
The Founding Principles of the Massachusetts Broadband Institute

A Presentation to the MBI Board of Directors

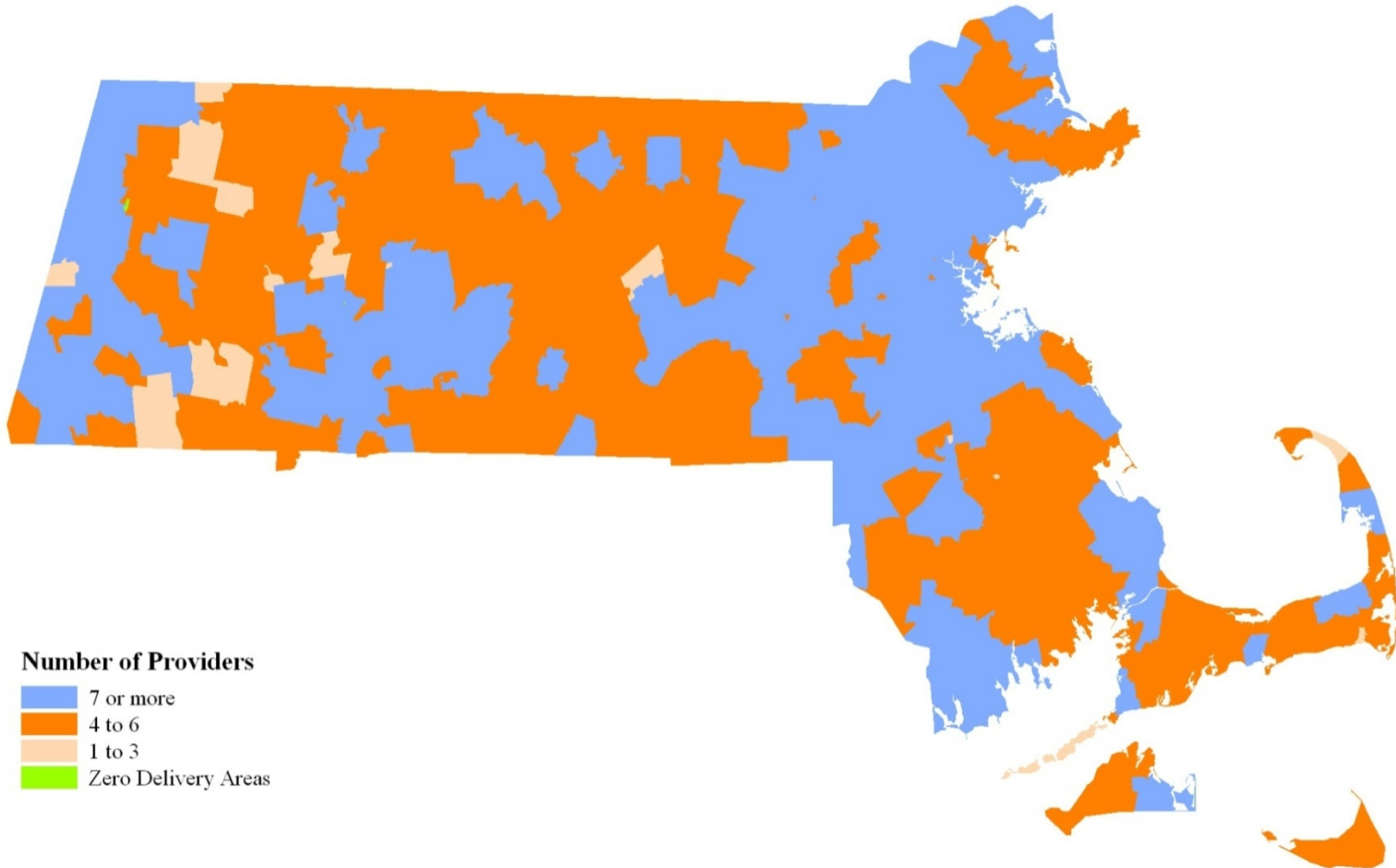
- **Assessment of the Problem**
- **Proposed Solution**
- **Moving Forward**

