

Massachusetts Department of Telecommunications and Cable

Commissioner Karen Charles

April 17, 2023



SHOW ME THE MONEY

How Massachusetts is Closing the Broadband Gap By Using State and Federal Funds and Why That May Not Be Enough

New Mexico State University
Center for Public Utilities Advisory Committee
Current Issues Presentation



A Brief History



Massachusetts Governors

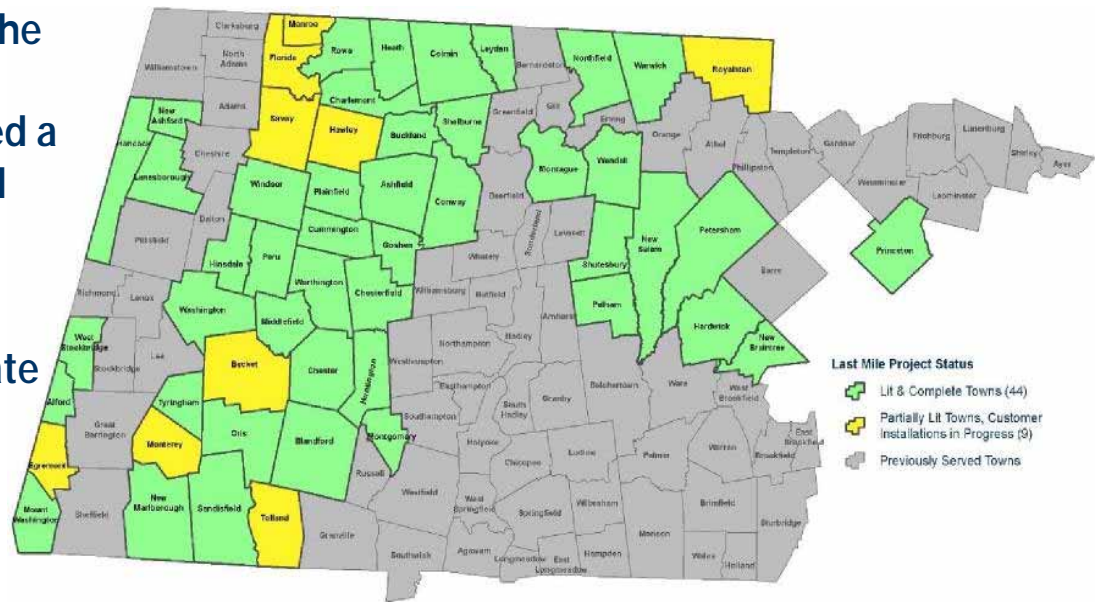
Governor	Tenure	State Funds	Federal Funds
Deval Patrick	2007 – 2015	\$40 million	\$45 million
Charlie Baker	2015 – 2023	\$40 million	\$96 million
Maura Healey	2023 –	\$10 million	\$100 million



Governor Patrick



- In 2007, the Patrick administration's focus on broadband connectivity resulted in the creation of Massachusetts Broadband Institute (MBI) and DTC. This established a dedicated budget to address broadband connectivity in Western MA
- First effort: Building the middle mile. Governor Patrick used \$40 million in state dollars + \$45 million in federal dollars/Broadband Technology Opportunity Program (BTOP)



- 2009-2014: The administration started a State Broadband Initiative to collect and map broadband service availability across the state (by 2009 we had identified 53 towns with no broadband access)
- 2014: Completed the middle mile project. The middle mile network stretches across 120 MA communities/1200 miles of fiber. We were hopeful that last mile connections would follow. **That didn't happen.**



