCAUSE Network Policy Council”**
- *Tuesday, 3:00 pm:* **“Stimulating Big Broadband Deployment”**
- *Wednesday, 12:00 noon:* **“Stimulus BoF”**

"Let us be the generation that reshapes our economy to compete in the digital age. Let's set high standards for our schools and give them the resources they need to succeed. Let's recruit a new army of teachers, and give them better pay and more support in exchange for more accountability. Let's make college more affordable, and let's invest in scientific research, and let's lay down broadband lines through the heart of inner cities and rural towns all across America."

*-- Barack Obama, Springfield, IL
February 10, 2007*



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