

Is A Publicly Owned Minneapolis Information Network A Wise Public Investment?

Becca Vargo Daggett
Director, Municipal Telecommunications Project

Would a publicly owned information infrastructure in Minneapolis be a wise public investment? To date, the City has not addressed this question, or at least no such analysis is publicly available.

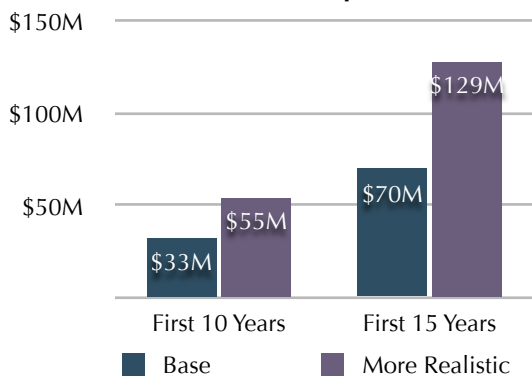
In the interests of furthering the public conversation about public ownership, the Institute for Local Self-Reliance has developed a rough financial analysis. Without complete information from the City, the numbers are not precise. We urge the City to undertake its own analysis and make it public.

Our scenarios assume a city-chartered non-profit corporation owns the network. This is the structure chosen by the Wireless Philadelphia Executive Committee.¹ Corpus Christi, Texas, has adopted this model for its citywide wireless network.

The non-profit corporation would either manage the network itself or contract with a private company to manage the network. The non-profit would not provide services directly, except to public sector entities. Instead, it would sell wholesale network access to private sector service providers, who in turn compete to sell services to residents and businesses.

Our model anticipates \$28.8 million in initial financing, which includes the cost of fiber, wireless, initial operating costs, debt payments during the construction year, and one cycle of wireless upgrades. Operating costs include all costs associated with providing services to public entities, and selling wholesale access to service providers. Revenue streams are limited to wholesale access fees and public entities' currently budgeted telecommunications expenditures.

**Net Benefits of A Publicly Owned Information Network
In Minneapolis**



THE ANALYSIS

BASE SCENARIO

- ▶ Payback period of 7.9 years - a 12 percent annual return on investment
- ▶ Surplus revenues beginning in the first year of operation
- ▶ \$2.5 million in surplus revenues over the first 10 years
- ▶ \$21 million more in surplus revenue over the following 5 years (after the \$28.8 million debt is retired)
- ▶ \$3.4 million in annual savings for customers

Total public benefits over 10 years = \$33 million
Total public benefits over 15 years = \$55 million

A MORE REALISTIC SCENARIO

- ▶ Payback period of just over 5.2 years - a 20 percent annual return on investment
- ▶ \$2 million in surplus revenues annually, beginning with the first year of operation. That is enough to pay for 20 police officers each year, or keep all 15 Minneapolis libraries open every Sunday afternoon.
- ▶ \$19 million in surplus revenue over the first 10 years
- ▶ \$30 million more in surplus revenue over the following 5 years (after the \$28.8 million debt is retired)
- ▶ \$5.7 million in annual savings for customers

Total public benefits over 10 years = \$70 million
Total public benefits over 15 years = \$129 million

WHY THE BASE SCENARIO IS CONSERVATIVE

The base scenario could be considered a “worst case” scenario, for the following reasons.

- ▶ We assume a low monthly rate of \$16 per subscriber (of which the non-profit corporation would receive \$8). This is the rate charged by Chaska’s municipal wireless network. It is far below current rates (\$26 to \$45 per month) for the faster connections that the new system would provide.
- ▶ We assume a low penetration rate of 15 percent. Other cities have seen rates of 25 percent or higher. At a rate of \$16 per month for a connection that can be used anywhere in the city, it is likely that at least a quarter of households and small businesses would subscribe.
- ▶ We assume the City, schools, libraries, and parks will pay just \$3.5 million annually for basic services. The current market rate for just these basic services, however, is over \$7 million annually.²
- ▶ We assume public entities will spend no more for information services in the future than they do in 2006. More realistically, consumption will increase substantially. For example, 1400 City vehicles will eventually be equipped for mobile data communications, a sevenfold increase from the approximately 200 police vehicles with such devices now.
- ▶ Value-added services such as Internet telephony, meter reading for utilities, and wireless parking meters are not included. Including these items would increase network revenues.
- ▶ Savings to customers who purchase broadband from existing cable or phone companies are not included, even though competition will certainly drive these prices down, as has occurred in other cities that have established publicly owned information networks.

