

Appendix 3

Community Input

Community Technology Advisors gathered business opinion in a series of three focus group discussions and via email. Business representatives and residents provided input on their level of satisfaction with current telecommunications services, especially focusing on broadband Internet services. The focus group of technologists from Eagan's largest companies met four times to further develop their issues and begin to develop solutions. In addition, a recent Northern Dakota County Chamber survey completed as a part of the E-Commerce Ready initiative completed early this year provided insight.

City newsletter and web site stories informed residents of the city's telecommunications study efforts and encouraged them to provide comments via email. Emailers received a follow-up survey to gather additional information. While not a statistical sample, the information was valuable for providing a snapshot of community opinion.

Business

Highlights from the business input are:

- The City should play a lead role in gathering and maintaining information on the availability and quality of telecommunications infrastructure and services.
- The City should serve as a catalyst in ensuring that the community has leading edge infrastructure and services.
- A competitive telecom environment will lead to better offerings, services and prices.
- If necessary, the City may have to assume a role as a telecommunications provider, either as a utility or in a joint venture, especially in the provision of wireless services, to ensure that Eagan residents and businesses have access to competitive advanced telecommunications services.
- Quality telecommunications is central to economic development and quality of life. The City needs to maintain an ongoing effort to ensure that Eagan becomes and stays competitive in this important area.

The four meetings of the large technology users group identified the following specific issues relating to their needs for telecommunications services:

- While there are significant fiber facilities connecting Eagan to central network locations in Minneapolis and St. Paul, there are concerns that Eagan lacks connections directly to the south (Kansas City) and west (Denver). This concentration of Internet traffic may lead to some vulnerability.
- MN DOT regulations restrict the ability of telecommunications carriers to place fiber optic facilities on highway bridges limiting fiber routes into Eagan. No facilities are

allowed on Highways 35E, 494, or Cedar Avenues bridges. This restricts some sophisticated data practices by at least one major employer.

- Participants questioned the reliability and supply of electric power, especially in northern Eagan. Technology companies use significant amounts of electricity.

Residents

A small number of Eagan residents responded to the request for input. This non-scientific survey does not represent all Eagan residents, though the results are interesting.

- Almost all had some form of Internet connection at their homes (87.5%). Equal numbers of dial-up and cable modem users responded. No user of DSL service responded to the survey.
- Main Internet activities were email, web surfing, working from home, k-12 usage and home business.
- No respondents were satisfied with their broadband choices, due to lack of choice, cost or availability. Cable modem users focused on price and choice; dial-up users focused on availability and price.
- Respondents generally were neutral or slightly positive about the City having a role in constructing or operating a citywide Internet network. Aggressive city action to joint venture or operate a network as a utility received strong support from a plurality of respondents.
- Respondents indicated strong support for a citywide wireless network. When asked to rate specific locations for a more targeted network, local schools and libraries ranked well ahead of other locations. City parks ranked lowest.

A detailed summary of business and community input follows.

Eagan Residential Internet Survey

1) Do you have Internet service at your home?

- a. Yes 14 (87.5%) b. No 2 (12.5%)

If yes, please go to question 3.

2) If no, please check all of the reasons you do not subscribe to an Internet service.

- a. Not interested _____ b. Have at work or school 6.25% c. Cost 12.5%
d. Broadband not available here _____ e. Other (specify) _____

Please go to question 6.

3) How do you connect to the Internet at home?

- a. Dial-up connection 43.75% b. DSL _____ c. Cable modem 43.75%
d. Wireless connection _____ e. Other (specify) _____

4) How do you use your home Internet connection? (check all that apply.)

- a. Work from home 56.25% b. Home business 31.25% c. Email 87.5%
d. Web surfing 87.5% e. School (adults) 18.75% f. K-12 37.5%

5) How satisfied are you with the choices that you have for broadband Internet services?

- a. Very Satisfied _____ b. Satisfied _____ c. Dissatisfied. 67.5%
d. Very Dissatisfied 18.75% f. No opinion _____

6) If you are dissatisfied with your choices for broadband, is it because of:

- a. Availability 18.75% b. Lack of choice 62.5% c. Cost 62.5%
d. Other (specify) _Customer service 6.25%

7) Please rate the following strategies for constructing and operating a city wide Internet network.

	5 = Great idea	1 = Poor Idea	
	Mean	Median	Mode
a. Provide incentives to attract private sector investment and operation	3.5	3	3
b. Rent tower space at market rates to all interested private sector providers	3.6	4	4
c. Enter into a partnership with a private sector provider and share net income	3.6	4	5
d. Provide broadband Internet service as a city-owned and operated utility	3.5	4	5

8) Please rank the value of wireless Internet services at these locations:

	5 = High Value	1=Low Value	
	Mean	Median	Mode
a. _____ Public library	4.0	5	5
b. _____ City and county parks	2.2	1	1
c. _____ Public buildings	2.5	3	1,3
d. _____ Local schools	3.4	4.5	5
e. _____ Local shopping center	2.3	2.5	1
f. _____ City wide wireless access	4.25	5	5

