



Stellenbosch  
Wireless User Group

## DESCRIPTION AND ANALYSIS OF CANDIDATE BUSINESS MODELS FOR BUILDING, MAINTAINING AND EXPANDING A CITY-WIDE WIRELESS NETWORK.

### Short Description of Candidate Business Models:

#### **Public Community**

A city, foundation, or coalition funds the design, deployment and operation of a citywide wireless network and provides free access to all subscribers. This type of model often justifies the cost of the network as an “amenity” for residents and tourists.

#### **Private Consortium**

A private telecommunications company funds the design, deployment and operation of a citywide wireless network and charges fees to subscribers for its use. The city provides access to high sites (potentially for a fee), agrees to act as an “anchor tenant” for the network, and optionally, negotiate with the private company to “regulate” rates for economically disadvantaged subscribers.

#### **Cooperative Wholesale**

A City funds the design, deployment, and operation of a citywide wireless network. The city receives value through reduced telecommunications costs by using the network to insource telecommunications services currently leased from private companies (e.g. T1 replacement). The city also makes the network available and charges fees on wholesale basis to retail Internet Service Providers and other private telecommunications companies. Retail providers perform customer acquisition, customer care, technical support, billing etc.

#### **Public Utility/Authority**

A public utility company (city-owned, private or co-op) fund the design, deployment and management of the wireless network and charges fees to subscribers for its use. The utility may outsource services to design, deploy, and manage, but would typically leverage their existing resources for subscriber acquisition, customer care, technical support, billing etc.

## **Non-profit**

A non-profit organization is created and funds are raised through foundation grants, private donations and in some cases, loans from a city or financial institution. The non-profit outsources the design, deployment, and management of the network to private companies. The non-profit typically has a social charter to reduce the digital divide.

## **Evaluation of Business models**

- The Public Community model is eliminated due to its inability to support cost neutrality for the City.
- The Private Consortium model ranks low due to the social impact goals of a community network and the inability of the City to influence retail fees.
- Both non-profit and wholesale business models fit the needs of a community network and our proposal is thus based on these models.

Some of the advantages of a non-profit organization is the ability to dictate retail prices for services and the nature of the organization enables it to engage in programs to accomplish social and economic development. Some of the disadvantages include little cooperation with the private sector.

A Wholesale model on the other hand has increased cooperation with the private sector and creates price competition in the market but requires government funding and is unable to dictate retail prices for services.

We therefore recommend that a hybrid model is adopted, combining the best characteristics of these two models. The hybrid model is referred to as the “Cooperative Wholesale” model.

## **A description of the Cooperative Wholesale model:**

- The non-profit receives start-up funding from foundation grants, bank loans and/or other non-city sources.
- The non-profit makes access to the network available for low wholesale fees to retail service providers, telecommunications companies, institutions and other non-profit corporations.
- Service providers market the service to subscribers and provide customer service, billing, technical support, content, and other value-added services.
- Service providers make discounted rates available to low-income and disadvantaged residents as well as minority, women, disable-owned, and other small businesses.
- The non-profit builds key informational messages for distribution to multiple stakeholders, informing, educating and familiarizing them with the benefits of the Stellenbosch Community Network.
- The City provides the non-profit with access to city-owned light poles, high sites and other assets.

## **Benefits of the Cooperative Wholesale model:**

- Creates an alternative broadband network at a low capital-cost-per-home
- Promotes lower broadband pricing through low wholesale rates and increased competition.
- Enables private sector service providers, telecommunication companies, institutions, other non-profit corporations and local and minority businesses to launch new added-value services.
- Demonstrates a high degree of cooperation with the private sector.
- Creates cost savings for the City by aggregating their demand for certain services.
- Eliminates the need for Stellenbosch Community Network to build expensive, high-cost services such as customer service, retail billing, and retail technical support.

In summary the Cooperative Wholesale model is unique in its ability to accomplish the social goals of a community network, while at the same time promoting competition in and enabling rapid growth broadband access. Rather than attempt to enforce government regulation of broadband pricing, we believe that the availability of an alternative, low-cost broadband network and an increase in the amount and intensity of competition will result in more affordable broadband services.