

# Tolland

# Becoming a Fiber Town

April 14, 2015

Tolland



**WiredWest**

Life in the Fiber Lane™

# Why do we need fiber?

- \* Build critical communications infrastructure for long term
- \* Fully participate in an increasingly internet-based world
- \* Make Tolland attractive to live, work, retire or raise a family
- \* Improve quality and lower costs of education
- \* Enable Aging-in-Place
- \* Bolster tax base
- \* Support businesses and jobs

er facility or if you're right next door.

## Speed Comparison Chart (Time To Download a File)

*(click the dropdown box to compare download times)*

Sample Download	Size	Select Speed	Select Speed
		Fiber Optic 25 Mbps ▼	DSL/Cable (768 kb
Typical MP3 Song	5 MB	2 sec	52 sec
Resolution Picture	8 MB	4 sec	1 min 23 sec
Adobe Acrobat	35 MB	19 sec	6 min 5 sec
One 2.1 Software	231 MB	2 min 3 sec	40 min 6 sec
s Vista Service Pack 1	434 MB	3 min 52 sec	1 hr 15 min 21
Digital Movie	750 MB	4 min	2 hr 10 min 13

# What is the MBI?

## Massachusetts Broadband Institute

- \* Division of Mass. Technology Collaborative, a quasi-public agency
- \* Commissioned by Governor and Legislature in 2008 to “connect the unconnected”
- \* Built and owns 1200 mile “middle mile” fiber network
- \* Works with WiredWest to create regional home to fiber network
- \* Subsidizing up to 40% of the regional network cost

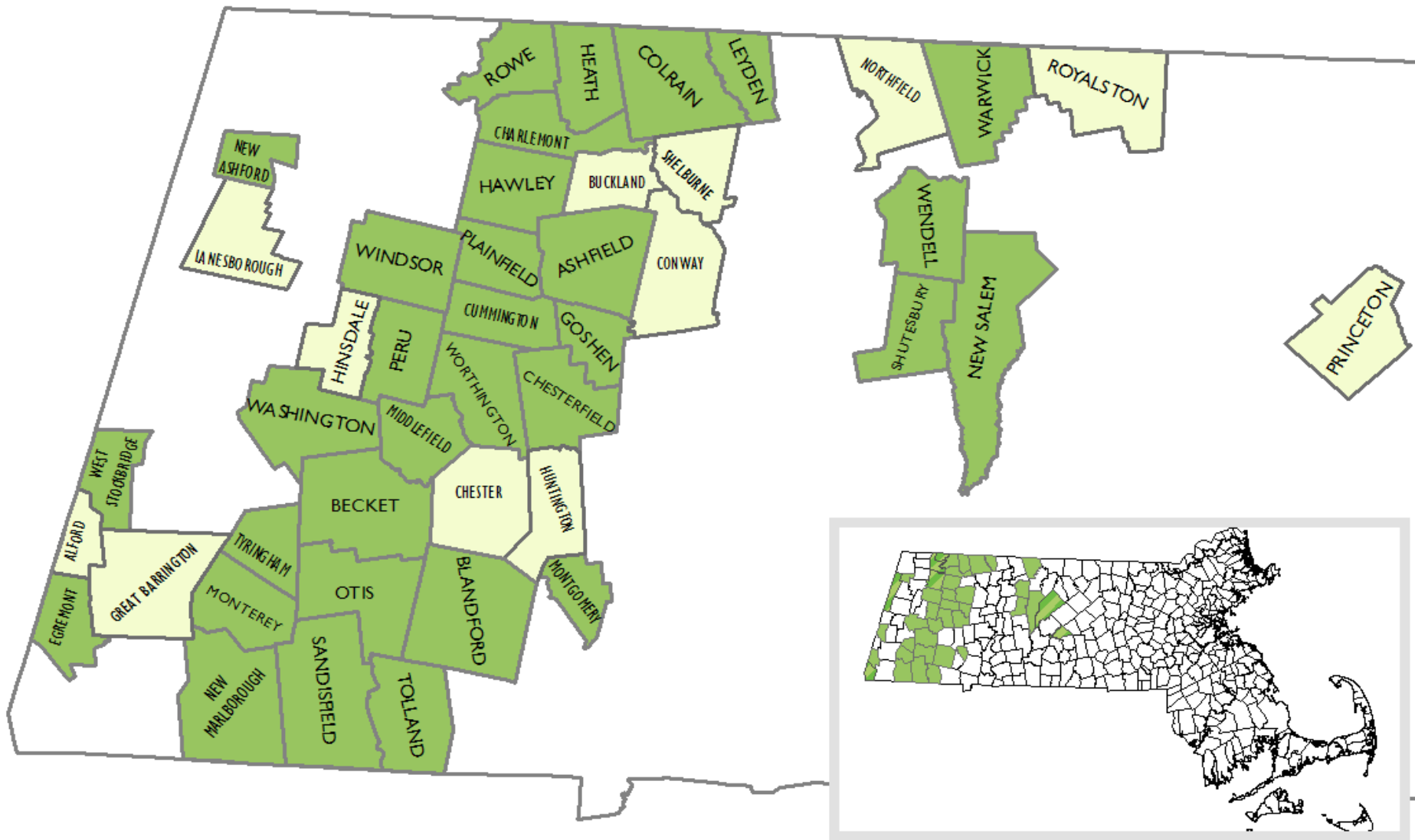
# What is WiredWest?

