BROADBANDUSA

Looking Forward by Looking Back
Local, State and National Broadband Efforts

April 14, 2015 – Broadband Communities

Anne Neville
Director, State Broadband Initiative
Director, Product Development, Broadband USA
aneville@ntia.doc.gov

BROADBANDUSA
CONNECTING AMERICA'S COMMUNITIES

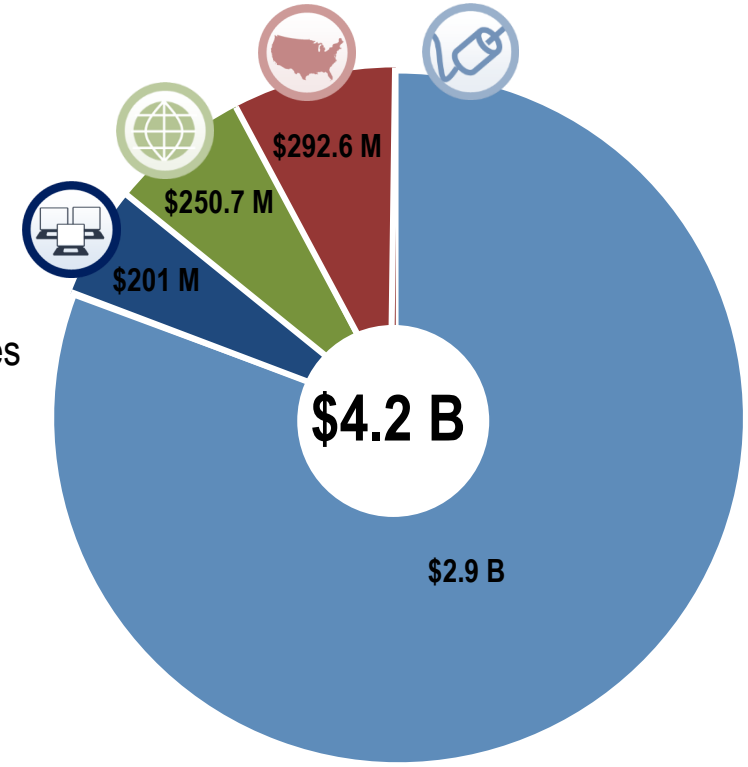
NTIA is Completing $4.2B in Grants that Invested in Communities and States

Infrastructure - 109 Grants
Construct or upgrade broadband networks to connect unserved and underserved areas

Public Computer Centers - 66 Grants
Provide access to broadband, computer equipment, computer training, job training, and educational resources

Sustainable Broadband Adoption - 44 Grants
Promote broadband adoption, especially among vulnerable population groups

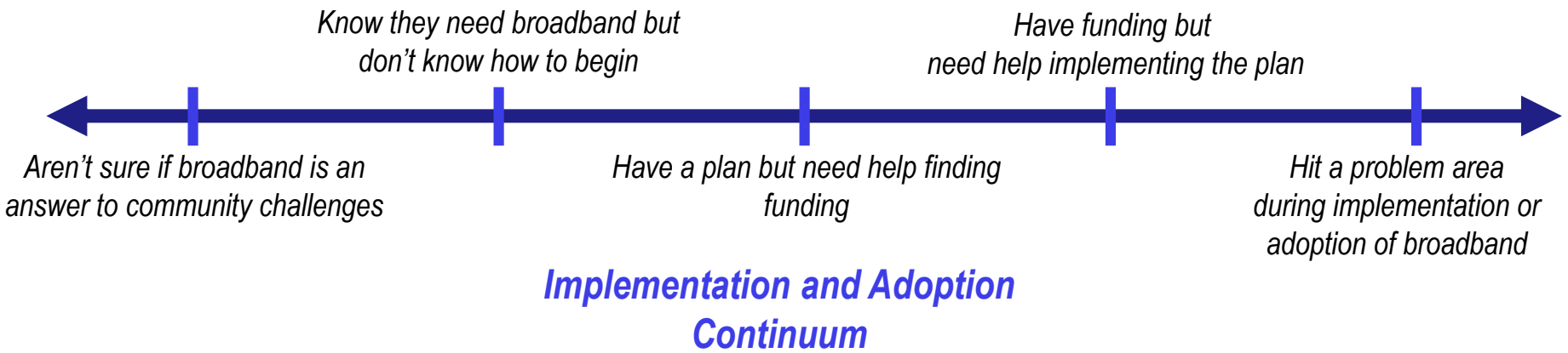
State Broadband Initiative - 56 Grants
Funded collection of first open dataset for broadband availability information, and funded local and state planning efforts, Gov 2.0 activities, and train-the-trainer programs



What will NTIA do?

