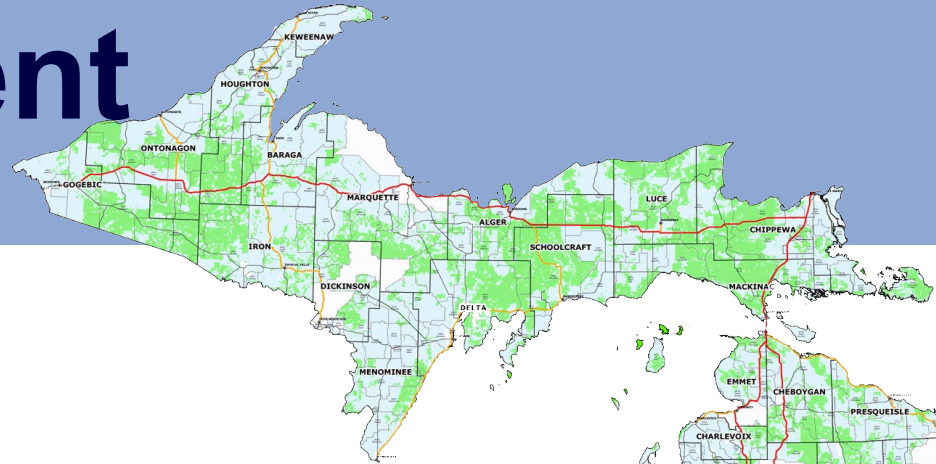
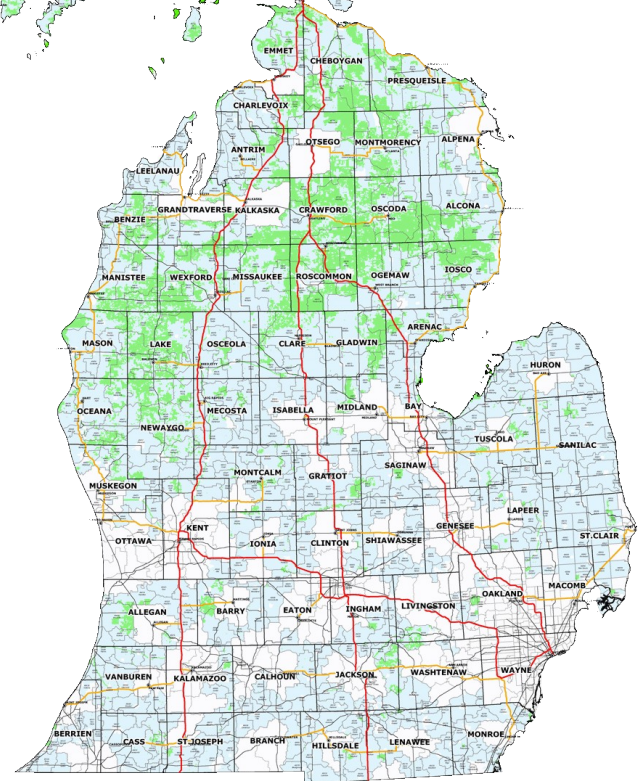


ARRA Broadband Investment



Michigan's Framework May 2009



ARRA Funding

US Dept. of Commerce – National Telecom & Info. Admin.

\$4.7 Billion for Technology Opportunities

- ◆ \$3.9 Billion for Infrastructure Investment
 - ◆ \$200 Million for increasing Computer Center Capacity
 - ◆ \$250 Million for Sustainable Adoption Programs
 - ◆ \$350 Million for Broadband Mapping Activities
-
- ◆ Program guidelines have not been announced



ARRA Funding

US Department of Agriculture – Rural Utilities Service

\$2.5 Billion for the Broadband, Distance Learning and Telemedicine Program

- ◆ Funding for existing loan, grant and loan/grant programs
- ◆ Anticipate majority of funds to be made available for grants
- ◆ Program usually disperses monies directly to providers



***Final grant criteria for these programs is expected in Summer 2009**

ARRA Funding

A Key Moment for Michigan

Michigan's ARRA broadband funding requests total over \$2 Billion for competing projects; pooling these will:

- ◆ Enable statewide investment with long-term benefits
- ◆ Bring broadband to every corner of the state



