

## Broadband USA Applications Database

**Applicant Name:** Monroe Telephone Company

**Project Title:** Monroe Telephone Cheshire & Greenbury Buildout

**Project Type:** Last Mile Non-Remote

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### Executive Summary

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a. Opportunity the proposed system seeks to address Monroe Telephone Company of Monroe, Oregon seeks to extend broadband services into rural areas which have little or no access to acceptable broadband today. The areas are adjacent to Monroe's certificated exchange area. Our market contacts have shown a demonstrated demand for reliable high speed broadband access in the areas. That is what this application proposes to provide. The Greenberry district is served from Qwest's Corvallis exchange. Benton – Lane and Cheshire are served by Qwest's Junction City exchange. Qwest currently offers no high speed broadband service in these areas and has given no indication that they will in the foreseeable future. Portions of these areas can get marginal wireless broadband service from UnWired West, generally at less than the advertised speeds. A greater part of the area simply cannot "see" a wireless tower. The charges for this service are higher than what is charged in urban areas. We propose fiber to the premises (FTTP) for broadband service, plus a WiMax wireless overlay for mobility and temporary services.

b. General Description of the proposed funded service areas The Greenberry District (named after a rural crossroads business cluster) is part of Census Tracts 103 & 104, Benton County, Oregon and encompasses 45 square miles. This area is just North of Monroe's certificated area. The remainder of Tract 104 has access to high speed broadband from the incumbent telephone companies, Monroe Telephone and Pioneer Telephone Cooperative. The Benton-Lane district includes another part of Tract 104 and part of Census Tract 4.03, Lane County, Oregon, and includes 2 square miles. This small area is adjacent to the Southeast edge of Monroe's exchange area. The Cheshire community of Census Tract 4.02, Lane County, Oregon, west of the Long Tom River, and encompasses 46 square miles. This area is along the South of Monroe's exchange area.

c. Number of households and businesses passed Monroe Telephone Company currently serves 904 telephone subscribers, and 50% have broadband service. The Greenberry area census data shows 209 households. Based on local survey, the Greenberry FTTP route passes 182 establishments including 10 businesses. The majority of the businesses are agricultural or agriculture related. The Benton-Lane cluster census data shows 43 households. The Benton-Lane FTTP route passes 30 houses with no businesses located there. The Cheshire census data captured within the online drawing tool shows 738 households. However, many of the census blocks have unusual shapes and the online tool appears to not have captured some of the areas. Other census tools show 1,065 households. The proposed Cheshire FTTP route passes 753 establishments. There are 19 businesses, again mostly agricultural or Agriculture related. The wireless facilities proposed will be able to reach an estimated 90% of the geography of the three areas. The wireless system will be able to reach to some less-populated areas that cannot be economically served with FTTP and will be well-suited to specific applications requiring mobility.