- NTIA created BroadbandUSA to provide assistance to communities that want to improve their broadband capacity and use broadband more effectively.
- NTIA provides expert, impartial advice and field-proven tools for assessing broadband adoption, planning new infrastructure, and engaging a wide range of partners in broadband projects.
- BroadbandUSA brings stakeholders together to solve problems, contribute to emerging policies, link communities to other federal agencies and funding sources, and address barriers to collaboration across agencies.

BroadbandUSA Will Assist Communities In A Variety Of Ways

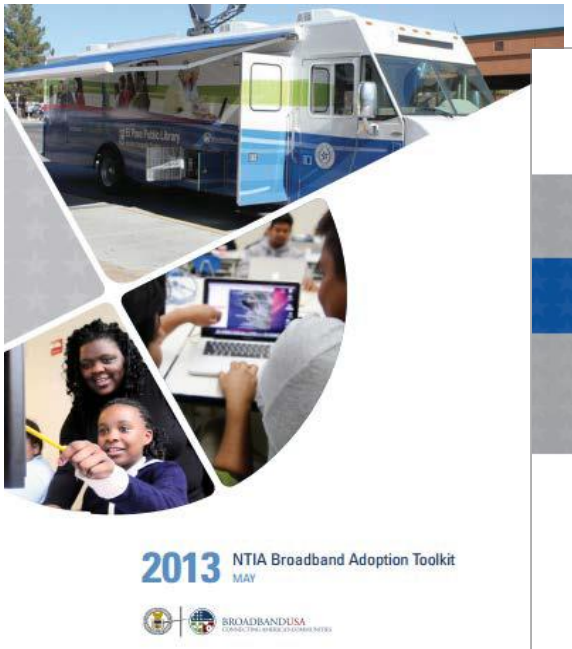


Implementation and Adoption Continuum

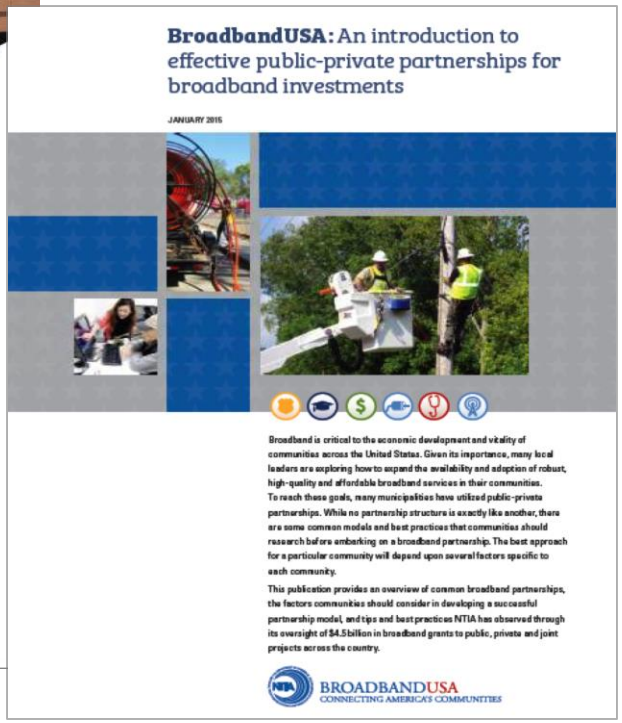
4

NTIA Is Developing Useful Products And Tools

Broadband Adoption Toolkit



Public Private Partnership Primer

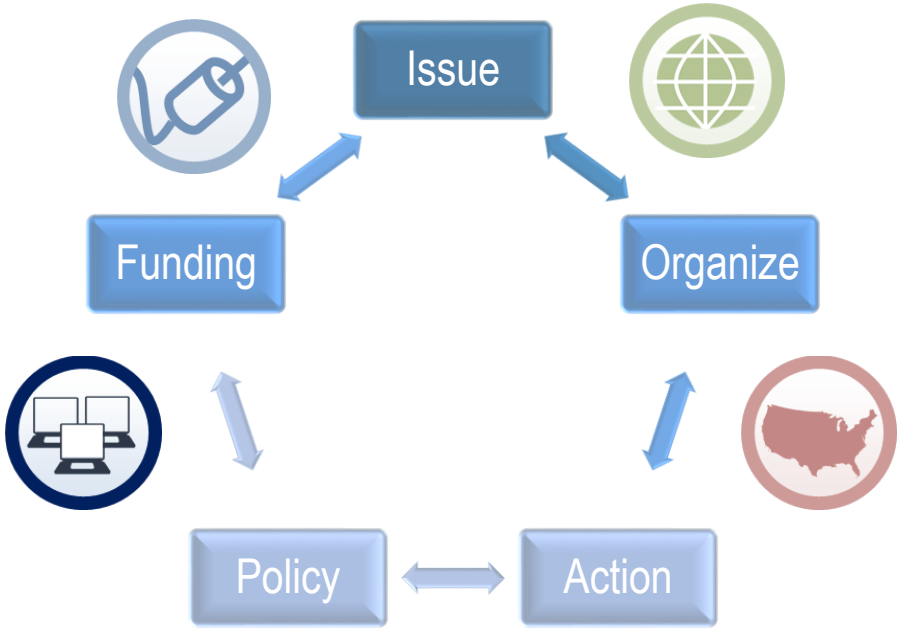


Primer Includes Tips on–

- Getting Started
- Best Practices
- Case Studies

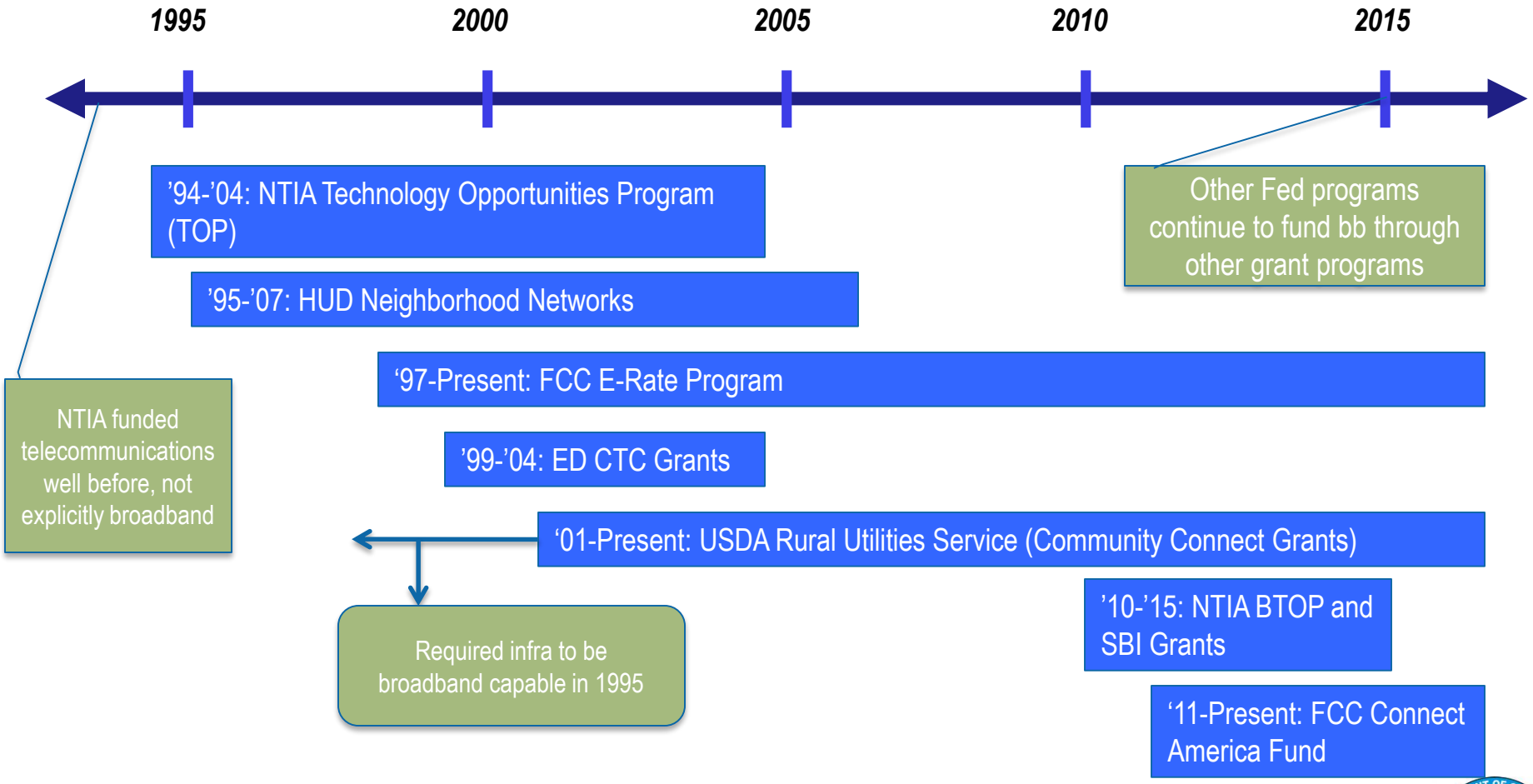
Download it today:
http://1.usa.gov/1kve40F

