EESC's LastMile Connectivity Grant Application
Cove School District

Contact: **Jeff Clark, Superintendent**
jeff.clark@cove.k12.or.us

1. **Project Description:** *(describe the telecommunication challenge you seek to overcome, and how your proposal provides a viable, long-term solution)*

Cove School District is a rural school district in Union County, traditionally served by Union-Baker Education service District. Currently they utilize a point to point T-1 (1.5 megabits per second) connection that is provided by Verizon. Cove has partnered with Umatilla-Morrow Education Service District (UMESD) in interconnecting for data and video services utilizing NERO (Network for Education and Research in Oregon) for Internet access. The challenge they are facing is the lack of capacity to sustain the digital traffic attributed to progressive curriculum, video streaming, and mandated online reporting and State testing. The T-1 solution is not technically capable to meet the districts needs associated with supporting 21st learning environments. Adding additional T-1's would have a diminished impact at exponentially higher costs.

This project will build upon upstream infrastructure to increase the Cove School District capacity up to a 45MB connection The district now has an incredible opportunity to take advantage of a solution that will provide the bandwidth necessary to meet the education needs that is both affordable and sustainable. This project will enhance the delivery of K-12 instruction by supporting learning environments that engage students through educational technology activities. Under the current conditions, the ability to utilize video conferencing, distance education, or in-building wireless technologies is

NOT an option in an efficient or effective manner. Cove School District's commitment to sustain the maintenance, cost, and support of this improved infrastructure will insure the viability as a long term, sustainable solution to the current connectivity shortfalls. In summary, Cove School District has made increased bandwidth a priority in support of achieving their educational technology goals.

2. Description of how the proposal satisfied the criteria outlined in Section E:

Cove School district will use LastMile funds to support the one-time expenditures necessary for providing a wireless connection to LaGrande where Umatilla-Morrow Education Service District (UMESD) interconnects with NERO (Network for Education and Research in Oregon) for Internet access. It is a long term solution that is both scalable and sustainable.

This falls in the OSI model physical link and will build upon infrastructure already established to deliver the capacity essential to support instructional technology and educational efforts.

3. Description of site(s) covered and projected numbers of students and educators served:

School	Students	Staff
Cove School K-12	260	32

Cove is a rural farming community covering 55 square miles with 27% percent of students receiving free or reduced lunches. Cove School District is committed to technology resources and to maintaining the ratio of students and staff to functioning

networked computing devices. We have a 20 station computer lab in the high school and 12 laptops available for student checkout throughout the school day. Classrooms average two student computers throughout the middle and high school grades. The elementary has 12 mini dells for K-12. The 4-6 graders share a 20 station computer lab and have access to 4 additional laptops in the elementary building. We have projectors in both labs and in 14 classrooms. Each projector is coupled with schoolpads, for real time digital interaction. We have 3 document cameras with the intent to purchase 8 more over the next year. We use online learning to provide additional educational opportunities for students.

4. Key ESD and/or school staff involved in proposal:

Name	Title	E-Mail	Phone
Jeff Clark	Superintendent, Cove SD	Jeff.clark@cove.k12.or.us	541-568-4424
Cheri Rhinhart	IT Director, UMESD	Cheri.rhinhart@umesd.k12.or.us	541 966-3181
Cindy Naughton	Network Analyst, UMESD	Cindy.naughton@umesd.k12.or.us	541 966-3108
Kim Tally	Technology, Cove SD	Kim.Tally@cove.k12.or.us	541 568-4424
Cindy Criswell	Telecom, UMESD	Cindy.criswell@umesd.k12or.us	541-966-3211
Tom Hutchison Allen Acevedo	Network Analyst (WAN) Network Analyst (WAN)	Tom.hutchison@umesd.k12.or.us Allen.acevedo@umesd.k12.or.us	541 966-3187 541 966-3186

Technology needs of the district are supported collaboratively with Information Technology staff from Umatilla-Morrow ESD. This includes, but not limited to Networking support, desktop support; and Instructional Technology Support.

5. **Description and role of any contractors involved in proposal**:

Cove School district will secure services from the selected vendor, WTechLink to deploy the proposed wireless project. They are registered vendors in the E-Rate program.

6. **If applicable, a description of how the grant funds leverage other resources and their value**:

This project involves the acquisition of carrier-grade wireless equipment capable of 526 Mbps aggregate (263 Mbps full-duplex) that leverages an existing upstream network connection to the Internet. By purchasing the last mile equipment the district will also reduce upstream recurring charges saving the district an additional $2400 annually. Cove school district participates in the federal E-Rate Program with plans to continue to apply annually for discounts on telecommunications costs to offset the recurring costs. Our 2009-2010 discount is %60. The district also provides free access to the local library and holds open computer lab nights. Community, Students, and teachers will have increased access to digital curriculum and professional development resources that are dependent on adequate bandwidth.

7. **If Equipment is part of the funding request, a description, manufacturer and make of equipment is required.**

The project includes the purchase and installation of a TrangoLINK Giga high performance point to point wireless microwave system. This is carrier grade equipment that will deliver 11GHz licensed full duplex. It will be over-engineered to allow for with the worst case scenario under extreme environmental conditions.

8. Proposal Budget

Wireless Service From LaGrande Regional
Office to Cove School

Non-Recurring Cost

Item	Description	Quantity	Total
TrangoLink Apex	Includes power supplies 263 Mbps Full-Duplex	1	$11,166.00
AD11G-3	3-Foot 11Ghz Antennas	1	$1,300.00
AD11G-2	2-Foot	1	$1,000.00
Microwave Path License	11 Ghz Path Analysis and FCC Filing		$1,050.00
Stabilizer Bar	Antenna Stabilizer and horizontal adjuster	1	$275.00
SFP Modules	Fiber Interface Kit		$200.00
Installation	Radio Installation		$3,500.00
Fiber Optic Cable Installation	Underground fiber installation between tower and ESD Regional Office		$2,200.00
Total Non-Recurring Cost			**$20,691.00**

Monthly Recurring Costs

Monthly Service Charge	**$550.00**