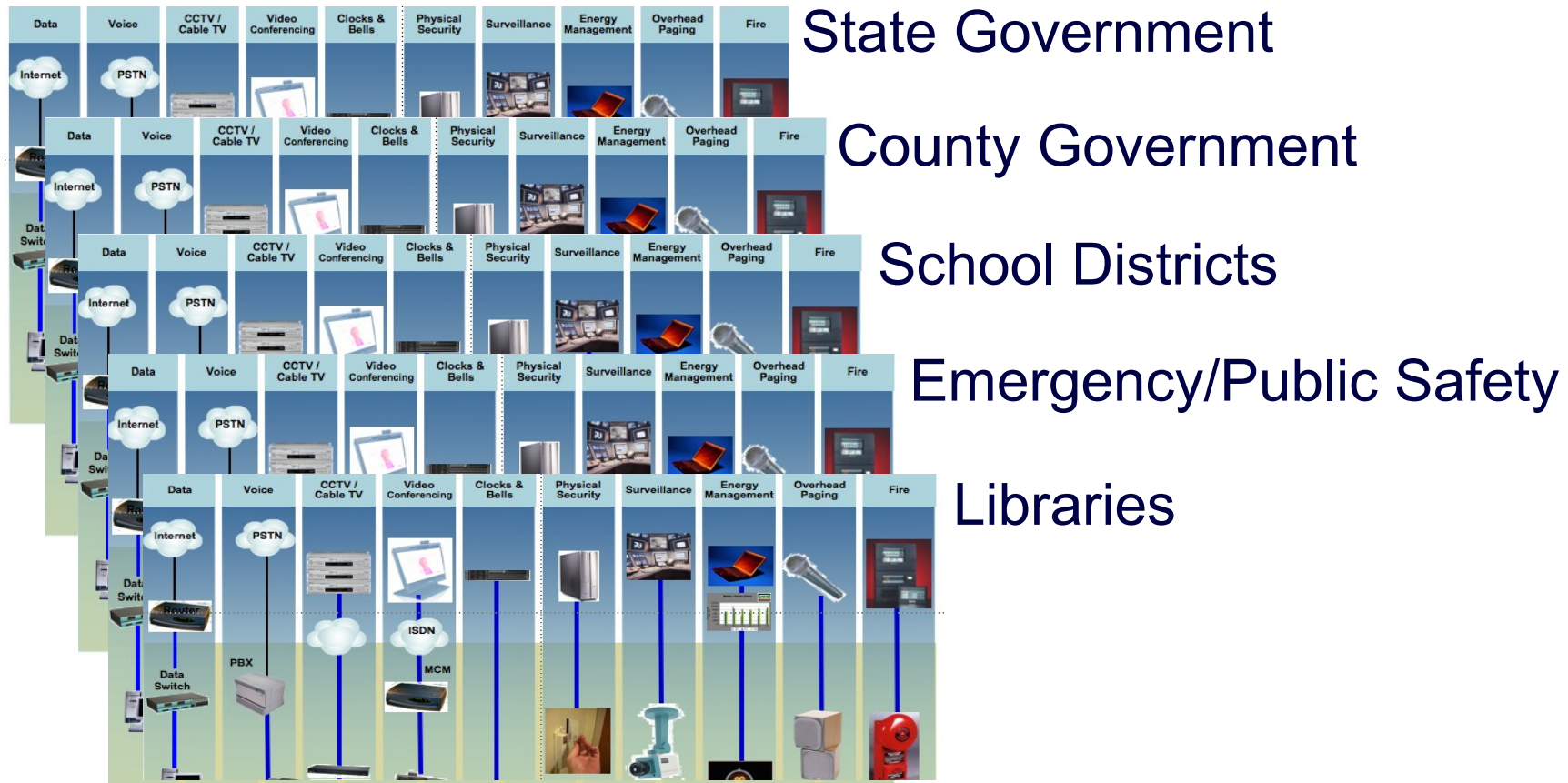
Developing Michigan's Broadband Framework

Statewide Broadband Planning Group developed the framework...

