

Pushing Metro Wi-Fi Past the Basics

By [Adam Stone](#)

Sure, we know you can plug it in. But what can you make it do?

A year ago, citywide Wi-Fi deployments were hardly a blip on the radar screen. Now they aren't good enough. In the latest deployments, urban managers say they're looking for more than just Internet connectivity. They want to know that as other mobile applications evolve, their urban mesh investments will be able to handle new applications.

Take, for example, Addison, Texas, home to such corporate giants as Mary Kay Cosmetics, Pizza Hut and Palm Harbor Homes.

While the city is home to just 25,000 residents, its business population is sufficient to drive the need for Wi-Fi. There's an airport, about 20 hotels, and a big daytime population of workers. By mid-summer, it will have a Wi-Fi hotzone deployed throughout the metro area to serve all those roamers.

"We wanted to give people options," says Deputy City Manager Lea Dunn. "There are many businesses and folks in town that do not have the ability to access the Internet at all, either because they don't have the cable or it is not currently provided in their area. So we wanted to provide an alternative for our businesses so that they could be competitive."

The city called on mobile data systems integrator [RedMoon](#) to manage the deployment. Both Dunn and RedMoon executives say experience was the first criteria in winning the bid: RedMoon can point to successful deployments in Dallas/Ft. Worth and elsewhere. But RedMoon was just as eager to show that its systems could and would support a broad range of applications now and in the future.

"In terms of construction, it is not that different to put up these nodes," says RedMoon President and CEO Bryan Thompson. He's talking about the use of the [Tropos Networks](#) MetroMesh hardware the company installed. "The difficulty is in interconnecting these nodes and using them to run multiple applications," he says. "We were able to show an ability to do that."

With more than 60 nodes, Thompson was able to cover the city's 4.3 square miles. That's a lot of Internet access, but as Thompson sees it, the longterm value for the city lies in what the system can deliver over and above the ability to surf the Web.

"It's not all about the access today," he says. "It's about running multiple applications, things like mobile capability, voice over IP, different advertising applications over individual hotspots, as well as security and surveillance-type operations."

RedMoon has put a lot of effort into assembling the appropriate vendor partners to make this possible. In addition to the Tropos mesh technology, Trango Broadband handles the backhaul, and PadCom software allows for roaming between Wi-Fi and cellular networks. RedMoon is working on a deal to team with Sony for camera-based applications.

"We are constantly looking at new gear and applications," Thompson says. "We have spent a lot of time and money going through the process of finding quality providers. I certainly have a room full of gear back here that didn't work. Most of the time we test them ourselves and put them into real applications, and if they don't pass muster, we move on to someone else."

The city has a vested interest in encouraging RedMoon's pursuit of Wi-Fi-driven applications -- namely, a revenue sharing deal on Wi-Fi usage. Roaming users can use the network for \$6 an hour, or they can subscribe by the day or the month.

But it's more than just the money.

When it comes to VoIP or mobility apps, Dunn sees these capabilities not as money-makers, but rather value-added services.

"We really feel like anything we can do to stay on the cutting edge will help our businesses to stay competitive," she says. "We are very urban, and part of what we are trying to do is to make available whatever tools will help people to be competitive. So the ability to look at VoIP and things like that, we feel like that is very important."

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