Governor Baker



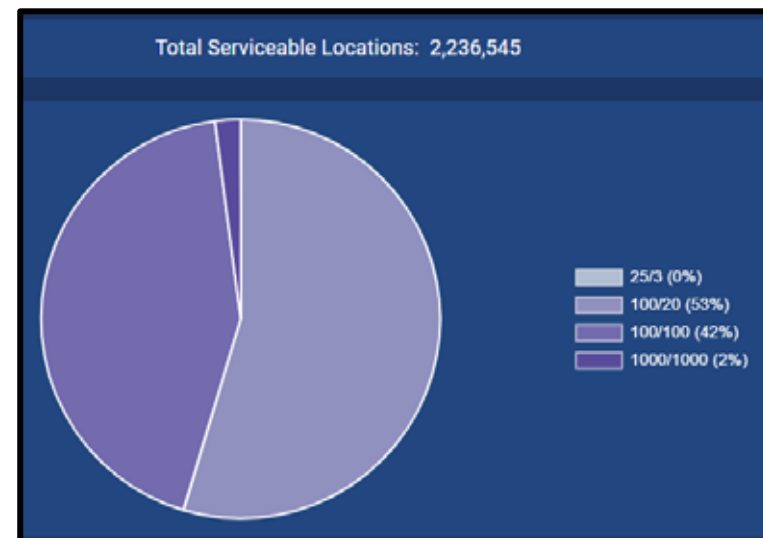
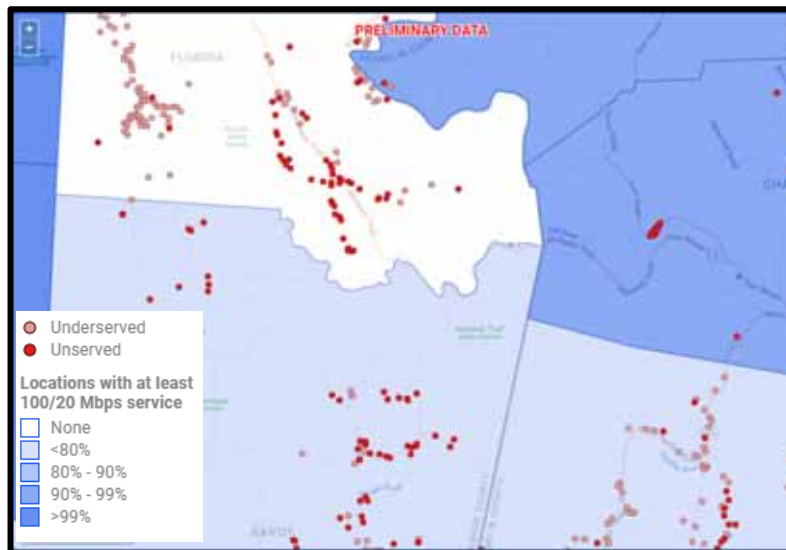
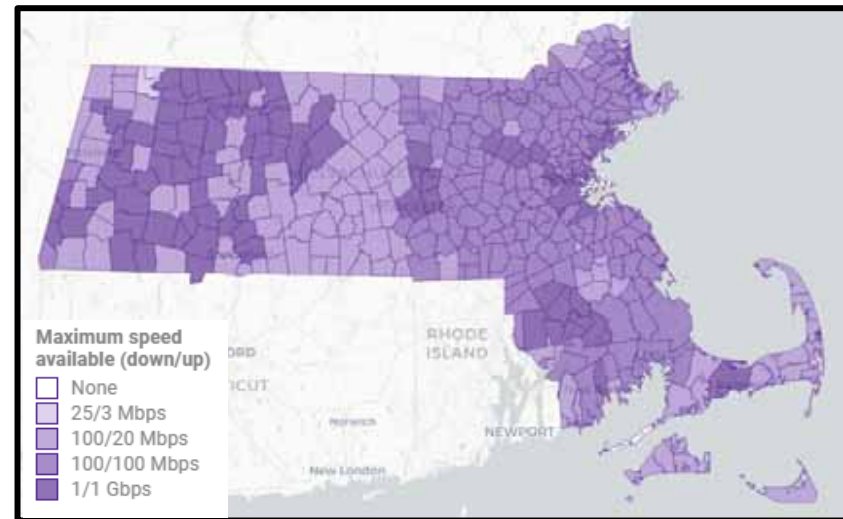
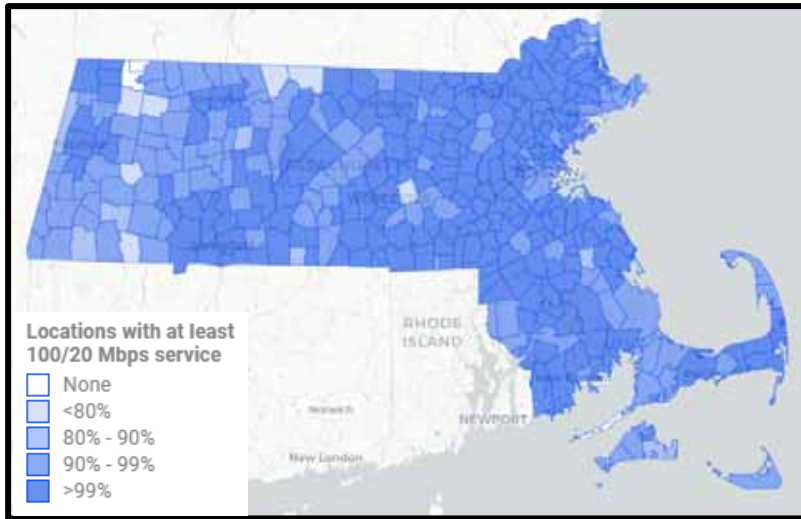
- **2016: As a result of no takers, the Baker administration launched a new last mile project**
- **The new last mile project used a combination of public-private partnership funds, federal, state and municipal funding; and left decision making authority to municipalities**
- **As of February 2023, 46 of 53 Last Mile towns have networks that are fully operational. The remaining seven towns have networks that are partially operational. This program is winding down and will be completed in FY24**



