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## Argyle Town-Wide Broadband Planning Phase I Completion Report

### Executive Summary

OTELCO, Penobscot County staff, and the Argyle Community Broadband Committee have completed the requirements of the Phase I Planning Grant.

OTELCO is the incumbent provider in Argyle and has plans to invest approximately \$200,000 to construct a Fiber to the Node (FTTn) network providing 25 Mbps download and 3 Mbps upload speeds. Currently, the best DSL service OTELCO provides is 10/1 to a handful of locations, otherwise for the remainder of town, speeds are in the 3-6 Mbps download range with upload speeds barely at 1 Mbps.

Although Spectrum lists Argyle as served, it is not. Spectrum reports served areas by zip code, which in this case, is the same for Old Town and Argyle. When contacted about multiple specific addresses in Argyle, Spectrum indicated that they couldn't deliver broadband.

Penobscot County and OTELCO contacted Spectrum and Premier Broadband to invite their participation in the planning process, both declined.

OTELCO estimates that a full Fiber to the Premise (FTTP) network providing speeds of at least 100 Mbps download and upload will cost approximately \$400,000 leaving a \$200,000 gap in funding compared to its planned capital investment in FTTn infrastructure.

At the commencement of the Planning Initiative, a Community Broadband Committee was convened and, during the past few months, has conducted a massive outreach campaign including 2 community meetings, signage in the town, a Facebook page, and door to door canvassing to encourage community participation in a survey that was prepared by OTELCO.

Additionally, OTELCO and the County conducted multiple mailings to encourage participation and OTELCO created an Argyle Information page on its website that offered a digital version of the survey and periodic project updates.

Survey results (69% of locations) overwhelmingly indicated inadequate Internet speeds, support for a town-wide network employing some county funding to augment OTELCO's investment, and a take-rate in excess of 80% of respondents.

On December 10th, representatives from the Broadband Committee and OTELCO presented a report to the Penobscot County Commissioners seeking a commitment of funding for the project. Informally, the Commissioners indicated support for a disbursement from a TIF fund to fill any funding gap after an infrastructure application to the ConnectME Authority in the upcoming grant round. The County TIF Committee will review the information from the December 10<sup>th</sup> meeting and upon its approval, the Commissioners will conduct a formal vote to commit funds. That vote is expected before mid-January 2020.

The County has already committed \$5,000 toward Phase II Planning. OTELCO will be seeking Phase II Funding simultaneously to the infrastructure application in order to capitalize on the 2020 construction season.

Neither the operating nor the business model will change from the current OTELCO ownership, and OTELCO does not anticipate any permitting issues since there is existing access to utility poles.



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## Milestones

### Infrastructure / Gap Documentation – Completed by OTELCO

OTELCO, to meet ACAM / FCC obligations, anticipates investing approximately \$200,000 to deliver VDSL (very high-speed DSL) via Fiber to the Node to most of the premises in Argyle. This technology consists of fiber cabling to the neighborhood and then copper lines from the neighborhood distribution points to the individual homes and can provide 25 Mbps download and 3 Mbps upload meeting the FCC standard for ‘served’. No other provider indicated interest in working in Argyle.

### Budget Projection – Completed by OTELCO

The estimated cost of designing and engineering the network is approximately \$50,000 and will hopefully be funded with Phase 2 planning grant funds of \$35,775, a \$5,000 commitment previously approved by Penobscot County, and in-kind services from both OTELCO and the County.

OTELCO estimates a budget of \$400,000 in order to take the project from the planned Fiber to the Node to Fiber to the Premise. The budget includes approximately 12 miles of network at a cost of approximately \$300,000 and approximately 140 connections to homes including the premise-based equipment at a cost of approximately \$100,000.

Below is a breakdown of the estimated timeline and budget for the remaining planning and the construction of the network.