- ◆ State Departments: Information Technology, Education, Transportation, History Arts & Libraries, Community Health, Energy Labor & Economic Growth and the Public Service Commission
- ◆ Others: KPMG, Michigan Public Health Institute, Executive on Loan (Cisco), Michigan State University and Convergent Technologies
- ◆ Consulted with many vendors and local governments
- ◆ Continuing discussions with vendors and local governments

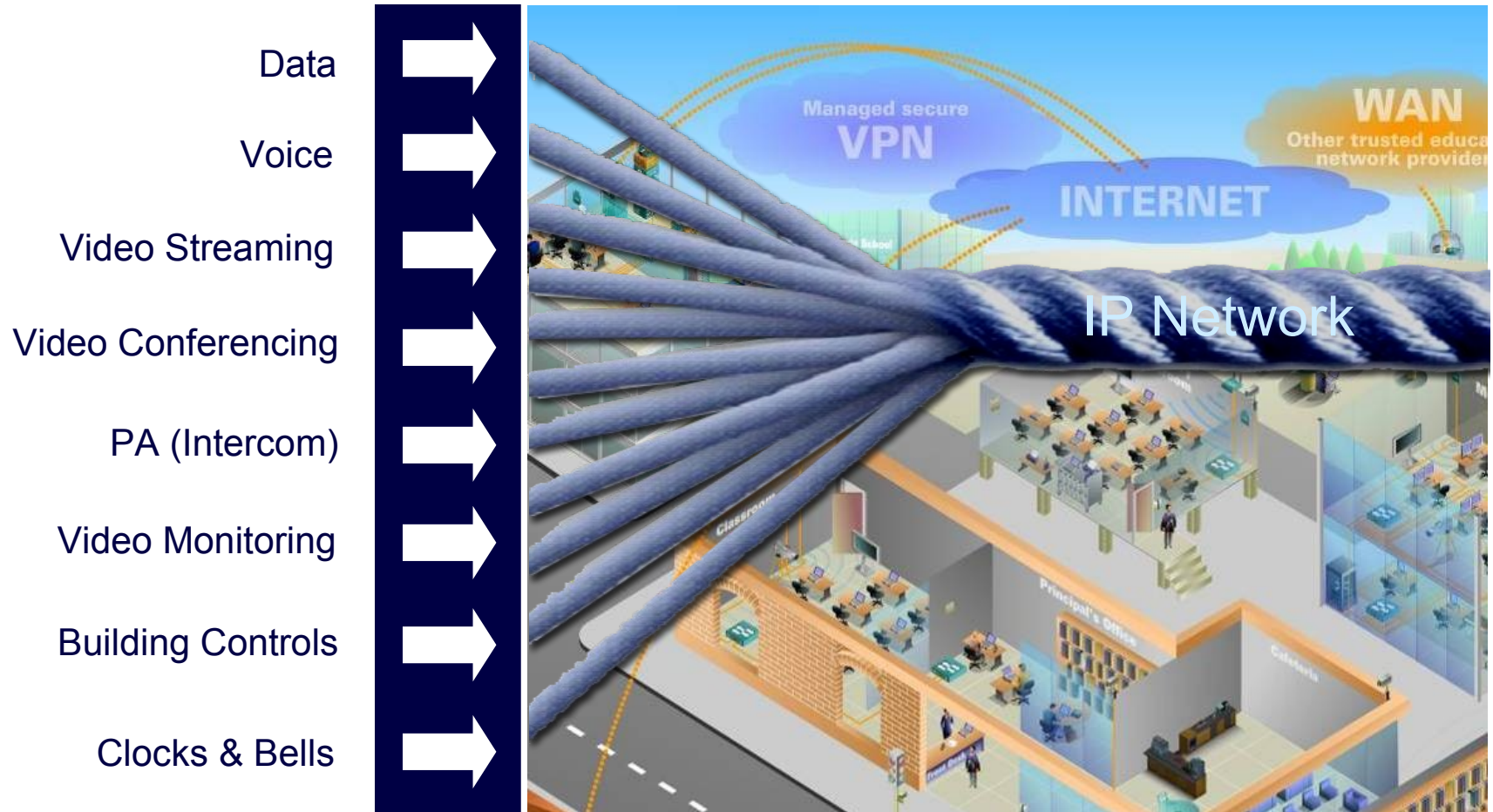


Traditional Deployment Models



Many Independent Networks

The Power of Convergence



Michigan's Statewide Vision

4-3-2-1 Framework

- ◆ 4 Goals
- ◆ 3 Legs
- ◆ 2 Underlying Principles
- ◆ 1 Unified Network for Michigan