- **The state will use federal funds to close the final broadband availability service gaps in cities and towns**
- **Statewide Broadband Map**
 - **Purpose:**
 - Supporting federally funded infrastructure and digital equity programs
 - Supporting state BEAD challenge process
 - Leveraging state and local information
 - **State Data Collection and Mapping Process:** MBI began an effort to continue to identify gaps in physical infrastructure and/or deficiencies in reliability and quality of service



Governor Healey





■ Challenges Filed with FCC

- **1st Round of Fabric Challenges:** MBI submitted 5,695 challenges to add missing broadband serviceable locations to the FCC National Broadband Map. 4,362 (77%) of those were included in the 2nd version of the Fabric released 12/31/22
- **2nd Round of Fabric Challenges:** MBI has filed 4,288 pending new and resubmitted challenges to add missing broadband serviceable locations and address other location inaccuracies
- **1st Round of Availability Challenges:** MBI has submitted 1,907 challenges to identify locations that are mistakenly listed as served or underserved. 1,896 (99%) have been accepted and the remaining are pending review



Massachusetts Broadband Initiative



- The Executive Office of Economic Development (EOED) works with Mass Technology Collaborative's Mass Broadband Institute (MBI) to implement and oversee all Broadband and Digital Equity initiatives
- Since 2013, the state has invested over \$100M in broadband infrastructure in central and western Massachusetts, providing service to nearly 26,000 premises
- Over \$260M of federal funding is already committed to the state. Most programs using these funds are open and accepting applications, or will open soon. Funding will be allocated to projects by the end of 2024 and spent by 2026



Massachusetts Broadband Initiative (cont'd)



- We expect an additional \$100M from the federal infrastructure bill to be allocated to Massachusetts, with \$6M already released for broadband and digital equity planning
- Additional funding beyond the \$100M will also come to Massachusetts by a formula based off unserved locations identified through FCC maps, which is currently in process
- Additional funding for digital equity capacity grants will also be allocated



Federal Broadband Funding



- With the passage of the Infrastructure Investment and Jobs Act (IIJA), the Bipartisan Infrastructure Law includes a historic \$65 billion investment to expand affordable and reliable high-speed Internet access in communities across the U.S.
- Public engagement is critical to ensuring that allocation of these funds is targeted in the right direction



Overview of Recent State and Federal Funds for Broadband



Infrastructure – \$286.6M

State Capital Budget

- Middle Mile Maintenance - **\$6.5M**
- Last Mile Programs - **\$4.1M**

Federal Planning & Research Grant

Statewide broadband data collection and mapping to identify communities with gaps in physical infrastructure and/or quality of service deficiencies.

\$1M

Federal Capital Projects Fund (CPF)

- Broadband Infrastructure Grant Program
- Residential Internet Audit and Upgrade Program

\$175M

Federal Infrastructure Investments & Jobs Act (IIJA)

Broadband Equity, Access, and Deployment (BEAD) Program: \$100M (with additional funds to be allocated)

\$100M+

Digital Equity – \$84.2M

Federal CARES Act Funding

- Mass Internet Connect
- WiFi Hotspots in Last Mile Towns
- WiFi Hotspots/Digital Equity Programs in Gateway Cities

\$9.2M

Federal ARPA

- Digital Equity Partnerships Program
 - Municipal Digital Equity Planning Program
- \$50M Initial Authorization + \$25M Additional Funding**

Federal Infrastructure Investments & Jobs Act (IIJA)

- Digital Equity Act: Planning and Implementation
 - Affordable Connectivity Program (ACP)
- The Commonwealth is waiting for the NTIA to release rules for the Planning and Implementation Grants**



Broadband Barriers



MASS LIVE

Boston

Four Massachusetts mayors highlight internet access as one of the issues seen during the COVID pandemic

Updated: Jun. 15, 2021, 1:55 p.m. | Published: Jun. 15, 2021, 1:55 p.m.