- \* Formed by the towns, for the towns
- \* Incorporated in 2011 under M.G.L. C 164, S 47c, MLP cooperative
- \* Four-year multi-town collaboration has defined plan for modern broadband solution via a regional, locally-owned and operated fiber-optic network
- \* Plan moving forward with \$40M state funding and town participation
- \* Tolland is a charter member town with a voting Board seat

# What will WiredWest Do?

- \* Wired West to install network on all poles and down all streets
- \* Will install poles to North Tolland if necessary
- \* No cost home connection to 750' of road for initial subscribers. Owner pays >750'
- \* Later subscribers pay costs from road
- \* \$100 to connect house with wireless “modem”
- \* Subscriber pays for ancillary equipment (DVR's, Receivers, phones)
- \* Subscriber pays for Additional requested in-home wiring (e.g. tv in every room)

■ WiredWest towns working on regional network   ■ Other WiredWest towns



# Tolland

## Underserved and Underpowered

- \* 45+ dwellings have only Dial-up
- \* DSL at max and degrading
  - \* No more DSL ports and at maximum distance from switch.
  - \* Speeds deteriorating as video/data rich applications used more
- \* Topography limits satellite, wireless network
- \* Students at a disadvantage
- \* Library parking lot is a research facility
- \* Streaming video slow and getting slower



# I have DSL. Why should I care?

- \* DSL runs over copper phone lines. Verizon repeatedly states intention to discontinue its copper infrastructure. Verizon wants out of the landline business.
- \* Verizon proposes to replace landlines in rural areas with metered wireless (read “expensive”) services.
- \* Even if DSL remains in place for the foreseeable future, it can’t keep pace with growing data demands of internet life

# What MBI and WiredWest Provide

- \* **Fiber optic cabling throughout town**
- \* **On existing or new poles as required**
- \* **String fiber to home (300' from road) - no charge for initial subscribers**
- \* **Service connection charge: \$100**
- \* **Inside wiring (if needed) paid by subscriber**
- \* **Broadband Internet access (min 25 mbps)**
- \* **Telephone**
- \* **TV content options with less bloat**
- \* **Service and Maintenance**



# Very Conservation Financials

- \* Estimates based on conservative assumptions
- \* Modeled by sophisticated technical and financial consultants and “the best” of each integrated into the models based on local knowledge.
- \* Likely that debt, “take rates: (i.e. sign-ups) etc. will be more favorable to members

# What will it cost Tolland for Fiber to all Homes?

Total Cost to build	\$	2,650,000
MBI Contribution	\$	(840,000)
Net Cost to town	\$	1,810,000
Debt Service at Year 6	\$	1,620,000
(based on 4%; 15 yrs)		

# Tax Impact by Assessed Value

Can decrease if fewer towns participate, high subscription rate , lower interest rate  
or increase if mil rate changes for other reasons