Broadband is critical to the 21st century economy

- Just the availability of broadband has meaningful impact on key economic metrics including:
 - **Employment** – Broadband added about 1% to the growth rate of jobs between 1998 and 2002
 - **Property Values** – Housing rents were more than 6% higher in 2000 in areas where broadband was available by 1999
 - **Number of Firms** – Broadband added nearly 0.5% to the growth rate of new business establishments from 1998 to 2002
 - **Industry Mix** – Broadband added over 0.5% to the share of establishments in IT-intensive sectors from 1998 to 2002
- **Broadband also enables key services**
 - **Education** – Research, Collaboration
 - **Public Health & Safety** – Disaster Recovery, Communication, Emergency Preparedness
 - **Government Efficiency & Local Democracy** – Centralized Reporting and Management, Community Networking and Collaboration
 - **Special Access** – Seniors, Disabled Persons, and Others

Broadband Fantasy – according to the FCC, it is everywhere...

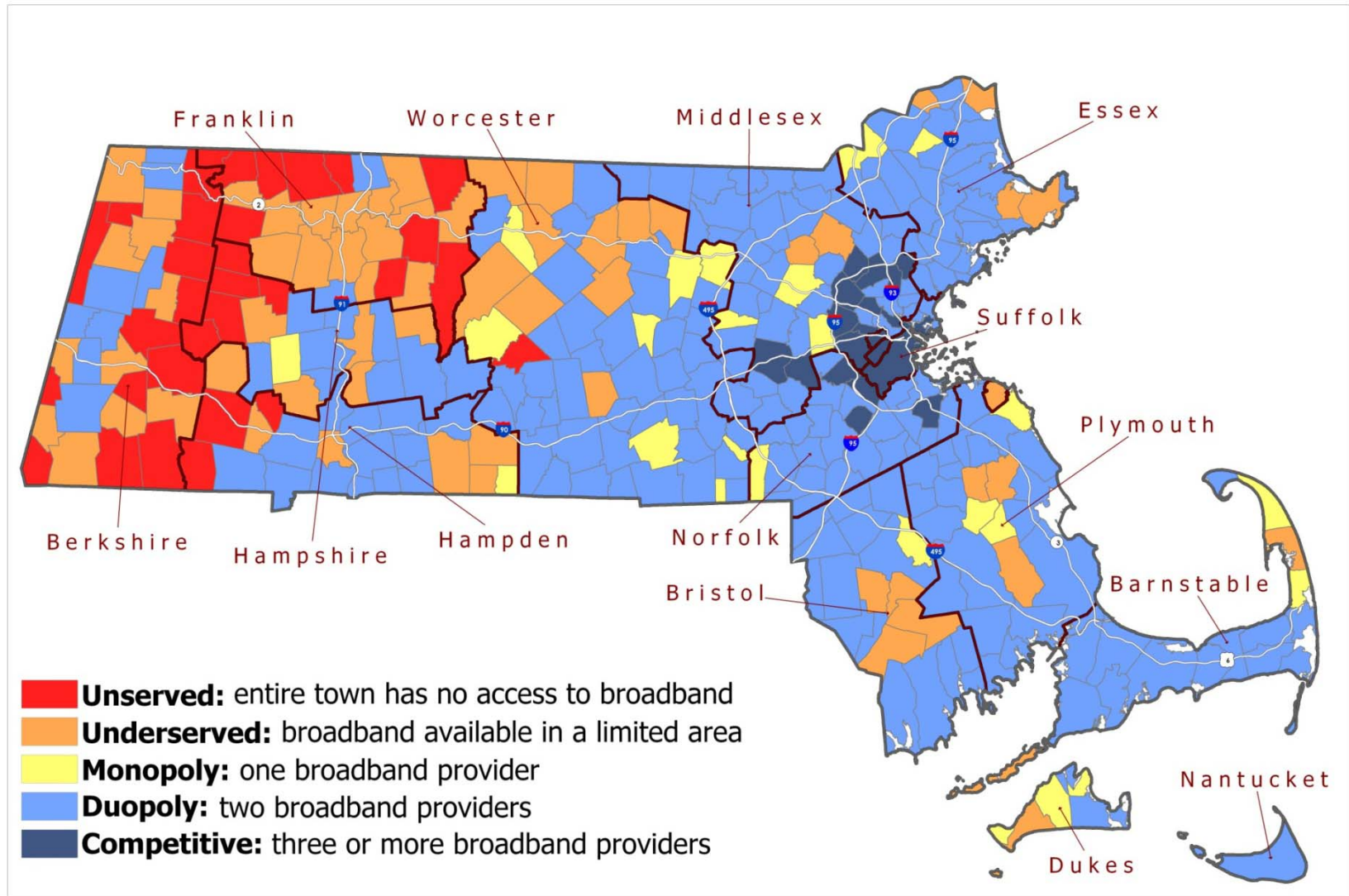
High-Speed Providers by 5-Digit Geographical ZIP Code
(As of June 30, 2006)



