



Broad Valley Micro Fiber Networks LLC
570 Mountain Ave.
Gillette, NJ 07933

Date: March 7, 2014

Marlene H. Dortch, Secretary
Federal Communications Commission
445 12th Street, SW 20024
Washington, DC

**Subject: Expression of Interest – Rural Broadband Experiments WC
Docket No. 10-90**

Dear Ms. Dortch:

This letter is to express Broad Valley Micro Fiber Networks LLC's ("Broad Valley" or the "Company") interest in receiving funding for a Rural Broadband Experiment in the State of Delaware as set forth in the Commission's Order released January 31, 2014.¹

Background

Broad Valley is an entrepreneurial start-up company currently putting the final touches on the design of a state-of-the-art fiber-based broadband network that it plans to deploy throughout the State of Delaware. Broad Valley plans to offer a portfolio of broadband connectivity services utilizing this network. The Company's business will be focused primarily on delivering the broadband access necessary to compete in today's digital world to unserved and underserved markets in rural areas of Delaware in order to support and drive economic growth in those areas. Given the rural nature of these markets, the Company anticipates utilizing fixed wireless and/or microwave technologies in certain locations where aerial or underground fiber builds are not currently economical.

¹ *In the Matter of Technology Transitions, et al.*, GN Docket No. 13-5 et al., Order, Report and Order and Further Notice of Proposed Rulemaking, Report and Order, Order and Further Notice of Proposed Rulemaking, Proposal for Ongoing Data Initiative, FCC 14-5 (rel. Jan. 31, 2014).

Geographic Territory

Broad Valley’s network will be deployed throughout the State of Delaware in phases, beginning with core backbone optical fiber infrastructure architected in self-healing rings that will enable high bandwidth service availability to businesses, Community Anchor Institutions and households. Phase 2 will increase penetration throughout Sussex and Kent Counties. Leveraging Broad Valley’s planned 200+ mile backbone, the approximately 3,000 unserved/underserved locations identified by the FCC in the State of Delaware can be targeted with an incremental expansion of the network. The targeted locations are summarized below in Table 1.

Table 1: Eligible Census Tracts

County	TractID	Eligible High Cost Locations	Extremely High Cost Locations	Annual Support	County	TractID	Eligible High Cost Locations	Extremely High Cost Locations	Annual Support
Kent	10001040202	22	0	\$12,200	Sussex	10005050101	11	0	2,192
	10001040203	95	3	50,685		10005050103	9	2	19,699
	10001040502	2	0	2,063		10005050104	2	0	713
	10001041000	4	1	2,019		10005050105	1	0	272
	10001041100	11	5	3,009		10005050200	81	2	49,340
	10001041300	1	0	140		10005050301	311	6	86,634
	10001041500	1	1	0		10005050302	181	0	53,415
	10001041600	1	0	717		10005050401	101	5	25,254
	10001041702	2	0	85		10005050406	1	0	553
	10001041801	20	0	6,588		10005050407	1	0	9,217
	10001041802	17	0	8,087		10005050408	9	0	12,552
	10001041900	5	0	1,349		10005050501	92	6	43,850
	10001042000	27	0	10,577		10005050503	5	0	1,414
	10001042100	42	0	9,289		10005050504	4	0	5,516
	10001042201	9	1	5,603		10005050601	75	2	47,620
	10001042202	8	0	4,535		10005050602	29	1	10,647
	10001042800	283	3	48,801		10005050701	4	0	801
	10001042900	58	0	11,038		10005050703	2	0	1,539
	10001043000	25	1	7,669		10005050801	4	0	2,090
	10001043100	381	3	117,833		10005050802	13	0	18,384
10001043202	82	13	51,747	10005050803	9	0	2,932		
10001043400	38	0	9,468	10005050901	5	1	1,013		
Total - Kent		1134	31	\$363,501	10005050902	21	2	5,744	
New Castle	10003000200	3	0	151	10005051004	1	0	1,053	
	10003003002	1	0	148	10005051006	9	0	2,796	
	10003010104	9	0	1,083	10005051007	1	0	264	
	10003010702	1	0	2,452	10005051103	6	0	2,148	
	10003010800	1	0	199	10005051201	3	0	1,391	
	10003011700	1	1	4,391	10005051202	1	0	63	
	10003013501	2	0	3,342	10005051205	6	0	660	
	10003013503	2	0	336	10005051301	6	0	7,999	
	10003014810	1	0	7,591	10005051302	12	1	3,568	
	10003016608	7	1	3,248	10005051303	3	0	108	
	Total - New Castle		28	2	\$22,941	10005051305	8	1	7,967
						10005051306	2	0	552
					10005051400	16	2	8,779	
					10005051500	58	8	23,533	
					10005051701	133	0	55,502	
					10005051702	415	11	108,100	
					10005051801	94	2	20,280	
					10005051802	1	0	483	
					10005051900	78	1	16,661	
					Total - Sussex	1824	53	\$663,298	

	Eligible High Cost Locations	Extremely High Cost Locations	Annual Support
Total - State of Delaware	2,986	86	\$1,049,740

Proposed Technology

Broad Valley plans to connect rural residential customers to its fiber network by deploying a fixed wireless solution to provide optimal coverage. Our current plan is to use unlicensed spectrum for the fixed wireless technology. The fiber used for the backbone service allows for additional dedicated service offerings with speeds up to 10 Gbps for businesses and Community Anchor Institutions including hospitals, municipal governments and schools.

Network Expansion To Unserved/Underserved Areas

Broad Valley will construct fiber laterals from the backbone to identified structures (building, towers, etc.), for deployment of the fixed wireless broadband technology. Each antenna will be connected to the backbone with a 1 Gbps pipe, and as currently designed, will result in a service offering of 50 Mbps to residential and small office/home office subscribers in these areas.

