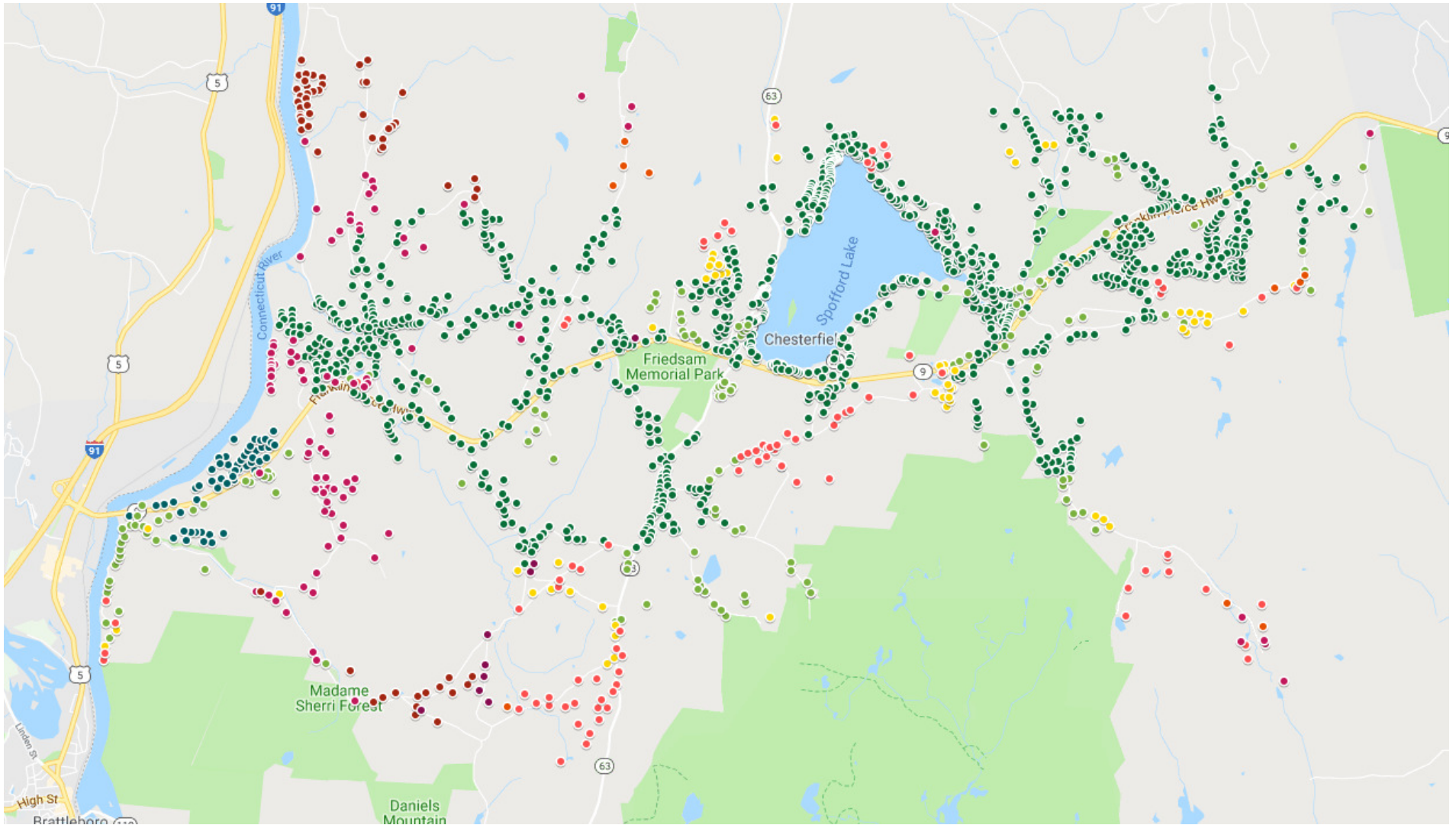


Why Improve Chesterfield Broadband?

