

Chicago's Broadband Strategy

TOWARDS AFFORDABLE, UNIVERSAL TECHNOLOGY ACCESS

State and Local Governments: Toolkits and Best Practices
National Broadband Plan Staff Workshops
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City of Chicago
Richard M. Daley, Mayor
Department of Innovation and Technology
Hardik V. Bhatt, Chief Information Officer



Policy Starting Points

1. Broadband is the key infrastructure of the 21st century.
2. Advanced speeds in cities is vital for regions and the nation.
3. Affordability, availability and inclusion drive adoption.
4. Networks must be open to address urban and national priorities like education, energy and health care delivery.

Background

- **Mayor's Advisory Council on the Digital Divide**
Blue ribbon panel of community, non-profit and private-sector leaders develops vision for "digital excellence."
- **Digital Excellence Working Group**
Practitioners from all City departments and sister agencies translate vision into actionable collaborative projects.
- **Digital Excellence Action Agenda**
Comprehensive technology access strategy to scale successful approaches citywide.
- **Broadband Master Plan**
Long-term plan to facilitate deployment and adoption of globally-competitive broadband services.

Four Key Elements

Data

Infrastructure

Adoption

Applications

Adoption Data

- Obtain detailed “hyper-local” data on access, adoption and applications to identify disparities and target programs.
- Researchers at the University of Illinois and the University of Iowa, polled Chicago residents in all 77 neighborhoods in summer 2008
- Unique in providing neighborhood level data not just on access to Internet infrastructure, but on adoption and use of broadband
- Major findings included:
 - Nearly 40% of residents are disconnected or less-connected to the Internet (lacking home access or broadband connections)
 - Lack of affordability is the most common barrier to use at home
 - Relatively large numbers Chicagoans have used the internet at libraries and community technology centers
 - An overwhelming majority (90%) of residents believe the City should work to increase broadband access through policies and projects

Backbone Infrastructure

- Inexpensively deploy excess conduit when streets are opened for other infrastructure and public works projects
- Incorporate specs for conduit into City and sister agency projects at the design phase, such as:
 - Arterial street reconstruction,
 - Residential street lighting,
 - Traffic signal interconnects, and
 - Tunnels and bridges (key bottlenecks),
- Obtain advanced notice of private utilities' projects from the Office of Underground Coordination
- Make "donated" conduit available for use by government agencies and Internet service providers.

In-Building Infrastructure

- Foster demand for broadband by encouraging construction of “smart buildings” that are ready to connect, through:
 - Vertical cabling standards,
 - Communications room standards,
 - Horizontal cabling, and
 - Rooftop antennae facilities.
- Public Building Commission to use standards for new projects like schools, libraries, police stations, fire houses.
- City agencies also apply standards to community projects, including public housing and energy-efficiency retrofits.
- Partner with NSP2 program in affordable housings
- Incentivize private-sector developers receiving City support to use standards (similar to Green Buildings Program).

Adoption

- Drive broadband adoption through culturally-appropriate outreach, training and equipment programs, touching other four drivers:
 - Affordable hardware
 - Suitable software
 - Training and education
 - Changing mindsets
 - Relevant content
- Provide exposure to technology through resources and training at hundreds of public facilities and community technology centers.
- Identify opportunities to include technology as core offerings or benefits from City human services and education programs.
- Create Digital Excellence Demonstration Communities to serve as incubators for innovative approaches to bridging the digital divide.

Applications

- Leverage ubiquitous broadband to develop innovative products, services and business models that address national priorities:
 - Community and economic development,
 - Education and learning,
 - Energy and environment,
 - Health care delivery and wellness,
 - Public safety, and
 - Transportation.
- Create consortium of academic institutions, private-sector firms, research laboratories, foundations and community based organizations to develop, deploy and scale innovations.
- Leverage research projects to evaluate impact of broadband on key outcomes and share best practices across the country.

Opportunities

- **Information**
Although surveys are invaluable, real-time data on adoption of services would enable better targeting of interventions.
- **Coordination**
Incorporation of broadband (infrastructure and adoption) into other federal grant programs would remove barriers.
- **Funding**
Sustained funding would allow local governments to maximize opportunities for deployment.
- **Applied Research**
Creating innovative deployment techniques, technologies and applications would make the U.S. a leader.