Assessed Value	Year 1 Mo/Yr	Year 3 Mo/Yr	Year 5 Mo/Yr	Years 6 – 20 Mo/Yr
\$150,000	\$.23/\$3	\$ 5.98/\$72	\$ 6.66/\$80	\$ 9.86/\$118
\$350,000	\$.55/\$7	\$14.96/\$180	\$16.65/\$200	\$24.65/\$296
\$425,000	\$.74/\$9	\$18.95/\$227	\$21.09/\$253	\$31.23/\$375
\$500,000	\$.79/\$9	\$19.94/\$299	\$22.20/\$266	\$32.88/\$395
\$650,000	\$1.02/\$23	\$25.92/\$311	\$28.86/\$346	\$42/74/\$513

# Tolland Assessed Values

\$272,656 Avg. Improved Property  
\$261,500 – Median Improved Property

Assessed Value – \$ Range	Number (%)
110,000 – 150,000	55 ( 9%)
151,000 – 260,000	175 (34%)
251,000 – 350,000	151 (29%)
351,000 – 450,000	60 (12%)
451,000 – 550,000	34 ( 7%)
Over 550,5000	31 ( 6%)

**50% will pay  
between \$9 and  
\$20 a month at  
max rate in 6  
years. Less in  
years 3 - 5**

# 2012 Market Research Commissioned by WiredWest revealed:

## Avg Costs of Stand-Alone Services



### Internet Service

- ▶ Residents pay average of **\$51 per month**
- ▶ 36% pay \$60 or more

### Cable and Satellite TV Service

- ▶ Residents pay average of **\$81 per month**
- ▶ Amount paid varies widely
  - Residents are equally likely to pay \$100 per month as they are to pay less than \$60 per month

### Landline Phone Service

- ▶ Residents pay average of **\$55 per month**
- ▶ Amount paid varies (could have more than one line)

**Total Average Stand Alone Cost for All Three Services = \$187**



# Tolland Tax Impact vs. Savings

House Value	monthly tax	annual tax
\$ 150,000	\$ 8.86	\$ 118.00
\$ 295,000	\$ 19.44	\$ 233.30
\$ 425,000	\$ 31.23	\$ 375.00
\$ 600,000	\$ 42.74	\$ 513.00



**Worst case yr 6 scenario – assumes network pays none of debt service.**

Service	Monthly			Annual
	AVG	WW	Savings	Savings
<b>Internet</b>	\$ 51	\$ 49	\$ 2	24
<b>Phone</b>	\$ 55	\$ 25	\$ 30	360
<b>TV</b>	\$ 81	\$ 65	\$ 16	192
	\$ 187	\$ 139	\$ 48	576

*Note: TV pricing not yet finalized*

# The more subscribers, the better...

- \* The higher the “take rate” of subscribers..
- \* The higher Tolland’s priority in scheduling network installation
- \* The more and faster money comes back to the town to reduce bond debt
- \* Early subscribers get fiber strung to the home at no charge

Financial projections show that with a 40% subscription rate, *WiredWest will be able to reimburse towns for their share of debt service after 5 years of operation.*

Very conservative financial assumptions  
and projections.



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# Where is Tolland now? (as of 4-15-15)

- \* **Required minimum number of subscribers:**  
250 (or 40% of premises)
- \* **Already signed up: 153**  
52% to goal
- \* **Additional subscriptions needed to goal**  
97

**Latest info on [register.wiredwest.net](http://register.wiredwest.net)**

**SUCCESS IS UP TO US!**



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# What Tolland must do:

1. Select Board resolution of intent to pursue becoming part of the regional network (done)
2. Minimum 40% of town's premises must pre subscribe for WiredWest services with \$49 deposit
3. 2/3 vote at town meeting authorizing borrowing up to \$1.8 million for its share of the construction
4. Debt exclusion vote to exempt borrowing from Prop 2 ½

# What can we do?

- \* Everyone sign up for WiredWest service
- \* Talk to friends and neighbors
- \* Attend and voice support at public info meetings
- \* Be sure you are registered to vote
- \* Let elected officials know you support WiredWest!
- \* Vote **YES on bond issue** at Town Meeting
- \* Vote YES for Debt Exclusion

# Questions



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Thank You  
Think Fiber Town!



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