

MILTON MUNICIPAL BROADBAND INITIATIVE

**RECOMMENDATION FOR A
COMMITTEE TO EXPLORE A
MUNICIPAL BROADBAND NETWORK**

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WHO WE ARE

- **Joe Chamberlin**
131 Clapp Street
- **Mike Zullas**
69 Fairbanks Road
- **Representing neighbors interested in higher quality & less expensive internet for Town government and residents.**

Milton Municipal Broadband Initiative

The Milton Municipal Broadband Initiative seeks to energize residents, Town government, businesses, and non-profits about the possibility of improving and updating our broadband network, with the following goals for all users:

- Lower costs
- Improved speed and capacity
- Improved service
- Capability for open-access to multiple internet service providers
- Net-neutrality, so that content is not tiered, blocked or bundled

The Problem – Comcast Internet

Comcast is the primary internet service provider (ISP) in Milton today, for both Town government (I-Net) and residential subscribers. Comcast's near monopoly results in the following:

- High prices
- Subpar speed and capacity
- Subpar service
- Limited choice

Comcast's Institutional Network (I-Net)

- Comcast's I-Net provides internet service for Town government.
- Like residents, the Town must rely on Comcast's service when confronted with poor network performance.
- Comcast's ownership and control of the I-Net may prevent the Town from pursuing:
 - Improved emergency response and communication systems; and
 - Innovative educational services.

Comcast's Subscriber Network

- Comcast's Subscriber Network provides internet service for Town residents.
- Many residents experience the following with Comcast's subscriber internet:
 - High prices – since MediaOne (bought by Comcast) started providing internet service in 1998, Town residents have seen 20 years of rising prices for essentially the same product;
 - Limited speed and capacity; and
 - Subpar service.

Comcast Internet: Old Technology

Comcast's internet is carried over its Cable TV network, which is:

- Copper wire, coaxial cable technology from the 19th century;
- Insufficient to meet the internet's burgeoning data demands;
- More costly to maintain and upgrade – with costs passed on to the Town and its residents.

The Solution – Municipal Fiber Optic Broadband Network

A municipal fiber optic broadband network will result in the following:

- Lower costs for the Town and residents;**
- Higher speed and capacity; and**
- Better service closer to the source.**

Comcast's 19th Century Coaxial Cable Versus 21st Century Fiber Optic

Comcast's Coaxial Cable

- Electric pulses over copper wire
- 16 megabits/second (U.S. average)
- Limited downloading and uploading speed and capacity

Municipal Fiber Optic

- Light pulses along strands of glass
- Multiple **gigabits**/second (1,000's of megabits)
- Videos in seconds and giant databases in minutes
- Videoconferencing – telemedicine, law enforcement, and education opportunities
- Multiple uses at once – internet TV, surfing the Web
- Needed for coming technology – 4K TV and video content, 5G wireless

Benefits to Town Government

- **Cost Savings**
- **Improved Town Services with Fiber Optic**
 - **First responder/public safety communications**
 - **School, library, and other educational services**
 - **Better internal communications network for all Town offices and for connecting to other governmental networks**
- **Revenue – leasing excess capacity to third parties, such as business networking companies**
- **Business-friendly environment to attract small businesses and telecommuters**

Benefits to Residents

- Lower Costs - Subscriber rates set by the Town to cover system costs, not by Comcast to make a profit
- High speed and capacity for telecommuting and state-of-the-art video communication and entertainment
- “Over the Top” TV - the future of TV is by internet connection (e.g. Netflix) rather than cable

Municipal Broadband In Other Communities

- **Over 175 municipal broadband communities in the US, ranging in size from small (Ammon, Idaho) to large (Chattanooga, TN)**
- **10 municipal broadband communities in Massachusetts (e.g. Concord, Braintree, Shrewsbury, Holyoke)**

Major Challenges

- Financing – wiring the Town and its residents with a fiber optic network will require a significant capital investment
- New Municipal Utility – several of the Massachusetts municipal broadband communities had preexisting municipal electric utilities. This is new for Milton.
- Push-back from Comcast

RECOMMENDATIONS - MUNICIPAL BROADBAND COMMITTEE

- That the Board of Selectmen appoint a Municipal Broadband Committee of residents and Town officials charged with exploring the possibility of developing a fiber optic municipal broadband network for our Town.
- That the Municipal Broadband Committee be funded to engage experts as part of its review.