Michigan's Statewide Framework

4 Goals

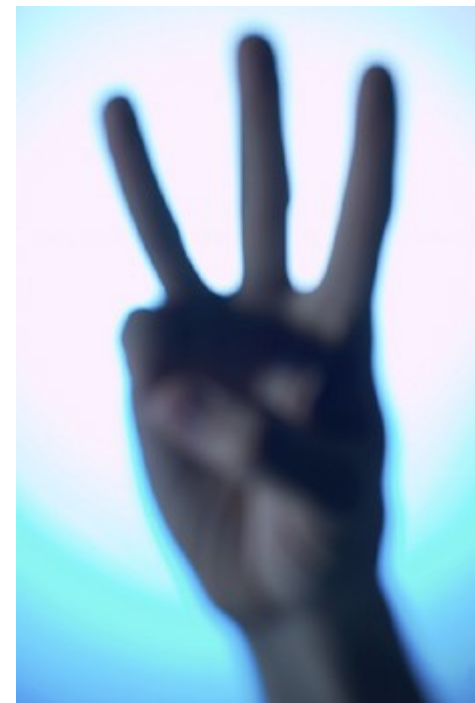
- ◆ **Goal 1**: Expand and upgrade broadband service to unserved/underserved populations across the State
- ◆ **Goal 2**: Transform Michigan's economic competitiveness by making affordable broadband accessible to any business throughout the state
- ◆ **Goal 3**: Ensure a better, more efficient government for the 21st century
- ◆ **Goal 4**: Strengthen Michigan's ability to monitor borders and critical infrastructure



Michigan's Statewide Framework

3 Legs

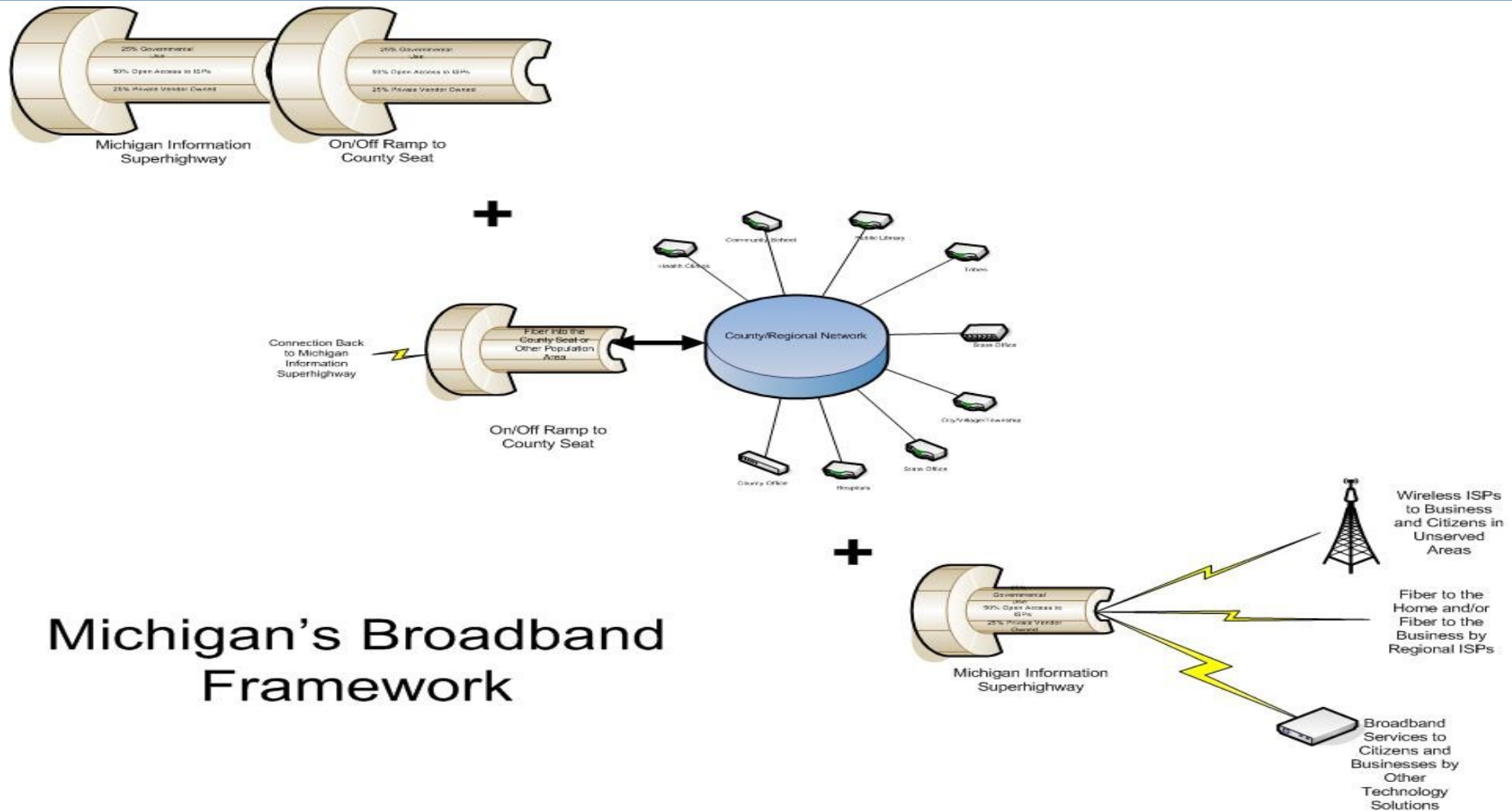
- ◆ **Leg 1: Superhighway & On-/Off-Ramps**
Makes up the Central Core of the Shared Infrastructure for the State of Michigan
- ◆ **Leg 2: Local Networks**
The foundation for regional cooperation and access to the statewide core
- ◆ **Leg 3: Un-served and Under-served**
Assists in providing lower cost access to the individual citizen and business owner, in addition to public entities



