## memorandum

**TO:** Chief Administrative Officer, Mayor Satterthwaite, Council Members

**FROM:** Ron Eldridge, Comptroller

Bill DeJarnette, IS Manager

**DATE:** March 14, 2005

## SUBJECT: Downtown Wireless Internet System Project Update

## Description

Money was budgeted in the current fiscal year budget in the amount of \$18,600 to be spent over the next two years to implement a downtown wireless solution. At that time a number of questions arose:

- Q. What will this wireless network do and who will use it? We can install devices (small computer) on city light poles in certain strategic areas in the downtown which will provide access to the internet in a wireless fashion to anyone that has a wifi enabled computer or device while they are in the downtown area. In addition, in the future, this network could be used to provide a wireless city network for City, School District, and Park District needs that would not require internet access.
- Q. Why should the City do this? The real reason to do this is probably one of making the downtown more attractive to development. There probably will be some applications that the City, Park District, and School District will be able to use in the future (parking enforcement, public safety & others), but not much at this time. Probably sometime in the next 12-24 months, the average cell phone will be able to access the internet. This will make the usage much easier for the public.
- Q. How much will this cost in time and money? The costs in both dollars and time are very small. The small computers that are mounted on the light poles cost \$330 each (\$11,880 for 36, which is the maximum number that we believe would be required for complete coverage downtown, number required will most probably be less). City staff in the electrical department has indicated they can install the devices without significant time requirements. There is no cost for the software (see discussion below). City will probably have to purchase bandwidth to the internet (estimate approx. \$2,000 annually).
- Q. What is area downtown that will be covered? Approximately Cedar St. to the west, Water Street to the north, Urbana Street to the east, and Illinois Street to the south.

- Q. Since the City will be responsible for installing and maintaining, is there security concerns? Security will be no different than using the internet at any location. It will be the responsibility of the user to use methods that protect the information he is conveying. We plan to have a disclaimer that automatically is generated when a user accesses the system, notifying the user of this.
- Q. What software should the City use? We currently have an organization "CU Wireless" located in the downtown area, which has received numerous grants regarding wireless software development and proof of concept. We have undertaken a review of the CU Wireless system and other vendors of similar software systems. All of these systems have some pluses and minuses. Some systems perform certain functions better than others. For various reasons, at this time we are recommending utilizing the CU Wireless system. If in the future when the City, School District or Park District usage grows, another system may provide certain advantages that CU Wireless cannot provide. At that time we can make the switch to this alternative system, using the same hardware.

We plan on ordering the first units within the next week, with installation and testing of density and antenna choices in the next 30 days (depending on weather). The hardware we are looking to purchase today should be viable into the reasonable future. There will always be bigger better faster but the standards that are in place have been honored in development to date.

Q. What is the exact role of C-U Wireless in this project? C-U Wireless will make their software available to the City along with their assistance and expertise in installing and configuration, at no cost. (C-U Wireless has received a grant for this purpose). They will also provide certain management reports and information concerning usage patterns, etc. The City is making no promises or guarantees to C-U Wireless. At anytime, the City can decide not to utilize C-U Wireless software.