How Did We Get Here?



BROADBANDUSA
CONNECTING AMERICA'S COMMUNITIES

ARRA funding was part of continuum, not a one-time investment



Historical Issue Areas

1980

- Community Technology
- Digital Divide
- Community Informatics
- Community Networking
- Digital Inclusion
- Muni WiFi
- Broadband Access
- Broadband Adoption
- Municipal Broadband
- Community Broadband
- Open Data/Open Gov

2015

=

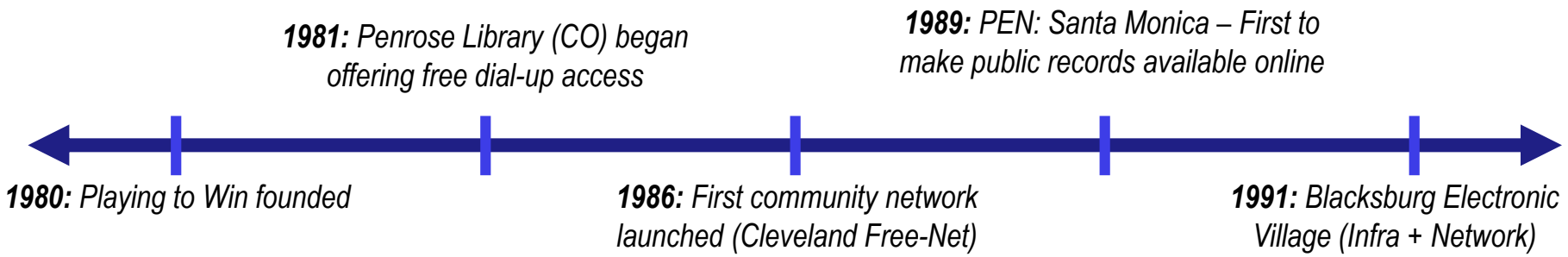
Technology Access and Adoption

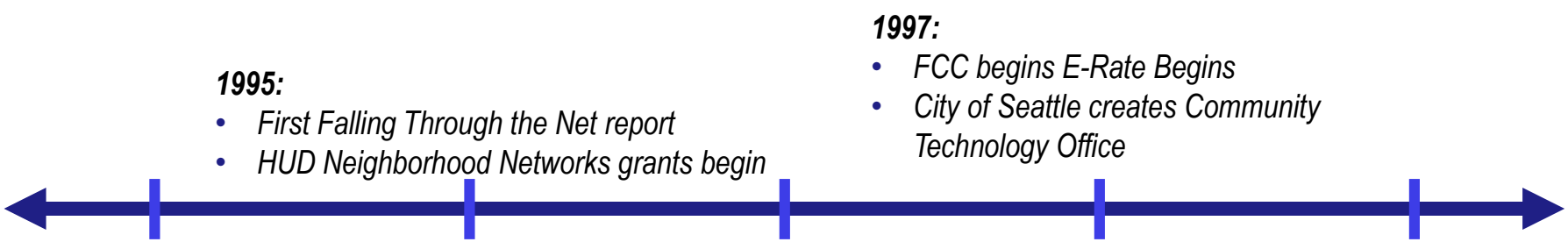
Computers, Internet, Media, Tablets, Smartphones, Devices