***It is the intent to look to the private sector to provide these legs**

Michigan's Broadband Framework

Legs At-a-Glance



Michigan's Broadband Framework



Michigan's Statewide Framework

2 Principles

- ◆ **Principle 1:** Reduce Ongoing Operating Expense (OPEX) while significantly increasing capacity, through Shared infrastructure and services
- ◆ **Principle 2:** Enable carriers/ISP's to increase reach, and enhance service for Michigan businesses and citizens



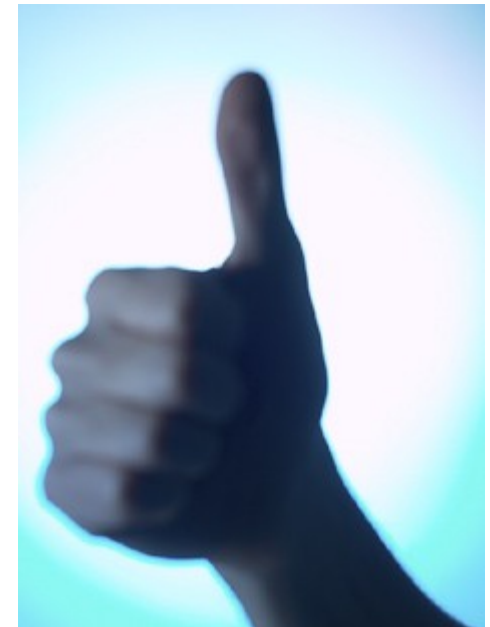
This effort is NOT intended to disable or replace existing services, but enhance carriers/ISP's access to lower cost infrastructure in every corner of the state.

Michigan's Statewide Framework

1 Unified Broadband Vision for Michigan

A single unified broadband vision for Michigan will:

- ◆ Leverage investment through collaboration
- ◆ Reduce recurring costs to ensure network sustainability
- ◆ Utilize the network as a platform to deliver better, more efficient services
- ◆ Enable collaboration and sharing of applications and access to shared services



Benefits Abound



- ◆ Economic development and job creation
- ◆ Better government (State and Local); reduced network and telecom costs and application sharing
- ◆ Educational and administrative application sharing
- ◆ Public access for retraining, small business and employment
- ◆ Greening tools for eCommerce and distance learning
- ◆ Connectivity for unserved/underserved citizens/businesses
- ◆ Health IT, telehealth and telemedicine capabilities
- ◆ Homeland security at border crossings and critical infrastructure across the state's roadways and bridges

ARRA Broadband Investment

What Information Should Communities and Regions be Gathering...