Eagan Business Survey Results

Business Type	# of Employees	Location	Connection	Questions (see below)									
				#1	#2	#3	#4	#5	#6	#7	#8	#9	#10
2	3	1960 Screen Rd	1	1	1	1	3	4	5	5	5	1	1
8	1	725 Granite Drive	1	1	2	4	nr	nr	5	5	nr	1	1
3	1		2	2	2	3	2	5	4	no	5	4	3
7	4		4	4	4	4	3	3	4	3	3	3	3
3,4	3		4	3	3	3	2	2	4	4	3	1	4
1	1	1960 Cliff Lake Rd.	1	2	1	1	1	3	4	3	4	3	1
3,4	3		4	3	3	3	2	2	4	4	3	1	4

Business Types

1. Retail
2. Manufacturing
3. Business Services
4. Personal Services
5. Information Technology
6. Construction
7. Transportation

8. Other

Employee Range

1. 1-3 employees
2. 4-10 employees
3. 11-25 employees
4. 26-100 employees
5. More than 100 employees

Connection

1. Dial up

2. DSL
3. Cable modem
4. T1 or greater
5. High Speed Wireless
6. No Connection

Questions 5=Strongly Agree

1=Strongly Disagree

1. Our firm can obtain all of the telecommunications services (telephone, Internet, etc.) that we need.
2. Our current connection to the Internet meets our needs.
3. The prices for the Internet services we purchase are reasonable and affordable.
4. Redundant or backup Internet connections are critical to our firm.
5. A wireless network enabling anywhere-anytime Internet connections in Eagan would help my business.
6. The City should do all that it can to ensure that Eagan has superior Internet capabilities.
7. The City should provide incentives to attract private sector investment and operation for additional Internet providers
8. The City should rent towers at market rates to all interested private sector Internet providers.
9. The City should enter into a partnership with a private sector Internet provider and share revenues.
10. The City should provide broadband Internet services as a City-owned and operated utility.

**City of Eagan
Technology Task Force
Business Focus Groups**

General Findings and Meeting Summaries

- The City should play a lead role in gathering and maintaining information on the availability and quality of telecommunications infrastructure and services.
- The City should serve as a catalyst in ensuring that the community has leading edge infrastructure and services.
- A competitive telecom environment will lead to better offerings, services and prices.
- If necessary, the City may have to assume a role as a telecommunications provider, either as a utility or in a joint venture, especially in the provision of wireless services, to ensure that Eagan residents and businesses have access to competitive advanced telecommunications services.
- Quality telecommunications is central to economic development and quality of life. The City needs to maintain an ongoing effort to ensure that Eagan becomes and stays competitive in this important area.

**Group One Summary
July 27th
Eagan City Hall**

Attending: Jerry Swenson (commercial photographer) Sue Hegarty (Eagan CVB), Nancy Wintermute (MSP Travel), Jim Carlson (retired 3M), Jan Stapleton; Al Zeitz, Tom Barott, Tom Garrison, Mike O'Connor, Bill Coleman.

What are your general impressions of telecommunications services in Eagan?

According to Sue Hegarty, 75% of the hotel visitors are corporate. There has been a big push within the hotel/motel community to provide high speed Internet to each hotel room. The Crowne Plaza has wireless Internet service now for its guests.

Action Item: Conduct survey of lodging facilities to inventory Internet offerings.

There was consensus that most businesses are generally satisfied with the telecommunications services at their locations. Overall, Internet services have been reliable.

Some businesses are seeking a wireless solution that would allow more mobility in and around the workplace and around the community. Businesses are seeking high speed, office connectivity and mobility from a single provider.

Redundancy is primarily a larger business issue. Smaller firms are likely to use dial-up, if anything, for redundancy. This may be true even if dial-up is ineffective for general business operations. Cost is the major barrier to a firm obtaining a redundant Internet supplier.

There is great competition on the voice side of telecommunications services. Some providers are able to provide a combination of services over a T1 or fractional T1 that meets many small business' needs. DSL service is a popular choice due to the competitive pricing that this service offers. Choosing the right provider is sometimes a task for a networking consultant.

A significant issue for businesses changing locations is getting installation of services accomplished on time and on a reliable basis. This is true for Qwest customers as well as competitive providers that use Qwest facilities. It was noted that these issues are industry-wide. The impact on a business is significant and delays in installation of basic services stops all communication activity. Businesses experiencing difficulties with moving into or around Eagan is a business retention and expansion issue. As telecom services increase in importance as a business location factor, this issue increases in importance to the community. There was a significant discussion about the difficulties in sending and receiving large files. Insty-prints uses a FTP server provided through the Insty-Print franchise. This has helped them to manage files. For Jerry Swenson and his large commercial photography files, his large files cause him and his clients issues. Different types of firms are facing changing business practices that increase dependency on high-speed Internet. For photographers, the use of digital media is a business requirement. The CVB receives and sends ad copy and proofs electronically. Growing file size is definitely the trend.

