

Plainfield Broadband Update - Annual Town Meeting May 2021

Network Construction Update

The network design, engineering, “make ready”, construction, and subscriber connection work began in 2017 and was substantially completed in January 2021. While politics, weather, and COVID-19 impacted the construction schedule we were able to bring the project in under the \$2,267,000 estimated budget.

The total project capital costs are: \$2,181,243. See Capital Cost Analysis for a breakdown of project components. Sources to cover costs include: Town borrowing of \$1,300,837; state grant funds of \$789,000; reimbursement from the Town of Windsor of \$84,536; and reimbursement of commercial/non profit drop costs of \$6,870.

Plainfield also secured a \$430,686 federal grant that will be remitted to the town in installments over 10 years, beginning in FY 2023, and which will be used to pay down the town’s broadband related loan, reducing the overall debt service costs.

Plainfield’s fiber optic network includes a state of the art telecommunications shelter, 40 miles of fiber optic cables attached to 1,078 utility poles, and is capable of serving 100% of the 397 premises in town. Included in our project is a municipal network that connects all 5 town buildings (Public Safety, Highway, Hathaway Hall, Town Offices/Library and Town Hall).

Operational Update

We have partnered with Whip City Fiber, a subsidiary of Westfield Gas +Electric, to operate our network and provide services. We offer residential giga-bit internet service for \$85/month with optional VOIP phone for an additional \$12.95/month (plus applicable taxes and fees). A typical residential bill is \$105/month. Home-based businesses are included in the residential service offering. Larger business (not located inside a residence) and non profit organizational services are offered at pricing starting at \$100 per month.

Of the 397 potential premises in Plainfield; 326 are currently connected to the network, as follows:

- Active Residential Subscribers: 262
- Municipal Departments: 5 (Plainfield Broadband department absorbs monthly costs)
- Active Business/NonProfit Subscribers: 7
- Cold Drops/Not Active Yet: 52 (premise is “internet ready” for future in-home connection)
- Total current “take rate” = 82%

During the past year we have worked hard to leverage additional funding to help ensure access and affordability to our services. We were able to get \$12K of COVID-19 CARES ACT funding to reimburse Mohawk school district for devices to help Plainfield kids with remote learning. We rolled out the federal “Lifeline” program which provides a \$9.25 monthly credit to income eligible households, and 10 households are currently participating. We will participate in the federal “Emergency Broadband Benefit

Program” which will provide a temporary \$50 monthly credit to households who have been negatively impacted by the pandemic. This program is expected to begin in May 2021.

We continue to work with our neighboring towns and with Whip City Fiber and with the Massachusetts Broadband Institute (MBI) to ensure the resiliency of our network and to urge upgrades to the “middle mile” that our town relies upon for ultimate access to the world wide web. Since December 2019 Plainfield has experienced 77 hours of unscheduled or scheduled service interruption, of which 71.5 hours is attributable to the “middle mile”, and 5.5 hours was scheduled late-night service upgrades on our own network performed by Whip City Fiber.

FY 2022 Budget- Related Requests

Operating Budget:

All direct network operating expenses are covered by subscriber revenues, or fees from the town of Windsor per an intergovernmental agreement. Direct expenses include stipends for the manager and assistant manager (total \$6K); costs to serve each customer (\$148,158); backhaul, pole bonds, insurance, maintenance/repairs \$122,499); and an allowance for unforeseen costs \$20,459. The total estimated costs for FY 2022 of \$297,116 are included in the Enterprise Fund Budget recommendation.

Indirect expenses include general insurance (\$1,040); an allowance to cover the town accountant and treasurer’s work related to Broadband Enterprise Fund activities (\$5,202); principal repayment of broadband-related loans (\$65,000); and interest payments on the loans (8,244.35). The total \$79,486 of indirect costs are included in the General Fund budget for the town and are presented in the Enterprise Fund Budget recommendation to provide the complete picture.

Broadband Enterprise Fund Stabilization:

Our community is running a \$300K annual business providing essential infrastructure that utilizes \$1.6M in physical assets. We want to set aside up to \$85,000 in a special broadband related stabilization fund so as to have funds on hand to cover insurance deductibles (\$25,000); unusual maintenance/repairs (\$20,000); equipment replacement (\$25,000); and funds to cover uncollected revenue (\$15,000, based on a % of annual revenue).

We want to set aside the \$17,542 in retained earnings from FY 2020 to start the Broadband Stabilization Fund, and for each future year we are able to retain earnings we will want to add to the fund. Town meeting voters must approve creation of any stabilization funds and must approve any contributions or withdrawals from stabilization funds.

