

## Summary of Community Wireless Best Practices

This document provides a summary of best practices identified by city officials representing 11 municipalities that have overseen, developed, and/or implemented a community wireless network. These best practices reflect broader research conducted by Freedman Consulting, LLC, on successful models of community wireless throughout the United States. For further information, please consult the May 2015 Freedman Consulting, LLC, report “Toward an Understanding of Best Practices in Community Wireless Networks: A Survey of Select Networks.”

### **Potential Best Practices**

The best practices suggested by interviewees are broken out into those that relate to the goals of the network, those that relate to network implementation, and those that relate to administration of the network.

#### **Goals**

- Achieve Consensus on Objectives: interviewees explained the importance of collaboratively achieving consensus on the goal and objectives of the wireless network during the network’s development.
- Consider the Competitive Environment: interviewees noted that it is necessary for cities to consider whether it is feasible and they are ready to enter the competitive market in their area.
- Gather Information from Other Communities: interviewees explained that leaders from other cities that have implemented community wireless projects can be effective resources for cities working to develop or improve their network.
- Reflect on City Needs: throughout interviews, city officials indicated the necessity to reflect on the needs and challenges of the community, including topography and landscape, to ensure that the network is designed most effectively.

#### **Implementation**

- Use Existing Infrastructure Where Possible: officials explained that cities should build the wireless network around existing infrastructure, and take advantage of this infrastructure, like poles and city-owned fiber, to support the network.
- Start with a Pilot Project: given the large and delicate nature of deploying a wireless network, city officials advised piloting wireless in a small part of the city to test the network before deploying it city wide.

- Ensure Adequate Backhaul: the Internet backhaul is a key component of the wireless network and interviewees highlighted the importance of ensuring that the community has the backhaul necessary to support the network.
- Consider the Wired-to-Mesh Node Ratio: city officials explained the importance of considering the wired-to-mesh node ratio of the network to ensure that the network has strong enough connections to meet the intended speeds.
- Leverage the Network: a wireless network can be an important asset for a city, and interviewees noted the importance and value of utilizing the network beyond its initial purpose and throughout city departments.
- Invest for the Long Term: officials recognized the huge investment of resources required to develop a network, and stressed the importance of investing in durable equipment that will ensure the long-term viability of the network.

#### **Administration**

- Adopt a Sound Business Model: interviewees noted the importance of developing a business model that supports the sustainability of the network over time, including ensuring feasible revenue projections in the planning phase.
- Work Collaboratively with Partners: the collaborative development of the network with partner organizations can be mutually beneficial for all parties involved and ensure long-term buy-in and success, interviewees explained.

**Check out the entire report at:**  
<http://tfreedmanconsulting.com/documents/BestPracticesinCommunityWireless.pdf>