- **Economic Impact**
 - Housing Prices
 - Telecommuting option
 - Economic Development
 - Small business
- **Educational Impact**
 - Homework
- **Unreliable Service:** lots of complaints
- **Limited Coverage & Speed:** FCC Spec: 25 Mbps
 - 6% of Town, less than 3Mbps Service
 - 12% of Town, less than 10 Mbps
 - 16% of Town, less than 25 Mbps

Chesterfield Broadband Coverage

(Best Estimate) 11/16/2018



Why are we talking about the Town Bonding to Improve Broadband?

- Providers will not invest in rural areas on their own because it does not make any economic sense for them.
 - Can't Rely on them to do it on their own.
- Cell and Satellite Providers have Data Caps that make them a problem for home and business users.
 - An average low data household uses about 100 Gb/month
 - Limited signal penetration thru trees
- State Realized these problems and passed a bill allowing Towns to bond for Broadband improvements and form public/private partnerships. (2018)
- Chesterfield: One of first Towns actually looking at doing this

Town Request for Proposals (RFP)

- Went out on November 28, 2018
- Bids were due by December 28, 2018
- Three Providers Responded
 - Consolidated Communication
 - Argent Communication
 - WiValley
- Five Different Proposals.
- Board of Selectman Selected Proposal: January 16, 2019
 - Requires approval at Town Meeting in March
 - Requires Approval of Bonding Authority
 - Requires Final Agreement on Contract

Consolidated Communication Proposal

- **Full Fiber Optic Network: Fiber-to-the-Premise (FTTP)**
 - 12-24 Months Timeline
- Speeds up to 1000Mbps or 1 Gbps available
- No Data Cap / No Throttling of Data
- Free Aerial Installation for first 150ft (~\$0.55/ft after)
- Video and Phone options available (Bundling)
- Eventual retirement of existing copper network

Current Service Pricing

NNE Residential Fiber Rates for GPON/FAST			
Product	MTM	1 Year	2 Year
15M/2M	\$62.99	\$54.99	\$49.99
15M/15M	\$74.99	\$59.99	\$54.99
30M/15M	\$111.99	\$69.99	\$64.99
50M/25M	\$109.99	\$79.99	\$74.99
75M/35M	\$129.99	\$99.99	\$94.99
100M/50M	\$141.99	\$111.99	\$106.99
150M/75M	\$161.99	\$131.99	\$126.99
250M/100M	N/A	\$139.99	\$129.99
500M/250M	N/A	\$159.99	\$149.99
1G/500M	N/A	\$179.99	\$169.99
1G/1G	N/A	\$199.99	\$189.99

Promotions may be available

Options Available	
Basic Phone	\$38
Video	\$45 to \$74 Packages

How is this Funded?

- Town Bonds \$1.8M for improvements
 - Consolidated contributes about \$2.5M
 - Bond Interest and Principal payment guaranteed by Consolidated
 - No cost to the taxpayer
- Town Infrastructure Fee
 - Broadband or Video Subscriber pay: Capped to \$10/month
 - This money is used to pay the Bond Principal and Interest
 - As Subscriber rate increases, Fee will decrease.

Public Benefit of Broadband Improvements to Chesterfield

Broadband Speed Available	Number of Locations	% Effect on Prices	Total Property Value Change
0 to 20 Mbps	255	3.3%	\$ 1,680,000
25 to 45 Mbps	153	2.4%	\$ 428,159
50 Mbps up to 100	118	0.7%	\$ 1,593,846
100 Mbps and higher	54	0.0%	\$ -
Total			\$ 3,702,005

Estimate Based on Average home Value of \$200,000 in Chesterfield

And data from

Molnar, G., Savage, S., and D. Sicker: "High-Speed Internet Access and Housing Values." Pending publication *Applied Economics*, University of Colorado, submitted August 31, 2018.

Summary

- Plan Provides Fiber to every home in Town
- High Speed
- High Reliability
- Bundle with Phone and Video
- Bond of \$1.8M for 20 years
- Bond payments paid & guaranteed by Consolidated
 - NO TAXPAYER MONEY – NO TAX INCREASE
- Bond paid for by Infrastructure Fee: \$10 max/month
 - BOND PAID OFF BY SUBSCRIBERS