

# Northwest Pennsylvania Regional Wide Area Network

A consortium of schools serviced by Intermediate Units 4, 5, 6 & 28

## History

- ◆ The consortium was created in March of 2006 to leverage the e-Fund grant program
- ◆ The e-Fund grant program was created to assist schools in procuring high-speed broadband services
- ◆ There is a potential of 85 school districts, technical schools, and Intermediate Units as participants
- ◆ The bidding and evaluation processes were completed in November of 2006
- ◆ The consortium has selected Sting Communications as the winning bidder

## Benefits of Participation

- ◆ Any-to-any connectivity between consortium members
- ◆ 100mbps (very fast) connection to the WAN
- ◆ Bulk Internet service at extremely low rates (\$60 per mbps per month)
- ◆ Internet2 transport to the Pittsburgh Super Computing Center (PSCC)
- ◆ Any-to-any connectivity to schools, universities, and others connected to PSCC<sup>1</sup>
- ◆ Participation in the Pennsylvania Education Network as it is deployed
- ◆ Deployment of new applications and services not available with your current connection (i.e. Voice over IP)
- ◆ Incremental growth for Internet, Internet2, and WAN connectivity
- ◆ Access to e-Fund dollars
- ◆ Consortium handles all E-rate processes
- ◆ The WAN is a content delivery system providing three access methods: WAN, Internet2, and Internet
- ◆ Private education network reduces or eliminates unwanted network traffic

## Instructional and Administrative Advantages

- ◆ Access to Internet resources
- ◆ Access to Internet2 resources<sup>2</sup>
- ◆ Improved streaming media
- ◆ Internet/IP video and web conferencing
- ◆ Sharing of instruction between districts in the region<sup>3</sup>
- ◆ Virtual access to content experts globally
- ◆ Ability to deploy new services such as voice over IP
- ◆ Ability to deliver services not available from your telephone provider
- ◆ Potential to reduce costs associated with current telephone services
- ◆ Access to resources from other districts
- ◆ Provide resources to other districts
- ◆ Consolidate services and reduce costs
- ◆ Collaborate with other districts
- ◆ Provide more experiences to more students
- ◆ Enough bandwidth to deliver engaging content

## Community

- ◆ Benefits your community by providing a \$3.3 million investment in new technology infrastructure in the region
- ◆ Provides new options to service providers to deploy alternative networking solutions
- ◆ Provide the district with enough bandwidth to provide services to the community such as:
  - Video streaming board meetings
  - Video streaming sporting events
  - Provide online adult education
  - Collaborate with community members and businesses through video and web conferencing
- ◆ Can benefit current and new businesses by providing new network connectivity options

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<sup>1</sup>The Pittsburgh Super Computing Center is a joint venture by the University of Pittsburgh and the Carnegie Mellon University.

- Many K-12 schools from other states
- Penn State University
- West Virginia University
- Comcast/Adelphia
- Atlanta CDC (Centers for Disease Control) Internet2
- Smithsonian (Internet2)
- Research Institutes (i.e. John Hopkins) Internet2
- Shoah Museum (Holocaust)

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<sup>2</sup> Just like Internet, Internet2 may require additional fees.

<sup>3</sup> The region consists of any school in the 12 counties served by the Intermediate Units that participate in the WAN project and any other schools connected to the Pittsburgh Super Computing Center. When the regional networks are "wired" together, then the region will extend across the commonwealth. Internet2 provides the ability to extend across the world.

## Key Decision Points

- ◆ \$5.2 million available to participants from the e-Fund grant
- ◆ \$2.2 million in E-rate funding<sup>4</sup>
- ◆ State-of-the-art network design and technology
- ◆ State-wide network connectivity<sup>5</sup> when it is deployed
- ◆ Any-to-any connectivity with regional schools
- ◆ Connectivity to the Pittsburgh Super Computing Center
- ◆ Internet2 transport
- ◆ The current Internet connection provides only one method to communicate outside your district—over the Internet
- ◆ The new network provides three methods to communicate—the Wide Area Network, Internet2, and Internet
- ◆ The e-Fund grant will invest \$3.3 million in new telecommunication infrastructure in the region
- ◆ Every district gets a minimum 5mbps Internet connection with the ability to increase the amount whenever they need it
- ◆ The new infrastructure will benefit more than just the schools—communities and business could benefit as well
- ◆ With this project, public schools will achieve what many other organizations have been unable to do
- ◆ This opportunity is a huge example of public education being leaders and innovators

## Costs

- ◆ \$2,790.00 per month before E-rate and before any transition<sup>6</sup> dollars have been applied
- ◆ The cost includes the monthly \$250.00 consortium membership<sup>7</sup>
- ◆ E-rate eligible monthly fee is \$2,790.00 - \$250.00 or \$2,540.00
- ◆ E-rate discounts vary by district and each district will have their monthly bill reduced by their discount percentage when the IU receives the funding commitment letter from the E-rate program
- ◆ For example purposes, assume a district receives a 55% E-rate discount
- ◆ The E-rate discount would be \$2,540.00 x 55% or \$1,397.00
- ◆ The actually monthly bill for this example district would be \$2,540.00 - \$1,397.00 + \$250.00 or \$1,393.00<sup>8</sup>
- ◆ Additional Internet access is low \$60 per mbps per month<sup>9</sup>
- ◆ The Intermediate Unit strongly recommends you budget the full \$2,790.00 per month even though it is extremely unlikely you will actually pay this amount

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<sup>6</sup> Transition dollars can be used up to two years to help reduce the monthly fees. We do not know the extent of transition dollars in the e-Fund grant at this time.

<sup>7</sup> For a complete description of what services the consortium membership covers, please see the Consortium Membership Services sheet.

<sup>8</sup> This is an example only. The actual numbers for your district will vary.

<sup>9</sup> We currently pay \$100 or \$200 per mbps depending on your transport method.

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<sup>4</sup> Dollars are based on the 2005-2006 discounts.

<sup>5</sup> PAIMS has been awarded a \$46,000.00 planning grant to prepare for the regional networks to connect.