

Massachusetts Broadband Incentive Fund

Briefing Document

BROADBAND AVAILABILITY is a critical factor of economic development to stimulate commerce and increase job creation. Access to high-speed Internet is comparable in significance and economic potential to universal telephone service and the electrification of rural America in the 1930s. In today's world, any individual or community without broadband access is educationally and economically disadvantaged.

The Patrick Administration's overarching broadband policy seeks "to achieve the deployment of fast, affordable and ubiquitous broadband access for every citizen of the Commonwealth by 2010."

To implement this policy, the Patrick Administration is pursuing the following goals:

1. Address conditions for broadband access in Massachusetts communities that are un-served (no access);
2. Ensure robust broadband access for essential state and local governmental services including public safety, health, education and others;
3. Promote increased competition for broadband access and related services; and
4. Create conditions that will encourage economic competitiveness and growth.

These goals can best be addressed by making strategic, phased investments in broadband infrastructure within the Commonwealth in order to promote vibrant markets for communications services. Publicly funded investments will be made in a way that leverages significant private sector investment as well as utilizing public funds (including federal programs). These combined investments will catalyze significant deployment of broadband in areas currently unserved.

Initial public investment will be targeted to address the unserved communities throughout the Commonwealth. The most egregious situation is in Western Massachusetts, where a 2007 study detailed that out of 101 municipalities, 31 have no broadband and another 35 have limited broadband coverage. These unserved and underserved communities cannot participate fully in the state's economy, let alone in the government functions now done online.

To create the necessary infrastructure to achieve the deployment of fast, affordable and ubiquitous broadband access in Western Massachusetts, the Patrick Administration is recommending the establishment of a **Massachusetts Broadband Incentive Fund**, capitalized by the issuance of a general obligation broadband bond.

This Fund will be managed by the **Massachusetts Broadband Institute**, established simultaneously with the Massachusetts Broadband Incentive Fund and operated as a division within the Massachusetts Technology Collaborative.

Working in close collaboration with the Executive Office of Administration and Finance and the Executive Office of Housing and Economic Development, the Broadband Institute will provide

expertise and ensure that its investments leverage other sources of public and private funds, especially private sector capital.

Broadband Incentive Funds will be invested using unique public/private sector partnerships. The Commonwealth will neither build nor operate broadband networks. Open and transparent procurement processes will reveal the amount of public investment required to incentivize private sector investment. All private sector providers, including existing broadband operators, will be encouraged to compete for public funds.

The Commonwealth will invest in long-lived assets, such as fiber and towers, while the private sector will invest in emerging technologies, such as wireless devices, which evolve as the federal government allocates new spectrum. The Broadband Institute would focus the use of public monies to enduring assets whose useful life expectancy – like that of roads and bridges – would be measured in decades not years.

The winning private sector providers will have access to customer revenues on the network. In exchange, they will be responsible for the design, build-out, and operation of broadband infrastructure under standards established and enforced by the Broadband Institute. These private providers will also maintain the infrastructure and provide services to end-users. The Commonwealth will maintain title ownership to all broadband assets acquired or constructed with support of the Broadband Incentive Fund.

The Broadband Institute will strive to create carrier-neutral networks, in which public funds are utilized to build wholesale transport networks. One network could create multiple competitors, and by implementing a platform that opens the network value chain to all retail broadband providers equally on the network, the Commonwealth will introduce the most competition possible with a single investment.

MTC's Broadband Institute will work in close collaboration with regional non-profit broadband advocacy organizations in Western Massachusetts (*e.g.*, Pioneer Valley Connect and Berkshire Connect) to secure the necessary public support and to establish outcome standards for improved broadband connectivity in discrete regions throughout the Commonwealth. The Broadband Institute will achieve these outcomes through competitive procurement processes.

Empirical evidence has shown that the mere presence of broadband increases the growth rate of jobs by as much as 30 percent. In Western Massachusetts, for example, broadband availability could create roughly 5,000 jobs over the next 10 years. Each incremental job generates roughly \$7,000 in direct annual tax revenue and up to \$1.2 million in indirect (sales tax, real estate tax, trickle down spending, etc.) annual tax revenue to the Commonwealth. In total, the investment in Western Massachusetts alone could generate over \$163 million in incremental direct tax revenue over the next 10 years.

The initial public investment in Western Massachusetts through the Massachusetts Broadband Incentive Fund will serve to inform potential future investments in other regions of the Commonwealth – with the acknowledgement that there is not a single solution that will be applicable for every region of Massachusetts.