Number of Providers

- 7 or more
- 4 to 6
- 1 to 3
- Zero Delivery Areas

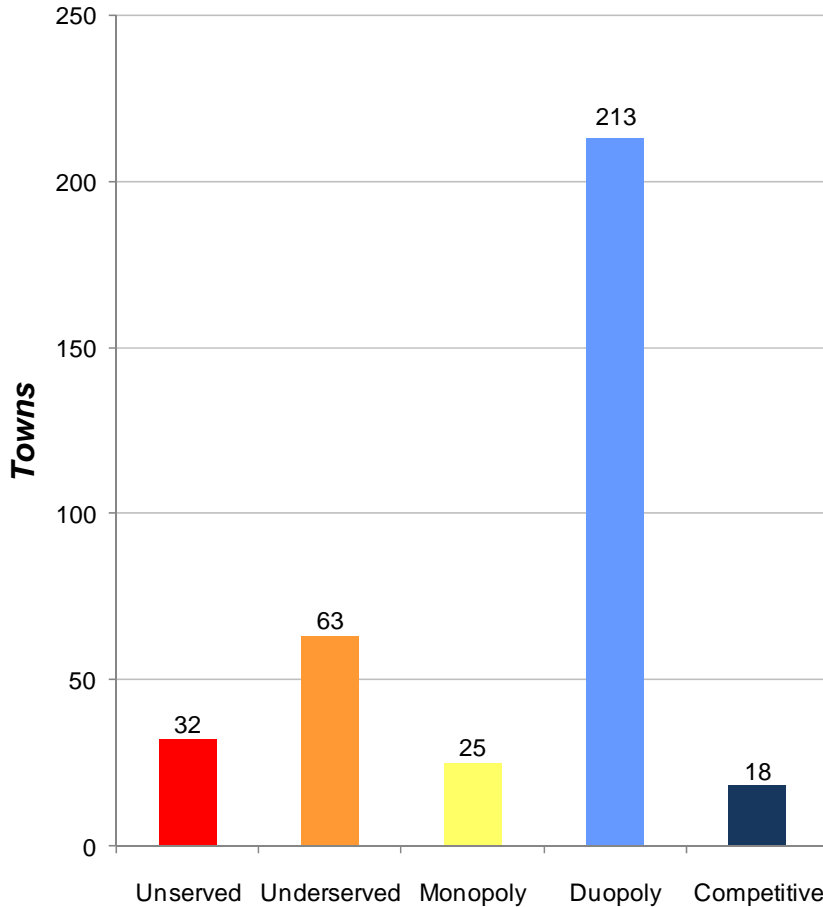
Broadband Reality – large regions of the Commonwealth have NO or LIMITED access



