

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**

or 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)

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 (based on 4%; 15 yrs)	\$	1,620,000

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
Internet	\$ 51	\$ 49	\$ 2	24
Phone	\$ 55	\$ 25	\$ 30	360
TV	\$ 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

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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