d. Number of community anchor institutions The Greenberry area has

one school and the offices of Finley National Wildlife Refuge. Benton-Lane has no community anchor institutions. The Cheshire area has an elementary school, post office, fire district substation, a grange and a Federal Aviation Administration radar facility. e. Proposed services and applications Broadband services via FTTP will be offered at speeds up to at least 20 Mbs. Additional speeds up to 100 Mbs can be provided from the FTTP equipment to be deployed. Wireless services up to at least 4 Mbs will be offered, with the capability to provide higher speeds with special arrangements. The services offered will mirror Monroe Telephone's current rates and terms, for services including broadband Internet access, digital video, and any special services such as private networks and hosting. Discounts will be offered for long term bundled products. Broadband wireline subscribers will be offered wireless services at a slightly reduced rate. The existing digital CATV headend will be retained. The middleware will be upgraded to a more robust platform. Services to community anchor institutions in the proposed areas will be offered at more than a 25% discount in comparison to residential and business subscribers, but this will not be a 25% discount from the service Monroe currently offers to anchor institutions, because current services are already offered essentially at or below cost. This application also proposes to connect to the Level 3 / Western Independent Networks (WIN) POP in Junction City as a redundant route to the Internet backbone and to gain access to faster bandwidth at a lower price than the existing connections. This route passes and will connect several facilities of the Junction City School District. A small extension will connect to two additional schools, enabling much higher-speed services and Internet connectivity for the schools and administration. The wireless system will be able to reach to some less-populated areas that cannot be economically served with FTTP and will be well-suited to specific applications including; rapid response services for temporary events or disaster services; rapid response to new construction in areas that are not yet on the FTTP routes; and subscribers that prefer a nomadic service. Area businesses such as vineyards, tree farms, logging operations and construction are candidates for this type of service. The services to be offered are based on broadband only. No dialtone service will be offered. f. Non-discrimination and interconnection obligations Monroe Telephone currently connects to the Internet in a manner that allows all lawful traffic and services and does not discriminate in treatment of customers. Monroe provides QoS (Quality of Service) mainly by monitoring the functional speeds of individual subscribers and ensuring that enough bandwidth and processing speed is available to meet their needs and their contract requirements for performance. Interconnection will be offered in a non-discriminatory manner at mutually agreeable rates, terms and conditions. Monroe Telephone is part of the WIN network in Oregon and already has some of the structure in place to enable other providers to use Monroe's facilities or services. g. Type of broadband system (network type and tech standard) Monroe Telephone's existing broadband and digital video deployments are based on ADSL via copper pairs plus some FTTP, from Calix C7 multi-purpose shelves mounted both in the Monroe CO and in remote cabinets fed with optical fiber from the CO. This application proposes both fiber to the home (FTTP based on GPON) and a WiMax wireless overlay for all three proposed areas. All deployments will be standards-based and focused on IP and Ethernet-based services. All establishments will be offered broadband connectivity. All subscribers that can be reached with wireline facilities will be offered digital video. Monroe plans to expand from the existing Calix C7 platform to offer FTTP in the proposed areas, and a high-speed (1 Gbs) link to the Level 3 POP in Junction City. Links from the Calix C7 will also provide 1 Gbs to the proposed wireless towers. In addition to digital video service, Monroe Telephone also operates a very small legacy CATV facility via coax within

the town of Monroe. Monroe has maintained this facility rather than force customers to switch to digital video. Monroe will upgrade middleware to a more robust platform to handle the increased use of bandwidth in the homes. h. Qualifications of the applicant Monroe Telephone has been in existence for nearly 100 years and is one of the early Digital Subscriber Loop providers in Oregon. We have had our current broadband platform in service for nearly ten years and are fully schooled in offering high speed bandwidth to our customers. We have fiber deployed throughout our network including some fiber to the premises. Our local schools are connected by fiber and have IP and Ethernet connectivity to the outside world. Monroe's management team, technical, and support staffs have many years of experience with voice, video, and broadband deployment and services. i. Overall infrastructure cost Our engineering estimate for this project is \$6,676,680 which we ask to finance through the RUS Broadband Improvement Plan. j. Expected subscriber projections Our initial estimates for customer take rate is 50% penetration; 452 FTTP customers and 130 users on the WiMax wireless service. Monroe Tel plans to hire local residents for marketing efforts to canvass the areas to improve the penetration rates. We believe there is a large amount of pent up demand for quality high speed access in these areas, and appropriate marketing will yield strong results. k. Number of jobs Monroe Telephone should see an employment rise of one field technician plus more effective use of our current employee base. We believe the access to broadband will lead to at least 25 jobs being created or moved into the area. The residents that work out of the area will be able to engage in telecommuting for at least part of their work week. Our experience here in the Monroe exchange leads us to believe our customers have created about a dozen new jobs and two businesses have remained in the area due to access to high speed broadband. As an anecdotal example, a local vineyard operator has been trying to run his business without broadband. He recently said if broadband doesn't become available he will have to try to use satellite data services to get some of the bandwidth he needs for his growing vineyard business, but isn't happy either with the pricing or services.