Access to high-speed Internet will allow Massachusetts to more effectively compete in the global economy. This public investment in infrastructure in Western Massachusetts will attract significant external investment such that all unserved communities have suitable broadband access. With increased access to affordable broadband, the Commonwealth will be shaping a regional economic infrastructure that is more adaptable to the needs of small businesses and more attractive to large companies. Individuals will be able to more easily telecommute for work or start a business from home – employment that is not possible without broadband access. Additionally, companies will be more likely to expand throughout or relocate into a Commonwealth that has robust broadband access everywhere.

Achieving broadband connectivity through the Commonwealth's public/private partnership approach provides the greatest opportunities for a robust, statewide telecommunications infrastructure in Massachusetts that will ensure the greatest gains toward (i) affordable access; (ii) educational attainments; (iii) improved public safety, including emergency and Homeland Security services; (iv) efficient administration of municipal and other governmental services; (v) and economic development.

High-speed Internet access is an essential tool for all levels of education from K-12 fundamentals, to higher education and research collaboration, to workforce training and development. Available broadband access statewide will enable the Commonwealth to move forward and facilitate citizen participation in government, economic development, and the economic renaissance of our cities and towns. Ubiquitous broadband is a necessity for the well-being and development of the Commonwealth's citizenry and economy.

The primary purpose and responsibility of the Massachusetts Broadband Institute is to invest in broadband infrastructure that addresses the needs identified above. Working in close collaboration with regional broadband organizations and coalitions along with the private sector, the Broadband Institute will use public capital as the means to catalyze sustainable marketplace solutions.

The Broadband Institute will make investments within clearly defined investment criteria. By directing resources according to a regional scope, rather than within single municipalities, the Broadband Institute will be able to aggregate market demand, achieve economies of scale and improve the business conditions for private sector investment and participation.

Operating Principles: The Massachusetts Broadband Institute will incorporate the following operating principles:

- In placing investments, the Broadband Institute will consider a number of investment criteria including sustainability of business model, technical risk, end-user service (price and speed), and level of private investment;
- To achieve additional economies of scale, the Broadband Institute will identify areas where leverage or utilization of public facilities, such as fiber, rights of way, buildings and other real property, can result in increased private investment and reduced barriers of entry for the deployment of broadband infrastructure;
- The Broadband Institute will prioritize investment in infrastructure that is operated in a wholesale, carrier neutral manner, thereby allowing access to many service providers and competitors by means of only a single network;
- The Broadband Institute will fund the construction of enduring infrastructure assets, such as fiber or towers that have a ten-year or longer lifetime; and
- The Broadband Institute will prioritize a set of investment criteria that ensures access is provided to the most unserved areas of the Commonwealth.

Timeline

Fall 2007	Bond Bill approved to create the Massachusetts Broadband Incentive Fund (BIF) within the newly formed Massachusetts Broadband Institute (BI)
Winter 07-08	<ul style="list-style-type: none"> • BI legally organized • BI board appointed • BI staff organized
Spring 2008	<ul style="list-style-type: none"> • BI business plan approved • Investment criteria finalized • Initial BIF solicitation issued
Summer 2008	<ul style="list-style-type: none"> • BI selects recipients of initial investments • BI conducts negotiations and issues contracts
Fall 2008	<ul style="list-style-type: none"> • Initial deployment of broadband infrastructure proceeds in Western MA
Fall 2009	<ul style="list-style-type: none"> • Infrastructure deployment completed in highest priority areas
Winter 09-10	<ul style="list-style-type: none"> • Evaluation and assessment of initial investments

Where to go for more information

	PHASE 1: Pre-passage of legislation	PHASE 2: Post-passage of legislation
Department of Telecommunications and Cable AND Executive Office of Housing and Economic Development (EOHED)	<ul style="list-style-type: none">• <u>Meetings</u> – Coordinates and meets with any private sector company that would like further information• <u>Communications</u> – Can discuss proposed framework and content of legislation as filed on 10/18/07	<ul style="list-style-type: none">• <u>Board Role</u> – Would serve on governing board of Massachusetts Broadband Institute (MBI)• <u>Communication</u> – The primary point of contact for MBI-related communications will be MTC in consultation with EOHED
Massachusetts Technology Collaborative's John Adams Innovation Institute (MTC)	<ul style="list-style-type: none">• <u>Materials</u> – Provides the latest materials to any interested party. Maintains contact database• <u>Outreach</u> – Organizes forums and outreach at the direction of EOHED	<ul style="list-style-type: none">• <u>Organization</u> – As currently contemplated by the legislation, MBI will be created as a part of MTC• <u>Meetings</u> – MBI will convene forums and meetings consistent with MBI mission and State law• <u>Communications</u> – Will keep all stakeholders informed of developments and solicitations