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BUSINESS

Broadband internet proves a hurdle as telehealth services continue to rise in popularity

Haley Chi-Sing Boston University Statehouse Program

Published 5:35 a.m. ET Jan. 2, 2022

Significant portions of city neighborhoods in Mass. lack internet access

More than half of homes in Chelsea, Fall River, and Springfield lack reliable broadband access.

By Jon Chesto Globe Staff. Updated June 29, 2022, 12:01 a.m.



Home / Local Coverage

CORONAVIRUS COVERAGE



When Your Remote Classroom Is Your Car: How Some Rural Students Without Broadband Are Connecting

03:42





Broadband Barriers



Affordability

- Over 200,000 households in Massachusetts are unable to afford broadband (Source: BCG analysis of ACS 2021 data)
- 3% of Massachusetts households earning more than \$75K report not having a home internet connection. This number jumps to 15% for households earning between \$20K and \$75K (Source: 5-year 2021 ACS data)
- For families that can't afford broadband, factors such as trust, awareness and understanding have contributed to a low enrollment rate in the Affordable Connectivity Program (23% in Massachusetts vs. the national average of 29%) (Source: Education Superhighway)



Broadband Barriers (cont'd)



Lack of access to devices

- Over 450,000 households (16.5%) in Massachusetts do not have a computer (Source: BCG analysis of ACS 2021 data)

Digital literacy

- Approximately 25% of unemployed job seekers receiving support through Mass Internet Connect requested digital literacy support
- Approximately 14,000 Gateway City households with school-age children have at least one adult who may need digital literacy support (source: MassINC)

Disparities among underserved populations

- In Massachusetts, individuals in majority black communities have a home broadband adoption rate of 69.6% vs. 80.9% of individuals in majority white neighborhoods (Source: 5-year 2021 ACS data)



Factors Impacting Digital Access



Connection

**Fast
Affordable**



Adequate Device

**Router
Personal Computer /Laptop**



Literacy

**Use of Technology
Ensuring functioning equipment
Evaluating quality of information and privacy risks**

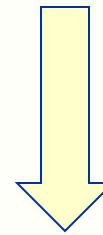


Building on Existing Partnerships



- Building capacity and coordination opportunities among stakeholders is critical to closing the digital divide
- Enable effective and scalable implementation programs, facilitated by expert partners
- Support flow of information and engagement in Digital Equity Act and BEAD planning
- Set the stage for future digital equity initiatives emerging from IJA planning activities

Builds on lessons learned from digital equity initiatives launched in response to COVID pandemic.



Mass Internet Connect

Partnership with MassHire to address technology barriers of unemployed job seekers, resulting to date in 961 customers referred for internet subsidies, distributed 10,442 Chromebooks, and referred 2,840 customers to digital literacy resources.



Digital Equity Partnership Program



MBI is partnering with 10 - 15 organizations to join the Digital Equity Partnership Program to support the deployment of 6 initiatives

Once selected as partners, these entities will have:

- fiduciary and technical responsibilities associated with executing the grant funding
- access to resources designed to build capacity and expertise in digital equity implementation activities

The 6 program areas specifically correspond to one or multiple key elements of digital equity



