

# LEVERETT FIBER-OPTIC NETWORK

Annual Town Meeting, 28 April 2012



## Broadband Committee Members:

Rob Brooks [Systems/Software Engineer, Hewlett-Packard]

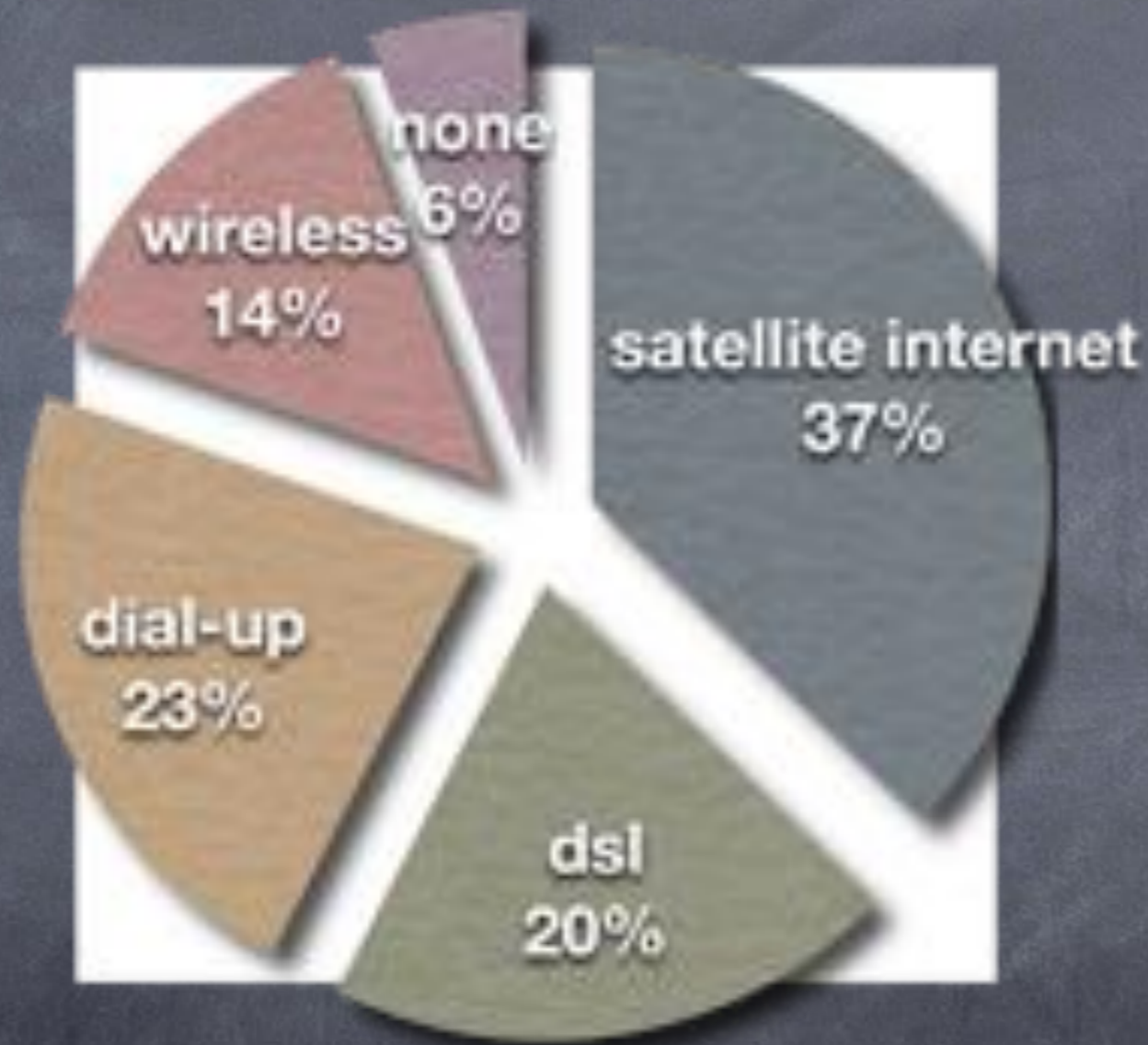
Peter d'Errico, Chair [Lawyer, SelectBoard member]

Margie McGinnis [Town Administrator]

Richard Nathhorst [Capital Projects Manager,  
UMass/Amherst]

Dan Williams [Principal Developer, ISO New England]

Only 20% of Leverett residents\* have DSL, which by today's FCC standards\* is not even considered high speed Internet.



\*Survey: Current Internet Access (300+ households, November 2011)

\* FCC 10-129, section I.5.:  $\geq 4$ Mbps download,  $\geq 1$ Mbps upload



# Lack of Broadband is lowering our quality of life and property values.

Our homes are losing value. People don't want to rent or buy where there is no high speed internet.

Our residents are falling behind in educational opportunity.

