

Wi-Fi RFPs and Vendor Evaluation: Ask the Right Questions When You Prepare for Wireless Internet

by David Evertsen

Small and rural communities have always hoped for but have almost never received the benefits of high-bandwidth Internet connectivity. Wi-Fi, also known as wireless (Internet) fidelity, is a solution for such connectivity. Wi-Fi offers products that are far more capable than what were available even two or three years ago.

To make Wi-Fi projects a success, leaders of small communities must have the ability to distinguish among business models, financing, technologies, and deployment methods, because these are the details critical in determining the success of a wireless broadband project.

The collapse of the trillion-dollar dot-com bubble taught us a lot about the dangers of over-inflating the industry and the willingness of millions to fall victim to the lure of marketing and hype. So, what about Wi-Fi today?

Quickly deploying a Wi-Fi network in a small community can easily result in an unproductive Wi-Fi network and significant losses in public funds and trust in government. But doing it right can lead to successful broadband Internet connections even for small and isolated communities.

PRODUCTS VERSUS SERVICES

When local governments, universities, and school districts began deploying indoor and outdoor Wi-Fi networks in the late 1990s, many of the Wi-Fi products were in their infancy. The various types of Wi-Fi radios and antennas were not completely interoperable, and reliability was a significant problem. Today's Wi-Fi technology is a significant improvement although no universal Wi-Fi solution yet exists.

Today's Wi-Fi has evolved into not only a product; it has also become a communications service. For equipment manufacturers, suppliers, retailers, and service providers, the race into the local Wi-Fi market has begun. Wi-Fi industrialists know that in this highly competitive environment selling services or service agreements is critical to their survival. Right now, the industry is still controlling the dialogue, and local governments need to be properly informed to make accurate decisions.

STEPS TO EFFECTIVE WI-FI PROJECTS

Local government managers have the responsibility of determining whether the Wi-Fi hype can truly deliver what is needed in their organizations and communities. Constrained budgets and a public wary of government make it critical that a Wi-Fi network will deliver what it promises. Managers understand that each community has unique characteristics and needs and that what works for one community does not always work for another.

Wi-Fi is no different. Determining which model is best for your community requires proper application of knowledge before, during, and after issuing an RFP. Which Wi-Fi company, model, or business plan is right for each situation? The answer is simple: It depends.

Outlined below are steps that a local government chief executive or administrator can take to make

it easier to obtain accurate, reliable, and detailed information from vendors. These steps are intended to assist an evaluation committee in determining specific needs and the most qualified vendor solution for a local government or a local government agency.

I. Situational assessment, vision, and objectives. When the vice president of a Wi-Fi company states "Some 95 percent of the RFPs I see in the municipal wireless industry are terrible," that vice president might be speaking the truth. Wi-Fi vendors have dozens of local government RFPs sitting on their desks. They must determine which RFPs to respond to and which to avoid.

Dive into the financial details of the responders. Make sure that they have the financing to deploy the network as well as support it for years to come.

As a result, when a locality clearly articulates its situational needs, vision, and objectives and includes this information in the RFP document, it is much more likely to receive quality responses. Items to include in an RFP are:

- Results from an analysis of strengths, weaknesses, opportunities, and threats (SWOT); infrastructure and service assessments; business and residential surveys; government agency summits; and key elements from existing strategic plans. A SWOT analysis should also include descriptions of unique issues, challenges, or opportunities a community faces, including local climate, natural environment,

geography, demographics, economics, business environment, public services, and quality of life.

- Identification of available vertical assets: numbers and ownership of towers and poles, public buildings, and other available resources.
- Determination of potential network sponsorship, network beneficiaries, ownership, operation, and maintenance.
- Determination of an appropriate or desired business model or network design: hot spots (which are simple and not very costly) versus mesh technology (which is complex and more costly).

Determining the role of local government is essential. In the November 2004 ICMA *IQ Report*, "Broadband Access: Local Government Roles," we learned that local alternatives regarding broadband networks can vary significantly.

As a *catalyst*, a local government prods private sector entities to increase public awareness of their services and to provide greater geographic access. The locality uses its airport, business park, or industrial park to encourage private companies to provide high-speed access.

As an *enabler/facilitator*, a community is more ambitious, using its government resources to help the private sector expand and improve services while avoiding getting into the business. Common examples include co-location, a less-constrained plans review process, preapproved zoning for wireless phone towers, streamlined permitting for trenching for fiber and cable emplacement, and aggregation of multiple government agency needs (public I-Net).

As an *infrastructure provider*, a locality modifies building code and construction and engineering standards, requires fiber-to-the-home and smart building construction, and requires new developments to place conduit or fiber in the public right of way for lease, creating open access and a level playing field.

As a *service retailer*, a local government will construct its own fiber or Wi-Fi network and offer a broadband service to compete with the private sector. Determining the appropriate network business model is also essential. The box on page 23 outlines four of several possible Wi-Fi business models.