Current Timeline

- ◆ April to June 2009
 - ◆ Develop Framework – Michigan Team
 - ◆ Disseminate Framework to Vendors and Locals for input – Michigan Team
- ◆ Early Summer 2009
 - ◆ First NTIA Notice of Funding Availability expected
 - ◆ Gather needs assessment's from Locals/Regions
- ◆ Summer 2009
 - ◆ Outreach and Grant Guidance Workshops
- ◆ July thru September 2009
 - ◆ Submission of Applications for First Notice
- ◆ Fourth Quarter 2009
 - ◆ First round of award announcements expected

*Timeline based on information as of 6/4/09, subject to change as additional information is received



Timeline Continued...

- ◆ **2010**
 - ◆ Second and Third Notices of Funds Availability
- ◆ **September 30, 2010**
 - ◆ Completion of Grant Awards
- ◆ **September 30, 2012**
 - ◆ Substantial Completion of all Grant Projects
- ◆ **September 30, 2014**
 - ◆ Final Program Audits and Shut-Down

*Timeline based on information as of 6/4/09, subject to change as additional information is received



Information Gathering – Needs Assessment

- ◆ Information is best gathered at the local level
- ◆ Will help shape and determine what areas to invest in across the State
- ◆ What information to be looking for:
 - ◆ Job/economic impact
 - ◆ Broadband coverage levels
 - ◆ Sustainability Model
 - ◆ Ability to stimulate demand

Information Gathering - Jobs

- ◆ Projected Service Provider Direct Jobs:
 - ◆ Immediate (Construction, Electricians, Engineers, etc)
 - ◆ Long term (Maintenance, Network Admin, etc)
- ◆ Potential Business Development and Expansion:
 - ◆ Additional positions as a result of business expansion
 - ◆ Businesses expanding due to Global Economy
 - ◆ Businesses will need to develop new web services and online applications (Potential for new start-ups)
 - ◆ Entrepreneurial and technology opportunities (Home Businesses)
- ◆ List Other Opportunities:
 - ◆ Telecommuting (Work outside major metropolitan areas)
 - ◆ Tourism (“Hot Spots”, online services, tele-working to increase vacation stays)



Information Gathering - Coverage

- ◆ How many unserved homes and businesses will gain the capability to connect to broadband in a given area
- ◆ How many underserved homes and businesses will gain improved broadband connection capabilities in a given area
- ◆ What key access improvements are needed in a given area
 - ◆ Affordability, Speed, QoS, Competition, etc.



Information Gathering – Making the Case for Sustainability

- ◆ Ensuring that a network in your area will be utilized:
 - ◆ Who is at the table in your area
 - ◆ Government, schools, libraries, public safety, hospitals, community collages, public computing centers, etc.
 - ◆ Residents and Businesses
 - ◆ Will you work to increase eGovernment services provided to your businesses and citizens
 - ◆ Examples (permitting, meeting minutes, event planning, etc.)
- ◆ Reducing the initial investment for providers:
 - ◆ Determine Assets Available to Potential Providers
 - ◆ Water towers, antennas, permit efficiencies, letters of support from business and citizens, etc.



Information Gathering - Demand Stimulation

- ◆ Education and training opportunities within your community to learn about broadband
- ◆ What community marketing efforts will take place to increase broadband demand
- ◆ Any move to offer additional community services via the web
 - ◆ Education, commerce, social networking, event planning, permitting, etc.
- ◆ Provide information on citizen and business requests for faster internet connections that have been received

Program Resources

- ◆ NTIA
 - ◆ Web: <http://www.ntia.doc.gov/broadbandgrants/>

- ◆ State of Michigan
 - ◆ Web: <http://www.michigan.gov/recovery>
 - ◆ Email: broadband@michigan.gov
 - ◆ Phone: 517.373.7910 (MDIT)