Timeline Estimate	Task	Grant Funding	Otelco	County
Through application date March 2020	Community outreach / engagement	\$6,375	In-kind	In-kind
Upon receipt of Phase 2 planning funds 3-4 months*	Engineering and Design of the network	\$35,775	In-kind	In-kind / \$5,000 previously committed
Upon Receipt of Funding and final engineering 8-10 months**	Network construction \$300,000	TBD	TBD	TBD
	Customer drops and equipment at each location \$100,000	TBD	TBD	TBD

\*This will likely overlap with some of the construction period

\*\*Accounts for weather and other unforeseen events that could impede progress

### Community Vision – Completed by Broadband Committee

Based on survey responses and the exhaustive work of the Argyle Community Broadband Committee, a community vision of **Revitalization Through Connectivity** was established:

*“Argyle is a small rural community with a median age of 53. Providing the aging population access to telehealth and telemedicine is critical to quality of life and ability to age in place. Access to educational resources for the school aged population is another key element of the initiative. Argyle, with low taxes and affordable real estate prices is a prime location for young families; it’s anticipated that fast reliable connectivity will help bring those young families to the community. Younger workers, particularly millennials are highly entrepreneurial and place high value on the ability to work where they live – whether it be in a telecommuting capacity or to conduct their own business from their home. Families with school aged children are also more likely to seek communities where Internet connectivity is available for everything from home security, to entertainment, to education and distance learning.”*

### Funding Sources – Established by OTELCO and Penobscot County

In addition to the OTELCO capital investment, the ConnectME Authority and County funds from a TIF we identified as potential funding sources.

Possible Funding Scenarios	OTELCO	Penobscot County	ConnectME
With ConnectME Grant	\$200,000	\$100,000	\$100,000
Without ConnectME Grant	\$200,000	\$200,000	0



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## Feasibility Determination

Based on the overwhelming support and the data gathered during the planning process and presented here, and with a Penobscot County Commissioners commitment to funding the project, the Broadband Committee has concurred that this project is feasible and has merit for the community. The Committee recommends that the initiative move forward into Phase 2 Planning and the application for an infrastructure grant to augment whatever financial commitment the county decides upon.

## Survey Results

A total of **92 (69%)** Argyle locations were represented by residents completing the survey.

**62 (67%)** of respondents indicated that their current **Internet speeds are inadequate for their needs**. Most residents who conducted speed tests indicated speeds of less than 3 Mbps / 1 Mbps. A few did report speeds of up to 10 /1. Eight respondents indicated adequate Internet and 22 did not answer that question.

**66 (72%)** of respondents felt that a **town-wide fiber network would be a benefit to the community** for reasons including quality of life and place, ability to telecommute, and access to telemedicine, on-line learning and entertainment.

**84 (91%)** of respondents indicated **support for use of county funds** to augment OTELCO's investment and potential ConnectME grant funds for a town wide FTTP project. 5 were undecided and 3 indicated 'No'.

**86 (93%)** of respondents indicated that they **would purchase the FTTP service** if the network is constructed. Five respondents indicated that they were unlikely to purchase service and one didn't answer the question.

**41 (45%)** of respondents indicated that they **use Internet for telecommuting or home-based business** in Argyle.

See Attachment A for a copy of the Community Survey



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Attachment A
Community Survey



Argyle Community Broadband Survey

First and Last Name | Email Address

Street Address | Phone Number

How many people live in your home and use the Internet? | Does the existing broadband access meet your needs?

If you have broadband, how do you use it now?

Table with 4 columns: Education, Work, Email, E-commerce; Streaming TV, Streaming Music, Gaming, Social Media; Telehealth, Smart Home, Web Surfing, Other (explain below)

How do the mapping results compare with members' actual experiences?

According to information available to the ConnectME Authority, there are only 2 addresses in Argyle that receive Internet speed of less than 25 Mbps download and 3 Mbps upload; based on your experience at your own home/ business, is that accurate?

Text input field for response to mapping results question.

If it is inadequate in what ways does it fall short?

(please check each activity that is hindered by slow Internet access)

Table with 4 columns: Education, Work, Email, E-commerce; Streaming TV, Streaming Music, Gaming, Social Media; Telehealth, Smart Home, Web Surfing, Other (explain below)

How do you think fiber Internet will impact your community?

Text input field for response to fiber impact question.

Are you in favor of using county funding\*\* to pay for part of a town-wide broadband network?

Would you be interested in purchasing a fiber connection if the network is constructed?

Yes/No response grid for funding and purchasing questions.

\*\* does not include real estate tax dollars.

Additional Comments?

Text input field for additional comments.

On-line survey at otelco.com/argyle. ONE SURVEY PER HOUSEHOLD PLEASE. PLEASE RETURN TO: OTELCO, c/o Tracy Scheckel 56 Campus Drive, New Gloucester, ME 04260