

FIBER AND BUSINESS

Red Wing Area Chamber of Commerce

- **What is Broadband:**
- **Broadband is a means of transmitting information at high speeds; that information carrying capacity is typically referred to as “data speed” or “bandwidth capacity” and is measured in “bits per second”**
 - one kilobit per second: 1,000 bits
 - one megabit per second: one million bits
 - one gigabit per second: one billion bits

What does that mean

Remember your first internet connection

- Probably just about 10 or 12 years ago
- It was a dial up connection that tied up your phone line
- The fastest speed it delivered was probably 14.4 kilobytes per second (14,400 bits). It was pretty cool.
- Today most of you probably have DSL which lets us download information maybe at 3 megabits per second (3,000,000). We can probably send info at (500,000) bits per second. For most of us today, with some patience it might fit your needs at home, but in today's business world its probably too darn slow.

What does the FCC Say

Up until very recently the FCC defined “Broadband” as any service delivering 200,000 kilobits per second. I believe they have since “upped” that to 768,000 kilobits per second.

Again, petty darn slow

What about the U.S.

- Today, depending on what study you look at, the U.S. ranks:
 - between 15th and 20th in Broadband Deployment.
 - 14th in advertised download speed
 - 22nd in average monthly price for broadband

What about the best.

Japan has the fastest and cheapest broadband in the world

-Customers in Japan can get broadband that is 10 times faster than speeds available in the U.S. for prices that are less than $\frac{1}{4}$ of what we pay.

-Locally I just got what I consider a terrific offer to get 8 MBS (8,000,000). In Japan, in order to stay competitive, providers are offering customers services of 1 gigabit (1,000,000,000).

Thomas Bleha: Council on Foreign Relations quotes:

“It is now clear that Japan and its neighbors will lead the charge in high-speed broadband over the next several years. South Korea already has the world’s greatest percentage of broadband users, and last year the absolute number of broadband users in urban China surpassed that in the United States. These countries’ progress will have serious economic implications. By dislodging the United States from the lead it commanded not so long ago. Japan and its neighbors have positioned themselves to be the first states to reap the benefits of the broadband era: economic growth, increased productivity, technological innovation, and improved quality of life.”

FCC Commissioner

According to FCC Commissioner Michael Copps:

“America’s record in expanding broadband communication is so poor that it should be viewed as an outrage by every consumer and businessperson in the country. Too few of us have broadband connections, and those who do pay too much for service that is too slow. It’s hurting our economy, and things are only going to get worse if we don’t do something about it.”

The Economist:

“In the past, economic success depended on creating networks that could shift people, merchandise and electric power as efficiently and as widely as possible. Today’s equivalent is broadband: the high speed internet service that has become as vital a tool for producers and distributors of goods as it is for people plugging into all the social and cultural opportunities offered by the web. Easy access to cheap, fast internet services has become a facilitator of economic growth and a measure of economic performance.”

Which brings us to Red Wing:

- We recognized the need for better service for business, education, health care and government
- A wireless network, while cheaper, did not provide the speed nor the security required for today's applications (and it is difficult given Red Wing's geography)
- A fiber deployment is widely considered the "future proof" technology that will serve the needs of the community for the foreseeable future. It could also provide a economical opportunity to serve the community with a "wireless umbrella"

Important items to consider

- 1) Can we afford it? In order to deploy fiber into the community we must be comfortable that we can provide the service without subsidy.
- 2) Will the service improve? If we cannot provide faster, more dependable and more secure service at a competitive price, why move forward.
- 3) Local service: We want a network that provides local service and support. Your issues would be addressed in Red Wing.
- 4) Hooking up to a fiber network would not be mandatory. It would simply be another option for the delivery of voice, video and data product

What's in in for Business

Access to world class infrastructure (voice video and data applications such as webcasting, 3D navigation, high definition video, and IP telephony are only the tip of the iceberg...other applications are sure to follow)

Opportunities to do a lot more commerce over the internet

Single provider of voice, video and data services with no long-term contracts

Other applications: security, energy management

Ability for employees to work from home/remotely

Secure network: the financial plan calls for the installation of state of the art electronics and upgrades as needed

What about Health Care?

The opportunities for the provision of health care services over a fiber network are rapidly growing

- Distance from specialized service providers becomes a less important factor in determining quality of health care

Doctors can easily exchange large files such as video images and x-ray

- Easy access to health and medical information

- Enhanced home care through remote monitoring, diagnosis and consultation.

Learning

- Educational opportunities both locally and through greater access to e-learning
- Interactive televised classrooms
- Video store for classes, allowing remote review of lessons or home access during illness

Community Portal (for all to use)

A central clearing-house for information: community meetings, school closings, snow emergency, job opportunities, (the “go to” site for what is happening in Red Wing and the surrounding area).

Greatly enhanced local programming on the video end

What's Happening Today

- The fiber feasibility study is going through its final edits
- We will present the findings of the feasibility study to the City Council on November 17th (we will not ask for any action at that time)
- We will hold a series of community information sessions on fiber
- We will likely do additional research to make sure we are comfortable with the financial projections
- Finally, if we should decide to proceed, we will ask the City Council to consider holding a referendum on the issue