Project Time Line

Broad Valley intends to complete the build-out of all phases of the project including provision of services to the locations identified in Table 1 within 36 months.

Proposed Services

Broad Valley intends to provide residential customers with high-speed broadband Internet service and VoIP service. Business and Community Anchor Institutions with direct fiber links will have access to a suite of customizable dedicated high bandwidth services.

Scalability

As previously mentioned, Broad Valley's design will provide service to all Eligible High Cost and Extremely High Cost locations in the identified Census Tracts in Sussex County, Kent County and New Castle County Delaware, bringing high-speed internet access to these 3,000 locations. The infrastructure design is a combination of OTN/DWDM backhaul and fixed wireless access allowing for capacity augmentation as required throughout the footprint.

Service Regions

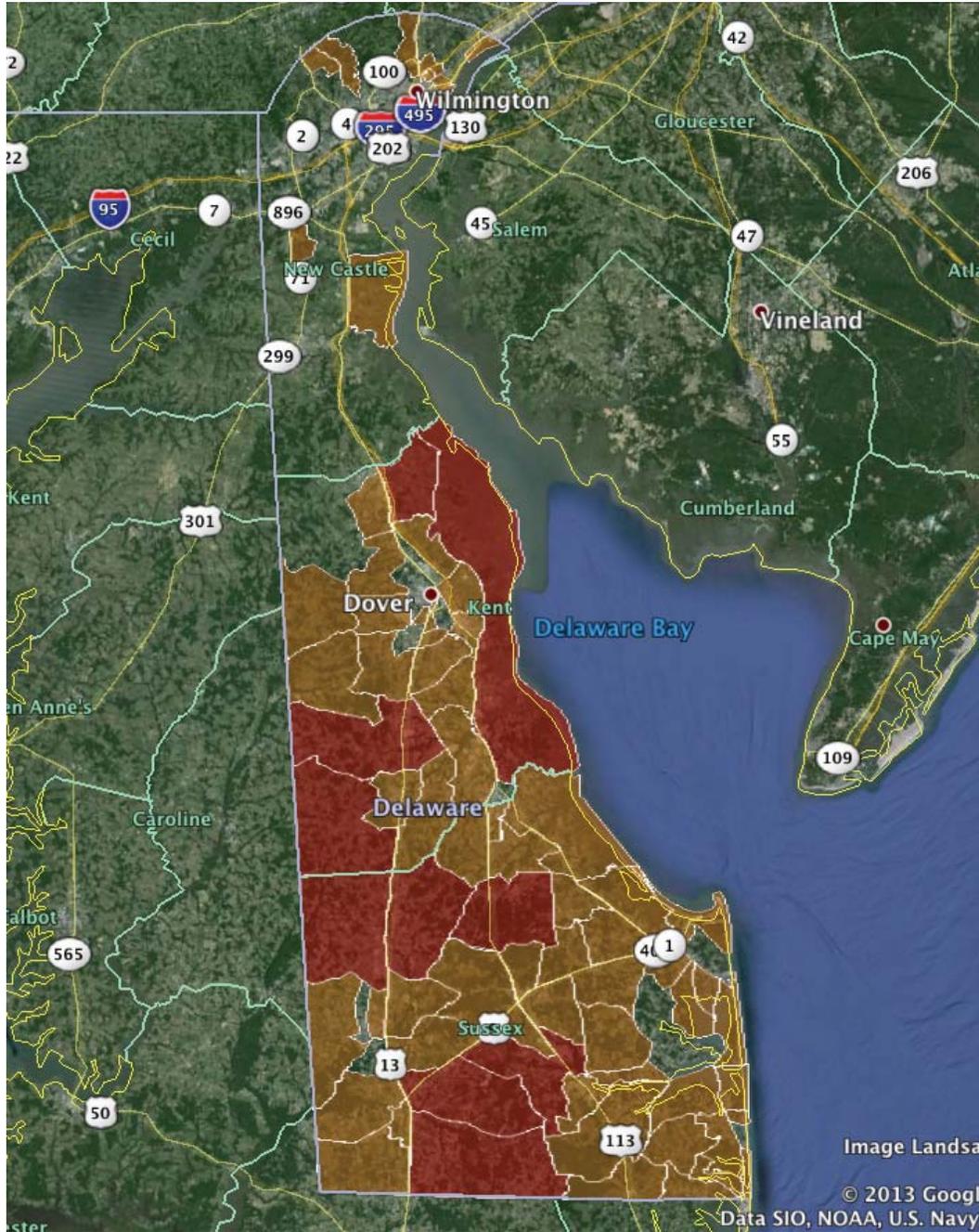


Figure 2: Eligible Census Tracts

Orange regions represent Census Tracts with Eligible High Cost Locations.
Red regions represent the top 10 Census Tracts with Eligible High Cost Locations.

Total Project Costs

Construction of Broad Valley's backbone infrastructure, laterals and wireless infrastructure, including service to the identified locations: \$45M

One-Time Capital Infrastructure Investment for Eligible Locations

Expanding the Broad Valley network to reach the Eligible locations will require additional fiber access loops, laterals, wireless infrastructure and CPE. Broad Valley requests one-time funding of \$25M for the purpose of executing the Rural Broadband Experiment in Delaware.

Thank you for considering our Expression of Interest in your decision regarding the amount of funding that will be allocated to Rural Broadband Experiments. The team at Broad Valley is committed to delivering the benefits of high bandwidth services to rural areas that have largely been left behind, and we look forward to working with the FCC to enable this to happen in a manner that meets the needs of all of the relevant constituents.

Sincerely,

Peter D. Aquino
Chairman & CEO
Broad Valley Micro Fiber Networks LLC