Once the local role and the Wi-Fi business model have been determined, preparation of a financial plan is recommended, particularly for large-scale networks. The local role, the business model, and the financial plan as well as the community's needs and desired outcomes must be reduced to writing in the solicitation notice.

2. Review your procurement policies. Determining which procurement method is appropriate is an important step—especially if fast-tracking the vendor selection is desired or if community education is a political necessity before a decision can be made. Some localities have specific procurement policies and practices defining the spending limits of various types of services:

- Bid notice.
- Request for proposals (RFP).
- Request for qualifications (RFQ).
- Request for information (RFI).
- Request for contract quote (RFCQ).
- Statement of qualifications (SOQ).
- Notice of intent to bid (NOI).

Some states require local governments to first consider vendors on state contract prior to beginning a competitive bid process. State contracts are a great source for quick (and legal) solicitation and selection of qualified vendors. Regardless of the method, most procurement policies require some form of public notice.

3. Writing the RFP, RFQ, or RFI. Avoid using templates and vendors to do the writing. Some vendors are skilled at embellishing the deliverables of their products and services beyond their

real value or capabilities. Solicitation notices (RFPs) should be vendor agnostic to help you distinguish between ideal vendors and undesirable ones. Recycling a Wi-Fi RFP from another community will only diminish your ability to identify any vendor's true capabilities, skills, technology, and methodology to best serve your community.

4. Solicitation notice and publication. Use the appropriate medium. Publication in major print newspapers can be expensive. Uniform standard publication media for engineering

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and utility construction projects have been around for years, but Wi-Fi is not yet a standard infrastructure construction project. Online media, while inexpensive, can be less effective because your target vendors might not see the notice in a timely manner. Many of the online resources are also hosted or sponsored by vendors. Therefore, try using multiple media—both online and print—to publish your notices.

5. Presubmittal conference. RFPs are often not as clear as the author intends. Even the best RFPs require clarification. The local Wi-Fi arena is becoming an increasingly competitive environment where vendors have opportunities for increasing product sales, market footholds, and long-term financial sustainability.

The presubmittal conference is the

first real opportunity for a vendor to get clarification of ambiguities regarding the intentions of the local government. To pursue legitimate projects, vendors will use the presubmittal conference to clarify issues, questions, or ambiguities prior to submitting their proposals. Such conferences also indicate to communities the level of private sector interest in their Wi-Fi network.

6. Evaluation matrix. An evaluation process should be empirical and unbiased. The Wi-Fi arena is highly competitive. While many vendors would rather be the first in and the only vendor selected (no competition, in other words), almost all vendors expect an open, candid, and timely process. With its clear criteria and appropriate assignment of a weighted value, an evaluation matrix eliminates most biases and provides empirical support for arriving at three or four finalists.

7. Vendor presentations. Face-to-face interviews are always valuable. In addition to conducting an empirical or technical evaluation, managers will find that it is important to meet, observe, and interact with the project manager, engineers, and primary contacts of the finalists prior to selection. Wi-Fi companies can evolve from their origins, which are often in either sales or engineering. Project team members come from all walks of life and a variety of professional backgrounds. Vendor presentations are also a great opportunity to receive education and compare corporate strategies, technologies, and methods.

8. Background checks. Comprehensive background checks are the most critical components of the vendor selection process. The wireless broadband industry has been a bright spot in the telecom industry during the past few years, but Wi-Fi has started taking on some unfortunate characteristics of the dot-com era.

Comprehensive background checks

Four Possible Wi-Fi Business Models

are the most critical components of the vendor selection process, yet background checks—while a seemingly obvious item—are conducted less frequently than might be expected. Wi-Fi provider background checks should cover legal, financial, and technical factors.

Legal. Many of the large system integrators outsource the actual design, installation, and testing services to specialty firms or partners. RFPs should require details about these firms, including a comprehensive list of partners and subcontractors and references from other projects where they were responsible.

Background checks have been known to uncover prior felony convictions, so it is important to require that all finalists be subject to a comprehensive criminal and financial background check. Also require respondents to include details about their technical, legal, and financial capabilities in Wi-Fi project design, management, subcontracting, and equipment procurement.

Financial. Dive into the financial details of the responders. Make sure that they have the financing to deploy the network as well as support it for years to come. Are the bidder and equipment supplier financially stable? What is the likelihood that the provider or manufacturer will not be around in three to five years? Make sure the company and its partners have actually worked together and that they are not on the verge of bankruptcy. Shy away from those companies that are building a business based on the expectation of being the firm chosen to deploy your network.

Technical. The expression “all hat and no cows” reflects an individual who looks and talks the part but has nothing to show for it. Many Wi-Fi companies in 1999–2000 had great business plans and aggressive sales forces, yet many were unable to get their equipment to work at the service levels their business customers expected. Many of those companies

Public Wi-Fi: An operations-based network that is owned by the government or a public agency. Includes the possibility of a free wireless Internet hot-spot option. A competitive broadband network owned and operated by the public agency would also qualify under this model.