Devices: Community Technology Centers, Home, Public Computing Centers, Makerspaces, Fablabs
Infrastructure: Dial-up, broadband, Internet, IOT

Digital Literacy (basic), Information Literacy (advanced), Content and Technology Creation

Evolution of a Movement: 1980-2000





9

Themes from 1980-2000

Institutions
- Non-profits
- Libraries
- Universities (Particularly Free-Nets)
- Government

Multiple Centers of Leadership

Influences
- Media Access
- Cable Access
- State High-Speed Education Networks
- Social Justice Organizations

Different Levers:
- Institutional support to community
- Authoritative research/policy proposals
- Community organizing/political pressure
- Funding

BROADBANDUSA
CONNECTING AMERICA'S COMMUNITIES

Evolution of a Movement: 2000-2014

2000:
- *E-NC Founded (1st State Authority)*
- *IL: Eliminate the Digital Divide Law*

2001:
- *PA law est universal bb goal for state (1.5 Mbps!)*
- *MBDA loan program in MI*
- *Connect KY organizes*

2003:
- *MD Taskforce for Rural BB*
- *CTCNet reaches 1,000 members*
- *Bristol, VA creates municipal network*

2004-2005:
- *TOP and Dept of ED CTC grants end*
- *CETF created ($60M); result of merger*
- *Taskforces/Councils begin in IL, IN, LA, NE, TN*

2006:
- *Nearly 250 municipalities offer wi-fi*
- *CA EO, VA Office of Telework and BB*

2007:
- *Taskforces/Councils begin: CT, HI, OH, MO, NY*
- *ConnectME Authority Established (ongoing funding)*

2008:
- *BDIA passed*
- *MN High-Speed Task Force*

2009: *ARRA creates BTOP, expands RUS funding, provides funding for BDIA, requires national broadband plan and map*

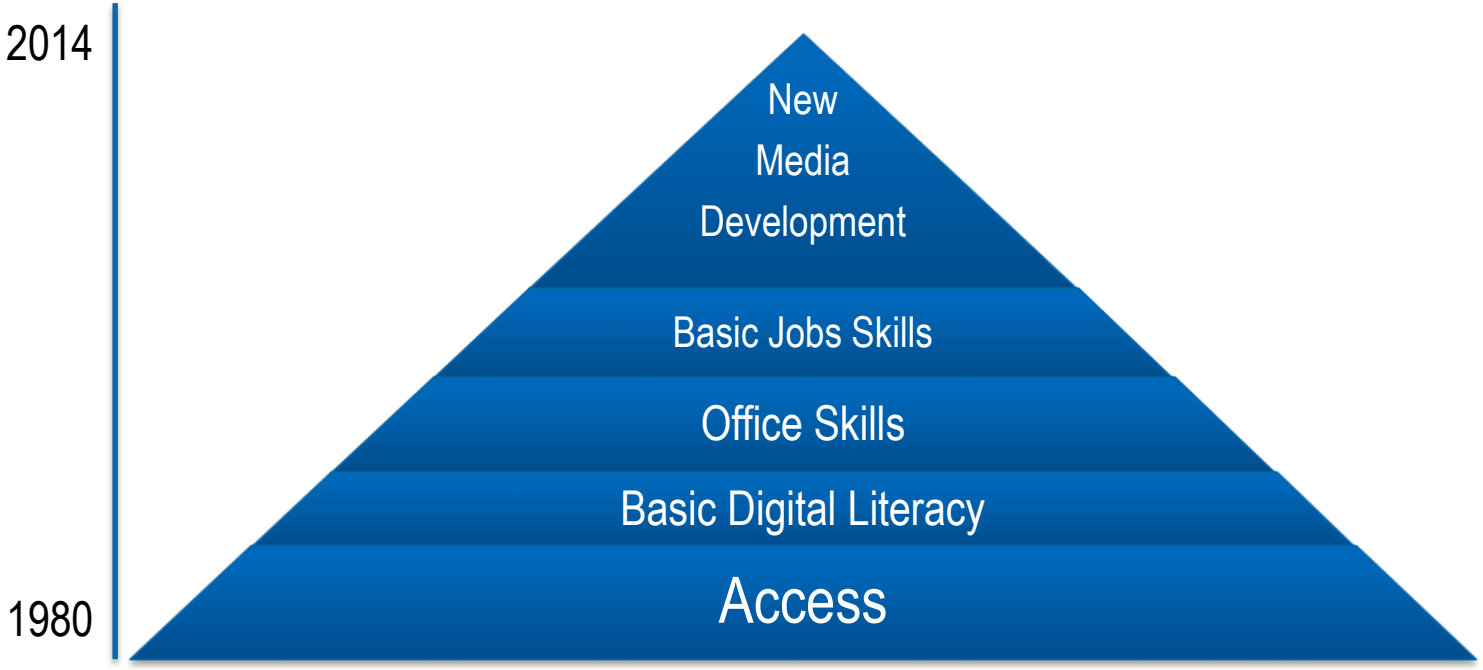
2010-2014:
- *ARRA grants (7B)*
- *National BB Plan*
- *National BB Map*
- *All states have bb groups*
- *Comm Networks (re-rise)*
- *Open data/open gov*

