

April 3, 2005

Sizzling Plans for Hot City

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The good news is that free, wireless Internet service is available right now in downtown Dayton at no cost to taxpayers. This pilot program covers 1 square mile.

The really good news is that coverage may expand to parks, green spaces and sidewalks within the Gem City's 55 square mile boundaries by early 2007.

The Hot City network plans to grow neighborhood-by-neighborhood in 2006. Press releases would announce when regions are ready for wireless service. Signals may extend to cities surrounding Dayton or anywhere in the county.

The network's benefits are endless. Dayton Dragons fans could access player statistics while enjoying the game from Fifth-Third Field. Wireless-enabled laptops would allow city employees to spend more time at job sites and avoid going back to offices to submit reports or pick up assignments. The workers may someday read utility meters through the network, reducing the cost of that service.

Dayton schools that house students in grades kindergarten through 12 may connect to the network under separate contracts. Sinclair Community College and the University of Dayton also have expressed interest. Sinclair plans to bring wireless service to its Tartan Cafeteria and Learning Resources Center.

The Internet service in educational settings will operate under a different model that eliminates pop-up advertisements.

Health care costs could drop if hospital patients head home sooner and wear wireless monitors while recuperating. This would be possible with repeaters, which would relay wireless signals inside homes for an extra charge. In-house repeaters might cost about \$100 apiece, which usually is cheaper than a hospital stay. Patients would contact private companies providing wireless service to obtain repeaters.

Robust and fast, the system's throughput could be as high as 11 Megabits per second. However, 6 Mbps is more likely due to limitations. Some neighborhoods' access points may relay signals to four or five other points, which could slow the pace in some areas to 1 Mbps. That speed, however, still falls well within the definition of "broadband." Reliability will compare to cell phones: You could lose connection by moving to a dead spot.

During the remainder of 2005, crews will evaluate and test the pilot system to ensure it works and to verify its usefulness. If the pilot is successful, city officials will request proposal contracts to offer broader wireless coverage. Leaders expect the system to be fully operational by January 2007.

Officials do not intend to restrict growth to Montgomery County boundaries. The network may extend to other towns if they agree to the contract that binds the city of Dayton and its wireless providers. The pact allows other municipalities to sign on without first seeking approval from the city or the providers.

The initiative is bold. But if the project is successful, it may be the model used by other cities nationwide.