CONCLUDING COMMENTS

The City of Minneapolis has stated that it cannot afford to invest in a citywide high-speed information network, offering as a reason that the sum required is greater than its current annual capital budget. But the vast majority of its capital budget is spent on non-revenue generating projects (e.g. road repair). An investment in a citywide wireless system would, as this analysis demonstrates, not only quickly repay the original investment, but also provide a significant surplus that could be used for future City projects.

Our analysis examines the investment from a public perspective that strives to maximize the long-term benefit to residents and businesses. A private company tries to maximize the short-term return for its shareholders. No private company would accept the eight or even the five-year payback contained in our analysis. It would need a much higher return. This could be achieved by lowering capital or operating costs, but it is unlikely that a private firm would be able to lower these costs significantly, if at all. The more likely strategy is for a private company to charge both residents and the City far higher rates than we have assumed here.

Public ownership of one of the City’s information networks can be justified by the benefits of greater competition, access to locally owned information service providers, and citizen influence on the direction of future information technology. These intangible but very real benefits alone would justify the investment even if in narrow financial terms it were simply a break even proposition. But our analysis indicates there is also a strong financial case to be made for public ownership.

We welcome the City’s developing its own analysis of the costs and benefits of public ownership of the information network.

<i>Base Case: 15 percent subscription rate</i>	
Surplus revenue in Year 2 (first year of operation)	\$153,131
Payback period ³	7.7 Years
Cumulative surplus revenue years 1 through 10 ⁴	\$2,485,417
Surplus revenue in Year 11 (after capital is repaid)	\$4,213,210
Annual customer savings ⁵	\$3,420,000

<i>Realistic Case: 25 percent subscription rate</i>	
Surplus revenue in Year 2 (first year of operation)	\$1,996,150
Payback period	5.2 years
Cumulative surplus revenue years 1 through 10	\$19,072,593
Surplus revenue Year 11 (after capital is repaid)	\$6,056,230
Annual customer savings	\$5,700,000

<i>Assumptions</i>	
Total capital cost ⁶	\$28,772,000
Interest rate	5.25%
Repayment period	10 years
Annual debt service	\$3,771,399
Annual operating cost ⁷	\$2,340,000
Currently budgeted public entity telecom expenditures transferred to new network ⁸	\$3,500,000
Average annual rate of inflation	2.5%
Total potential subscribers ⁹	190,002
Monthly wholesale fee per subscriber ¹⁰	\$8
Average monthly retail rate	\$16

The Institute for Local Self-Reliance is a nonprofit research and educational organization that provides technical assistance and information on humanly-scaled, sustainable economic systems. Since 1974, ILSR has worked with citizen groups, governments and private businesses in developing policies that extract the maximum value from local resources.

¹ *Wireless Philadelphia Business Plan*, Wireless Philadelphia Executive Committee, February 2005, available at <http://www.phila.gov/wireless>.

² Required services in the request for proposals include: 3 Mbps up/down connections for 345 sites, upgradeable to 100 Mbps in the future; mobile services at the same speeds for 1400 vehicles; wireless cameras for live, streaming video; support for streaming video broadcasts; and redundant access.

³ We assume that the cost of wholesale access to the network would be half of the retail monthly fee charged to subscribers (i.e. \$8 per month if the rate for residential service is \$16 per month).

⁴ Payback period is calculated using both wholesale revenues and currently budgeted public entity telecom expenditures in the first year of operation.

⁵ Surplus revenues in years 2 through 10, less debt service in the construction year.

⁶ Reduced costs compared to the current price of \$26 per month for 1.5 Mbps home DSL connections.

⁷ This figure is based on statements by City representatives. It includes the cost of fiber and wireless for the initial build out, initial operating funds, debt payment during the construction year and one cycle of wireless upgrades.

⁸ Operating costs include all costs associated with providing services to public entities, and selling wholesale access to service providers. Costs include: salaries for general, operations, and accounts managers; salaries for five engineers, a network administrator, and a Unix administrator; salaries for two commercial sales representatives; pole use fees; fiber bandwidth; insurance; utilities; communications; and warranties. Operating costs for the first year are based on August 2004 calculations from the City, plus 10 percent to account for price inflation since then. Operating costs in subsequent years are increased to account for inflation.

⁹ Current telecommunications costs for the City are based on statements from City representatives. School costs, are taken from the Minneapolis Public Schools 2005 budget. Library and Parks costs are rough estimates (bearing in mind that Parks include communications for Park Police). We assume that the public entities will pay no more for services on the new network than they are paying for telecommunications services in 2006, except for adjustment by the Average Annual Rate of Inflation, even though the extent and quality of these services will improve.

¹⁰ Includes Minneapolis households, small businesses, and 16,000 non-resident workers.