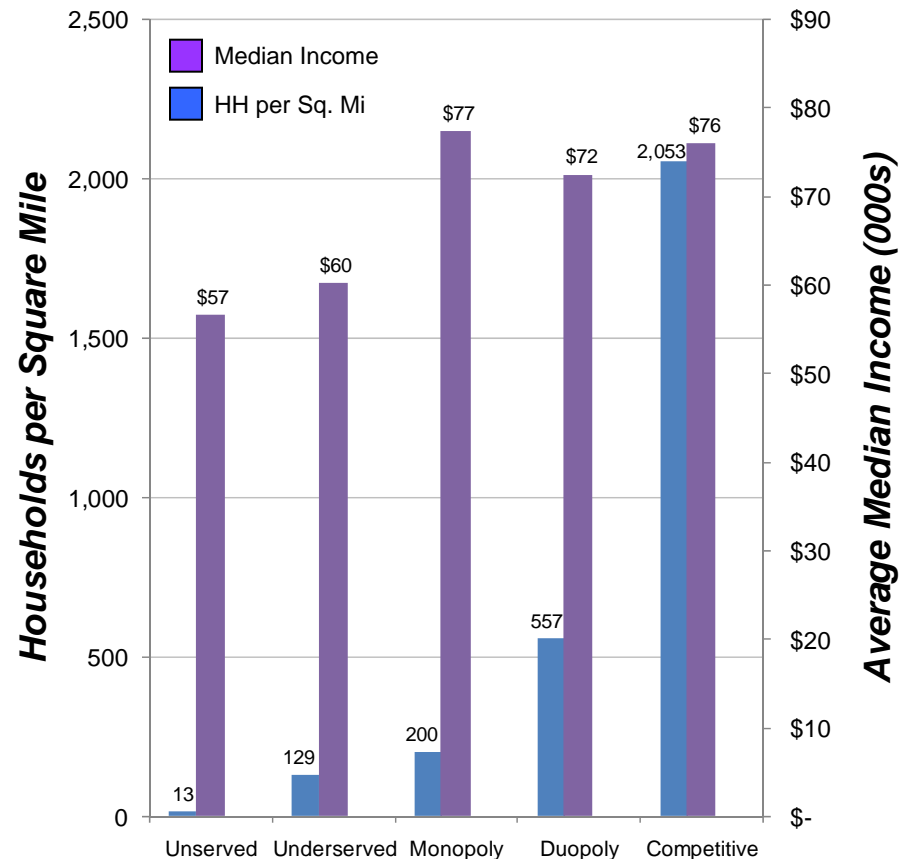
At the time the initiative was developed, 32 towns in MA were completely un-served and only 18 had more than two broadband providers. In general, income and density are highly correlated with increasing competition...

- Even the prospect of public investment is already stimulating private funds. After the bill was filed, Verizon announced plans to deploy DSL service in 22 Western MA towns. VZ has already started providing service in some towns

MA Broadband Availability



BB Adoption by Household Density and Income



The 100% Private Model has failed to provide ubiquitous broadband deployment

- Economics of density drive deployment decisions by providers, keeping companies away from low density areas such as western MA. These low density towns are typically last on the list for deployment and often never deployed
- Several weeks after the MBI legislation was filed, Verizon announced its intention to deploy DSL service in 22 unserved towns by year end
- Detailed financial modeling suggests that a private provider would require roughly 30 years to break even on an investment in Western Massachusetts
- Options for involvement by the Commonwealth
 - Regulate – Broadband is inherently free from state regulations and should remain so to allow free market operation
 - Demand Aggregation – Even with complete demand aggregation, economics in many areas are still untenable
 - Reduce Capital Needs – By contributing capital for deployment, the Commonwealth can reduce breakeven timeframe and incent deployment
- The MBI will take on issues that the private sector cannot address alone, while continuing to allow the private sector the freedom it needs to provide its services in the most competitive manner possible