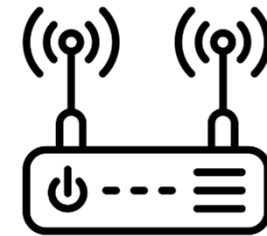
WiFi Access



Connectivity for Economic Hardship



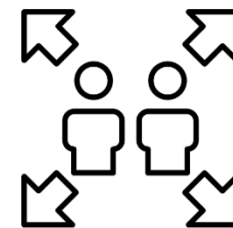
Public Space Internet Modernization



Device Distribution and Refurbishment



Digital Literacy



Education, Outreach, and Adoption

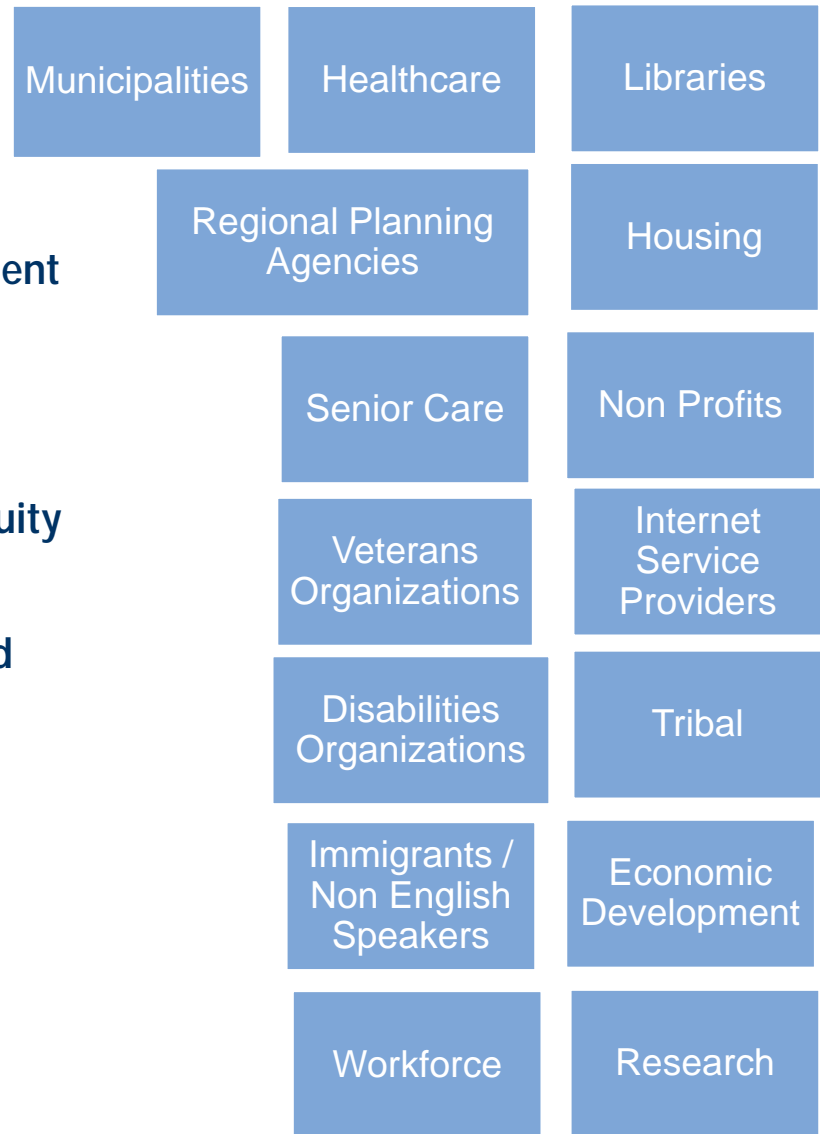


Engagement with Community Organizations



March 8, 2023 Kick-Off Meeting: Creation of Broadband and Digital Equity Working Group

- Advise on state deliverables and initiatives:
 - Digital Equity Plan and 5-Year Action Plan
 - Broadband and Digital Equity Ecosystem Development
 - Workforce Development
 - Additional opportunities, including federal funding
- Collaboratively develop a unified vision for Digital Equity and action steps towards implementing that vision
- Support the implementation of broadband access and quality of service initiatives
- Provide representation of un/underrepresented communities and full diverse scope of the Commonwealth, including geographic, urban/rural, race, gender
- Empower trusted community based organizations to deliver services in a culturally competent manner





Informing and Supporting the Public on ACP Benefits



The Affordable Connectivity Program (ACP) is a Federal Communications Commission benefit program that helps low-income households pay for broadband service and connected internet devices

Eligible households can receive:



\$30 Standard Discount

Up to \$30/month discount for broadband services



\$75 Tribal Discount

Up to \$75/month discount for broadband services for households on qualifying Tribal lands



Device Discount

A one-time discount of up to \$100 for a laptop, desktop computer, or tablet (consumer co-pay of \$10-\$50 required)

ACP benefit is limited to one monthly service discount and one device discount per household



Informing and Supporting the Public on ACP Benefits (cont'd)