We can't run our businesses or telecommute.

We can't take advantage of current and upcoming advances in telemedicine, public safety, HDTV.

And there are many more examples....

# Why Municipal Broadband?

Internet-wise, Leverett is in the stone ages. Imagine if only 20% of us had electricity – and dim electricity at that.

It's just not profitable for Verizon or any other company to provide us with service. If the town doesn't provide it, no one will.

The FCC regards municipal broadband as a “best practice” for expanding Internet access

It's an economical solution. Through a municipal bond for \$3.6M, the Town of Leverett will be able to provide all residents with Internet that is 50 to 100 times faster. Even when increased taxes are factored in, virtually everyone will pay less for phone and computer service.

If we pass this municipal bond issue, we can have high-speed Internet by 2014 and likely sooner. Everything is ready to go. The middle mile is already under construction in Leverett. Now is the time to act.



## Why Fiber-optic?

Super fast. 'State-of-the-art' for decades to come -- electronically upgradable.

Super reliable. Carries no electricity; is not vulnerable to lightning or water. No static, no crackling.

# TELEMEDICINE: Fiber-to-the-Home Health Care

- **Visiting Nurse Assistance:** Radiology Viewing; Respiratory & Infusion Therapy; Case Management
- **Home Monitoring:** Heart Rhythm & ECG; Blood Oxygen, Glucose, Pressure, & INR anti-coagulant; Weight; Sleep Apnea; Medicine Cabinet; Video Conference; Fall & Injury; Family Contact
- **Live at your home, not the Nursing Home**



# Monthly Service Cost

<b>Internet/phone Service</b>	<b>\$40.00</b>
<b>State/Federal Taxes</b>	<b>\$4.80</b>
<b>Middle-Mile Access Fee</b>	<b>\$4.50</b>
<b>Network Operation/ Maintenance</b>	<b>\$12.00</b>
<b>Monthly Cost</b>	<b>\$61.30</b>

# Municipal Bond Data

<b>Property Assessed Value</b>	<b>25<sup>th</sup> Percentile</b>	<b>Median</b>	<b>75<sup>th</sup> Percentile</b>
	\$223,900	\$278,700	\$345,800
<b>Bond Term (Years)</b>	<b>20</b>	<b>20</b>	<b>20</b>
<b>Interest Rate</b>	<b>4.0%</b>	<b>4.0%</b>	<b>4.0%</b>
<b>Tax Rate Impact (20 Year Average)</b>	<b>+1.06</b>	<b>+ 1.06</b>	<b>+1.06</b>
<b>Annual Tax Impact (20 Year Average)</b>	<b>+ \$237.38</b>	<b>+ \$295.48</b>	<b>+ \$366.62</b>
<b>Monthly Bond Cost</b>	<b>\$19.78</b>	<b>\$24.62</b>	<b>\$30.55</b>



# Current vs. New Service Cost Scenarios

	Median* Cost- Satellite User	Median Cost - DSL User	Median Cost - Wireless User
Current Phone	\$60.00	\$60.00	\$60.00
Current Internet	\$70.00	\$31.50	\$60.00
Current Monthly Cost	\$130.00	\$91.50	\$120.00
New Network Service Median Monthly Bond Cost	\$61.00	\$61.00	\$61.00
Monthly Network Cost	\$86.00	\$86.00	\$86.00
Total Monthly Savings	\$44.00	\$5.50	\$34.00
Annual Savings	\$528.00	\$66.00	\$408.00

# FY2012 Budget Line-Item Comparison

	<b>Tax Rate</b>	<b>Portion of Total Tax</b>	<b>Median Value - Monthly Cost</b>
Library	\$0.30	1.7%	\$6.99
Proposed Fiber Bond	\$1.06	6.0%	\$24.62
Public Safety	\$1.32	7.4%	\$30.55
Public Works	\$1.59	9.0%	\$37.02
Schools	\$12.27	69.0%	\$284.93



## Every aspect of this plan has been researched.

- ✓ We used conservative cost estimates.
- ✓ We haven't factored in potential grants and other cost-reducing resources we can apply for.
- ✓ The plan enhances engineering efficiency and eligibility for grants by bringing fiber service to every house.
- ✓ We compared wireless options, including WiMAX.
- ✓ We compared "open access" and "licensed provider" models.
- ✓ The projected \$61 service plan includes Internet and full phone service, as well as a maintenance fee.
- ✓ Maintenance is to be provided by 3rd party vendors (not the town).

## NEXT STEPS:

If the Town approves funding, we will immediately issue Requests For Proposals to build and run the network, connecting everyone by December 2014 – and likely even sooner!

**2/3 vote at Town Meeting 4/28**

**Majority at debt-exclusion vote**

**JUNE 2 : 9AM - 1PM**

**(absentee ballots available)**



# Leverett Broadband Proposed Timeline