Private Wi-Fi: A private, fee, or advertisement-based customer-driven network with tiered pricing. Public hot spots are possible but are limited in location and bandwidth and are generally part of a larger fee-based residential and commercial rate structure.

Public/Private 1: A local government purchases and maintains ownership of all infrastructure but contracts with a private vendor to operate the network, including provision of technical and customer support.

Public/Private 2: A local government leases its vertical assets (rooftops, utility poles, and the like), and a private company purchases and maintains ownership of all wireless infrastructure and operates the network.

are still around and will likely come knocking on your door.

A conversation with service providers that deployed first-generation networks is a sobering reality check for those who think that the business model is all that matters. Service quality should exceed 99.99 percent reliability. If a vendor cannot demonstrate previous performance, reconsider that vendor.

A decent Wi-Fi consultant or Wi-Fi network systems integrator will be able to advise whether the proposed technology and methodology address:

- Scalable network architecture.
- Appropriate levels of security (law enforcement, public utilities).
- Interoperability with existing hardware or multiple networks.
- Effective network management software.
- Proprietary versus standards-based equipment (is the bidder vendor agnostic?).
- Proven performance of proposed equipment (particularly in RF congestion).

9. Demonstration of network performance. It is often asked whether each finalist needs to set up a demonstration network as an essential part of the evaluation process. The simple answer is no.

Testing a vendor's technology and

methodology is extremely important. The need for a local government to determine whether a vendor can prove success in a unique local condition is also important. Metrics such as net throughput, latency, packet loss, capacity, and access point coverage radius must be evaluated. But the determination of a vendor's technical performance capability can and should be done apart from a demonstration network.

Demonstration networks can be expensive for a vendor. While demonstration networks are helpful, they can also impose unnecessary time, personnel, and financial costs on a vendor. Rather than requiring each potential vendor to spend as much as \$100,000 just to set up a temporary local network, a Wi-Fi committee can conduct on-site field trips to each vendor's operating network. This will save vendors a significant amount of money, and most vendors would likely cover the travel expenses of community officials as an expression of appreciation.

10. Contract terms and conditions. The value of service-level agreements (SLAs) and performance measures cannot be overstated. With average costs for Wi-Fi projects ranging from \$50,000 to more than \$6 million, protecting the local investment requires clear contract terms and conditions

Calendar of Events

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Visit icma.org/calendar

JULY

July 15-27 *Leadership ICMA, Senior Executive Institute*, University of Virginia, Charlottesville VA

July 27, 2007 *Lean Thinking: Just What Government Needs*
Birmingham, Alabama

AUGUST

August 1 *Leadership ICMA Application Deadline*—for admission to the Leadership ICMA 2009 class

OCTOBER

October 1 *Credentialing Deadline*

October 7-10 *ICMA 93rd Annual Conference*, Pittsburgh, Allegheny County, PA

UPCOMING EVENTS

SAVE THE DATES FOR 2008!

March 13-14, 2008
2008 Southeast Regional Summit, Grand Hotel Marriott® Resort, Golf Club & Spa, Point Clear, Alabama

April 17-18, 2008
2008 Mountain Plains and West Coast Regional Summit, Hyatt Regency Resort, Lake Tahoe, Nevada

May 5-7
Brownfields 2008, Cobo Center, Detroit, Michigan

Municipal Leadership Alternatives in Broadband

Catalyst: Educator/incubator
Enabler: Co-location/lease of public assets
Facilitator: Conduit provider, zoning, aggregation
Service retailer: Director, competition service provider

with realistic performance expectations. The key word is *realistic*.

Local governments who have initiated Wi-Fi projects have occasionally instituted such difficult contract terms as 100 percent performance bonds and 99.999 percent reliability requirements. Such requirements cause even the multibillion-dollar vendors to take a deep breath and in some cases withdraw from the bid process.

Requiring finalists to submit copies of licenses, bonds or proof of bondability, and liability insurance coverage as part of their RFP submittal and proposal should be standard. If they cannot produce them, you don't want them. Do their network maintenance and monitoring capabilities enable them to meet the service levels proposed? Better to be surprised during the evaluation process than after the network is operational.

FINAL TIPS

1. No solicitation method can be effective unless it seeks information enabling a local government to determine a vendor's technical, legal, and financial capabilities.
2. Formalize and limit all communications through a single predesignated contact within your agency.
3. Develop a strategic action plan.
4. Conduct a local infrastructure assessment or broadband survey, or facilitate a public agency summit. No Wi-Fi project will ever reach its potential without a well-thought-out plan and clear performance measurements.
5. Establish a Wi-Fi or broadband committee consisting of multiple departments, multiple public agencies, or a variety of community members to implement the information gathered from the assessment, survey, or

summit and to further outline project goals, objectives, timeline, preliminary budget, and evaluation and selection of submittals.

6. Beware of creative financing on the part of vendors and the money shell game.
7. Require bidders to provide a forecast and path for equipment migration (replacement of obsolete equipment).
8. Retain an independent, vendor-agnostic consultant to guide the process of scoping, RFP preparation, evaluation process, and project management. **PM**

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