

3.6 IMPACT OF NEW TECHNOLOGIES (E.G. WIRELESS) IN BROADBAND DELIVERY

With the release of unlicensed spectrum, improved developments in wireless technology, ease and speed of deployment and decreasing hardware costs, there has been a tremendous growth in the deployment of municipal owned wireless systems, particularly in the United States. In its 2005 report^[xvii], MuniWireless estimated that as much as \$700 million in expenditures on U.S. municipal wireless networks are anticipated between 2004 and 2007 representing a compound annual growth rate of 134% over this period with some 60% of the spending being done by large cities. The primary reason cited by large cities for building these networks is to reduce telecommunications costs for the provision of police, fire and emergency services, whereas, in the case of small municipalities, the primary driver is the provision of broadband access to businesses and residents underserved by existing carriers.

The regional and city wide wireless networks that have been deployed represent a mixture of ownership, provisioning approaches and business models. These range from the city or county government agencies owning and operating the networks as ISPs, government owned with a private ISP contracted to operate the network, or an ISP owned network providing service to the municipality or county.

One of the major advantages cited for these wireless systems is that they can often be used to provide municipal telecommunications services at a lower cost than service being provided by incumbent suppliers, and the networks can be expanded to provide broadband services to the community either as a free service or at a nominal cost.

The use of wireless to provide municipal local access networks is receiving increased attention by municipalities around the world with one of the more recent examples being Kynsna Municipality, South Africa, which is described as the first completely Wi-Fi covered town in Africa. The UniFi Knysna Project is a public private partnership between the Municipality and UniNet, a commercial wireless ISP provider that has a specific focus on partnering with local governments to develop local access networks either on an open or closed access basis.

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REFERENCES

[xvii] Vos, E., "MuniWireless, Second Anniversary Report", July 2005.
http://www.baller.com/pdfs/Muniwireless_7-05.pdf