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The MBI partnership model is innovative, but not untested

- The Commonwealth will not become a broadband network operator
- The Massachusetts Broadband Incentive Fund will invest up to \$40 million in regionally focused, public-private partnerships to increase the availability and quality of broadband
- The fund will take an ownership interest in durable, long-lived broadband infrastructure, such as fiber and wireless towers
- These investments will be a complement to private sector investment, not a substitute for it. A competitive procurement process — open to all industry players, including incumbents — will be used to establish the scale and scope of the necessary partnerships with the private sector
- Universal broadband will support the Commonwealth's leadership nationwide in economic development, accessible government, enhanced education, reliable public safety, and high quality and affordable health care

With its investment, the Commonwealth should seek to achieve the following objectives:

- A robust, affordable broadband infrastructure that reaches all un-served citizens and businesses in western MA.
- Partnerships with one or more private sector service providers that make broadband available at bandwidth and pricing that is consistent with markets in eastern Massachusetts and capable of uniquely positioning the region for enhanced service and bandwidth offerings.
- A network that supports business, residential, and government services.
- A network which is in part or whole available to other commercial providers at wholesale market prices.
- A sustainable business model in which the service provider is able to continually reinvest without the need for additional capital from the Commonwealth.
- Leveraging the greatest amount of additional capital possible, whether private, federal, or other. The Broadband Institute seeks significant private and other public investment to participate alongside its own capital.
- A solution that applies public investment to those elements which align with the Broadband Institute's intent to own long-lived, strategic, and enduring assets.

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MBI operates in three phases: Planning, Investing, Monitoring

–The planning phase has been in process since early 2007

Planning

- Business Plan Formation
 - Articulation of goals, objectives, and governing policies
 - Financial plan
- Organization Formation
 - Staffing – Program Manager, Administrative Coordinator
 - Space
 - Board of Directors
- External Assistance Sourcing
- General RFI Creation
- Identification of Regional Partnerships
- Assessment of Conditions

Investing

- Solicit Interested Parties for Provision of Broadband
 - Cable Companies
 - Phone Companies
 - CLECs
 - Others
- Hold RFP's for Relevant Underserved and Un-served Regions of the Commonwealth
 - Western MA
 - Cape
 - Others
- Negotiation of Financing Terms and Covenants with Winning Bidders

Measuring & Monitoring

- Review Financial Reporting of Financing Recipients
 - Board Of Director Meetings
 - Key Performance Indicators
- Monitor End-user Adoption, Prices, and Complaints
- Measure Other Economic Variables
- Exert Legal Authority over Recipient if Covenants are Broken
- If Need Be, Recover Assets and Manage on Interim Basis
- **Ongoing Operation**

Key Milestones – What’s been done, and what’s to come

Since early 2007, we have accomplished a great deal, including

- Economic Modeling of a Broadband Network in Western, MA
- Beta Testing of Radios
- Survey of Residents in Western, MA
- Preliminary MBI Financial/Operational Budgeting
- Initial Assessment of Procurement Strategies
- Legislative Briefings
- Assessment of Town-Level Broadband Availability
- Legislation Drafting
- Review of BB Deployment Efforts in Other States and Countries
- Developed Initial RFI & Call for Solutions
- Developed and Maintained Extensive Database of Contacts
- Legislation Signed into Law
- Stimulated Private Investment

Looking forward, there are many steps leading up to construction in Western MA

- Staffing – Program Manager, Administrative Coordinator
- Preliminary Budget Development
- Board Formation & First Meeting
- Bylaws and Budget Approval
- Call for Solutions Issuance
- Director Hire
- Call for Solutions Response Review
- Budgeting and Plan for A&F
- Broadband Availability Data Review and Analysis
- RFP Development
- RFP Issuance
- RFP Response Review
- Final Bids
- Contract Negotiation
- Partial/Complete Funding
- Construction