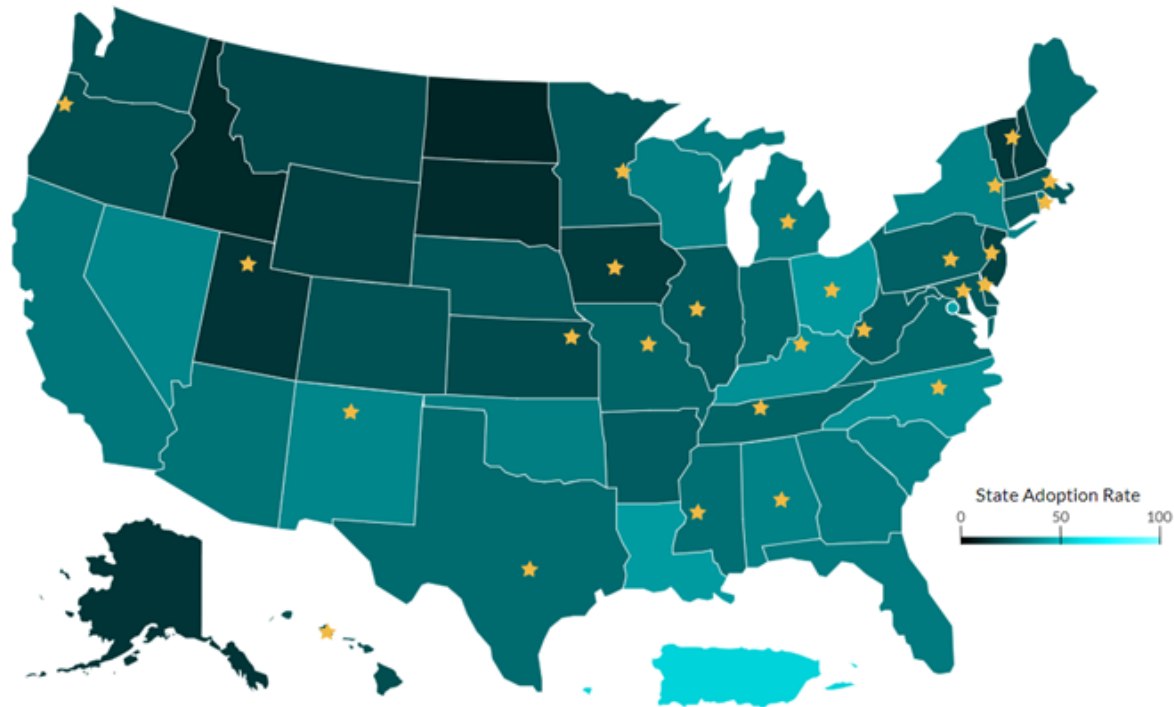


51.6M

ACP-ELIGIBLE
HOUSEHOLDS

17.3M

ENROLLED IN ACP



★ Governor has made ACP adoption a priority.



Informing and Supporting the Public on ACP Benefits (cont'd)



ACP Subscribers by Verification

Method of Verification	Massachusetts	United States
Lifeline	66,920 (25.6%)	5,094,701 (30.9%)
National Verifier Application	157,063 (60.2%)	7,141,726 (43.3%)
Alternative Verification Process	36,772 (14.1%)	4,246,547 (25.7%)
Verified by School Lunch Program	15 (0.01%)	5,786 (0.04%)
Total	260,770 (100%)	16,488,760 (100%)

As of February 2023

Source: USAC.org



Informing and Supporting the Public on ACP Benefits (cont'd)



- More than half of ACP subscribers are applying their benefit to mobile broadband

ACP Subscribers by Service Type (United States)

Service Type	Total Subscribers	% of Total
Mobile Broadband	8,838,957	53.6%
Fixed Broadband (cable, DSL, fiber)	7,505,159	45.5%
Fixed Wireless or Satellite	144,644	0.9%
Total	16,488,760	100%

Source: USAC.org



Informing and Supporting the Public on ACP Benefits (cont'd)



Areas for Improvement

- **Confusion about Application of ACP Benefits**
 - **Subscribers may unintentionally be combining ACP and Lifeline benefits for a wireless plan instead of splitting benefits (Lifeline for wireless plan, and ACP for fixed broadband)**
 - **Subscribers may find the application process for Lifeline and for ACP indistinguishable**



Show Me The Money



In Closing...

- \$85 million spent under Patrick
- \$136 million spent under Baker
- \$110 million to be spent under Healey

...At least \$331 million dollars will be spent in Massachusetts to close the broadband gap

At the end of the day: Will everyone be connected?

We hope so.