11

2000-2014: Frequent Change and Shifts in Leadership

- Free-Nets decrease, municipal wifi increases (and decreases again), next gen of community networks
- Non-profits and libraries organize and share resources
- Funding available, decreases, massive injection through ARRA
- State policy successes/organizing inform federal policy,
- State policy efforts increase even when federal funding decreases…from 2004-2009; what will happen after 2015?

Building Blocks of Access and Training: All continue to be important



Infrastructure Options for Communities: Increase with Technology Advancements

Today's community broadband movement: Fiber, Wireless, Middle Mile, Last Mile, Local and Regional

1980s-1990s	1980s to Today	Early to Late 2000s	1990s-2000s
Dial-up Access and Free-Nets	Creation and Expansion of Local and State Networks	Muni Wi-Fi	Wired Infrastructure and Community Networks

What does the next phase of the continuum look like?

Access:
- Home Deployment
- Institutional Deployment
- Wireless
- Mobile

Adoption:
- PCCs/CTCs
- Maker Spaces
- Fab Labs
- Devices
- Mobile Apps

Training:
- Digital Literacy
- Coding
- Robotics
- Online Media

Issues:
- Speed, Quality, Price
- Content: Availability, Diversity
- Open data/Open Gov → Civic Technology
- Privacy

Local, State, Federal Policy / Funding + Philanthropic Funding

This is all ALONGSIDE continued private-sector investment, advances

Look at the past as you consider the future

Access: Community access came first, then the demand for broadband in every home

Training: Community access came first – and stayed – recently, rise of the MOOC and similar.

What's the right model? What's next?

Infrastructure: Access to a network (Free-Nets), Municipal-supported network, wi-fi, community networks (fiber, wifi, mesh)

Are these the right models? What's Next?

What You Can Do

Big Picture

- Examples: P2W (access + training), Penrose Library (public access) , E-NC (policy and organizing), Cleveland Free-Net (access), Santa Monica (open gov)
- They thought ahead. What's ahead for you?

Connect w Newer Organizations Working in Similar Spaces (Education goes both ways)

- Civic Tech
- Open Data
- Maker Spaces
- Fab Labs
- Incubators

Communicate about the need for technology access adoption in language that resonates in today's discussions.

What Will You Do?

DISCUSSION

NTIA Broadband Resources

"Broadband has become a cornerstone of economic growth, providing Americans the tools they need to participate in the rapidly growing digital economy." Lawrence E. Strickling, Assistant Secretary of Commerce for Communications and Information and NTIA Administrator

Resource	Website
BroadbandUSA	http://www2.ntia.doc.gov/
State Broadband Initiative	http://www2.ntia.doc.gov/SBDD
National Broadband Map	http://www.broadbandmap.gov
NTIA Broadband Adoption Toolkit	http://www2.ntia.doc.gov/files/toolkit_042913.pdf
BTOP Economic & Social Impact Study	http://www2.ntia.doc.gov/btop-reports#evaluation
NTIA Public-Private Partnership Guide	http://www2.ntia.doc.gov/files/ntia_ppp_010515.pdf