



WiMAX:

The Educational Broadband Services Solution

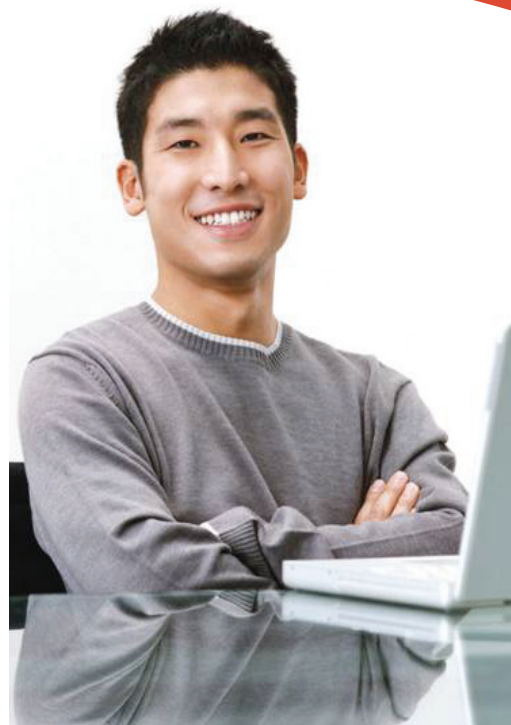
Overview

The Broadband Technology Opportunities Program (BTOP) calls for broadband networks to support education. How does your BTOP project support education? What applications does your project offer for education? How will you support local schools? Can you provide internet access to low-income households through local schools? The BTOP program coincides with Federal Communications Commission regulations which will seize school WiMAX (2.5 GHz Educational Broadband Services) licenses where school districts do not comply with build out requirements for their licenses.

This paper will make the case for WiMAX as the most effective wireless broadband technology for educational services enabling school districts to keep their 2.5 GHz licenses. In a time of economic downturn in the private sector, industry players would be well advised to "follow the money" into major public sector initiatives related to broadband internet services in education.

Key Points in Publication

- Educational Broadband Services licenses (2.5 GHz) will be forfeited by school districts and other license holders that do not build out networks by May 01, 2011
 - School districts holding those licenses are not protected by subletting to large commercial operators (Sprint, Clear, etc)
 - Understanding the education technology market (its not the same as enterprise or mobile)
 - Why WiMAX is the best technology for this application
 - Why WiMAX is the best complement to a one-to-one computing program
 - The "3 A's: Access, Applications and Affordability" of WiMAX in Education
 - Breakthroughs in video over WiMAX: HDTV on 1 Mbps WiMAX
- "The 5% Solution": one-to-one computing and WiMAX for 5% of a school district's annual per-student allocation



Key Benefits

- Enables grant writers to succinctly explain how their application will support broadband in education and the potential impact of specific technological applications such as 1:1 computing and the long term "affordability" or sustainability of the project. When comparing WiMAX or other broadband services as substitutes for existing telecommunications services, the case can be made for the sustainability of the project.
- Building a broadband network and handing out laptops to students will not in and of itself improve student achievement scores. The paper provides a deeper explanation of methods to support education through broadband awareness and adoption

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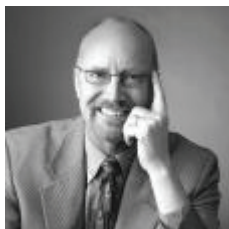
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About the Author



Frank Ohrtman has almost 20 years experience in VoIP and wireless applications. He is the president of WMX Systems, LLC, a Denver, Colorado-based consulting and systems integration firm.

Mr. Ohrtman learned to perform in-depth research and write succinct analyses during his years as a Navy Intelligence Officer (1981-1991) during which he specialized in electronic intelligence and electronic warfare.

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His telecommunications career began with selling VoIP gateway switches for Netrix Corporation to long distance bypass carriers. He went on to promote softswitch solutions for Lucent Technologies (Qwest Account Manager) and Vsys (Western Region Sales Manager). His consulting clients include national governments and tier one telephone companies.

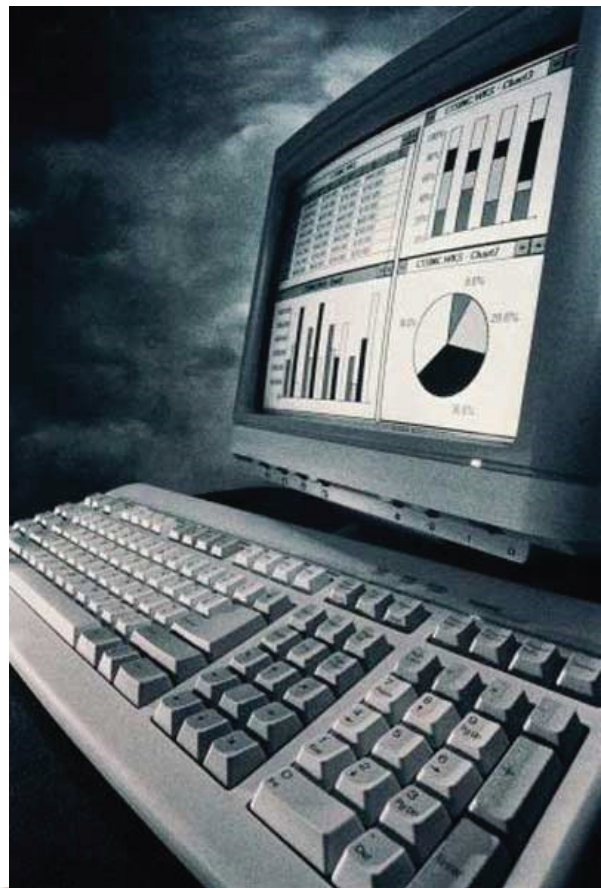
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He is a regular blogger and contributor to WiMAX.com (<http://www.wimax.com>) and annual presenter at WiMAX World (<http://www.wimaxworld.com>) as well as local Cisco Users Groups.

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Mr. Ohrtman holds a Master of Science degree in Telecommunications from Colorado University College of Engineering (master's thesis: "Softswitch As Class 4 Replacement-A Disruptive Technology"), a Master of Arts degree in International Relations from Boston University and a Bachelor of Arts, Political Science, from University of Iowa

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