More Information

Please visit our town website page at <https://plainfield-ma.us/broadband> for more information on the 14-year effort to close Plainfield’s digital divide; current policies for connecting new customers to the network (even though construction is complete, we are still covering some costs through our department annual budget for new customers) and more.

Plainfield Broadband - Summary of Capital Costs for Fiber Network		
Project Timeline: April 2017 - January 2021		
Expenses by Component	Expense Description	Actuals
Design and Engineering	Data collection/route validation/pole attachment heights (pole survey);strand maps, fiber and splice design	\$ 111,389
Project Management	Procurement and construction phase oversight of network distribution and drop contractors	\$ 69,886
Make Ready	Fees to Eversource and Verizon (license application, make ready); installation of town-owned poles; pole bonds FY2018, FY 2019, legal fees related to pole attachment agreement negotiation; tree clearing for town owned poles, pole application processing by WG+E	\$ 359,969
Telecommunications Hub	Site work, access road, hub structure, generator, a/c, propane, interior racks and electronics	\$ 229,290
Fiber Network	labor and materials to string fiber from hub to "curb" passing every premise	\$ 1,099,955
Service Drops and Interior Installation	Labor and materials to string fiber from MST at "curb" to NID (to outside of premise) Labor and materials to connect NID to ONT and router (from outside to inside premise), standard installation, nominal interior wiring, phone setup	\$ 310,753
Total Expenses	Including cost of Plainfield network and Windsor backbone	\$ 2,181,242
Revenue by Source	Revenue Description	Actuals
2015 Town Borrowing	May 2015 Annual Town Meeting authorized borrowing UP TO \$1.13M	\$1,130,000
2017 Last Mile Grant	EOHED May 2017 Award, less completion holdback	\$632,500
2018 Last Mile Grant	EOHED May 2017 Award completion holdback	\$17,500
2019 Town Borrowing	March 2019 Special Town Meeting authorized borrowing UP TO \$400,000 to ensure sufficient funds available to proceed with the project	\$170,836
Town of Windsor	For "backbone" to help Windsor reach Windsor residents through Windsor Pond access road, West Street, Windsor Avenue (make ready and network distribution, 112 poles)	\$84,536
Commercial/Institutional Subscribers	Drop Costs Billed per Commercial/Institutional Drop Policy	\$6,870
Last-mile drop costs	\$500 ea for up to 70% of installed premises (cold drops included) - maximum award for Plainfield is 139000 (397 total premises, * 70% = 278 eligible * \$500)	\$139,000
Total Committed Sources		\$2,181,242
<p>Note: Plainfield also received a \$430,686 federal funding award through the Connect America Fund; this will be paid to the town in 10 annual installments beginning FY 2023, and funds will be used to reduce this capital project debt expense.</p>		

From Table 3: Budget Recommendation Wording in Enterprise Fund Manual		https://www.mass.gov/files/documents/2017/09/08/enterprisefundmanual.pdf		
Recommend that the following sums be appropriated to operate the broadband enterprise:		FY2021 Approved at ATM	Current FY2021 Forecast	FY2022 Budget
Direct Expenses				
Salaries, stipends	SS	\$ 6,000	\$ 6,000	\$ 6,000
Expenses	VAR,EX	\$ 262,262	\$ 272,954	\$ 270,657
Debt	DD	\$ -	\$ -	\$ -
Extra/Unforeseen	ER	\$ 15,000	\$ 15,000	\$ 20,459
Budgeted Surplus		\$ 23,501	\$ 2,861	\$ 0
Subtotal		\$ 306,763	\$ 296,815	\$ 297,116
Indirect Expenditures				
Insurance	PI	\$ 1,020	\$ 1,020	\$ 1,040
Town Office Services	TS	\$ 5,100	\$ 5,100	\$ 5,202
Capital Outlay	CX	\$ -	\$ -	\$ -
Debt	ID	\$ 117,461	\$ 20,712	\$ 73,244
Subtotal		\$ 123,581	\$ 26,832	\$ 79,486
TOTAL BROADBAND EXPENDITURES		\$ 430,344	\$ 323,646	\$ 376,602
From enterprise revenues		\$ 306,763	\$ 296,815	\$ 297,116
From retained earnings		\$ -	\$ -	\$ -
From the tax levy		\$ -	\$ -	\$ -
From free cash		\$ -	\$ -	\$ -
To be raised and appropriated in the General Fund budget (*)		\$ 123,581	\$ 26,832	\$ 79,486
TOTAL BROADBAND REVENUE		\$ 430,344	\$ 323,646	\$ 376,602
* (do not duplicate this appropriation in the enterprise fund budget)				