The Value of Wireless

Participants recognized that availability of wireless Internet services in Eagan would benefit several audiences: the business traveler, traveling sales people, those involved in on-site small business consulting and the small office/home office business person.

It was noted that parents are often seen using laptop computers at the community center, doing work offline while their children use the playground. Wireless services would allow these people greater flexibility by enabling online computing.

Role of the City

The government role should be limited and should promote competition, drive the deployment and use of new technologies and should make sure to pick the right course.

The private sector should provide a bundle of telecom services that meet the community's needs.

The City should make it appealing for the private sector to invest in Eagan. The City can direct, but not control who and what is provided.

The goal should be to maximize competition, not necessarily city revenue.

The city should encourage or compel a high level of customer satisfaction through whatever regulatory powers it has. The city should measure customer satisfaction on a regular basis to ensure that the services are available and delivered well.

A citywide wireless network may increase the attractiveness of the community for new residents.

The city needs to find a balance between regulation, the provision of high quality services by the private sector and a competitive environment.

Group Two Summary
July 29th
NDC Chambers of Commerce

Attending: Jason Mercord-Hilton Garden Inn; Bruce Maas-Corporate Real Estate; Michelle Harrington-Business and Estate Advantages; Matt Miller-Interstate Partners; Tom Barott-Task Force Chair; Tom Garrison-City of Eagan; Mike O'Connor, Bill Coleman-Community Technology Advisors Corp.

General Impressions

There was a general feeling that Qwest had promised deployment of DSL throughout the city in 2001. Currently, about half of the access lines in Eagan are DSL capable.

There were issues with installation time according to Miller. Industrial clients have to wait for installations, especially when it is a high capacity line. DSL does not take as long. It was noted that some multi-tenant building owners now include high-speed access through T1 lines as part of the client package.

Competition between providers drives improvements in offerings, services and prices.

It was noted that Eagan's Business Retention and Expansion program identified many home businesses. These firms need technology and telecommunications services.

Business travelers expect high speed Internet in their hotels/motels. They also want tech assistance should they experience difficulty getting online. There is a movement towards the use of wi-fi in lodging properties. Hotels are still trying to recover costs of upgraded wiring in their facilities. Hotel groups may share the expense of a high speed Internet through the use of wireless interconnections across short distances.

Security issues are growing, especially in terms of wireless use. This should be a key consideration should the city decide to offer wireless services.

Value of Wireless

Wireless services are critical in hotels for visitors. There is some concern about hotel liability for Internet security and for the ad hoc tech assistance provided by hotel staff.

Connectivity is critical for financial planners. Research, planning tools and other information are online. Mobile connectivity would be valuable when meeting with clients, though most information in sales presentations is presented in paper format. Many clients are online and their computers could be used at their site.

Some cities have technology centers where travelers can get online and use computers.

Pricing would need several subscription options. One could pay by the day, month or year. Or through “calling card” options, like a number of online minutes for a set price.

There is definitely a move by business travelers to use devices like PDAs with wireless connections. Mobile access is critical for this group of business travelers.

Group attendees thought that Eagan residents would also be interested in subscribing to a mobile wireless service.

Economic Development Impacts

Maus noted that prospective businesses have placed telecommunications near the top of site selection criteria. Many firms can locate in any part of the country or the world due to reliance on telecommunications. He suggested that the speed of technological change requires that cities continually gather information on telecommunications and implement a process for continuous improvement.

September 11 has caused many firms to consider diversifying locations so as to provide redundant operations in case of terrorism. This provides an opportunity for Eagan to pursue these types of firms.

Electricity is a key concern for businesses and the Eagan electrical grid has issues. Technology firms need significant amounts and high levels of reliability. The city needs to be aware of these business concerns and use its influence with providers to address these issues. Xcel was specifically noted.

The City’s web site needs to have excellent economic development information in an easy to navigate format. Information on sites and telecommunications capabilities should be there and up to date. It is a key goal of the city to make sure that Eagan gets consideration for new development projects. Maus and Miller agreed that web sites are important sources of information for business locations.

Role of the City

The City should consider joint ventures to address any deficiencies in technology.

Make sure that the State (DEED) knows about capabilities so that business prospects learn about the strengths of Eagan regarding telecom. Electric utilities are also very important in economic development site selection. City web site needs good accessible information.

The City could be first in the door to provide wireless services. That would be a competitive advantage in positioning the city. Not being first would make it difficult to justify the city entering this business.

The City could encourage other wireless providers to expand wireless services in Eagan.

The City needs to encourage service in the Diffley corridor. The city should act as a catalyst to get providers to act.

Gather research and disseminate information on technology infrastructure and services.

Take a lead role to eliminate inequities to ensure that services are provided everywhere in the community. Telecom and technology access is a necessity in this day and age. People and businesses without equal access are at a disadvantage.

Use city powers, both regulatory and political, to influence decision-makers.

This needs to be an ongoing effort, to make sure that Eagan has the telecommunications infrastructure and services that it needs, to be an economically attractive and competitive community.

Youth Survey

The Eagan Youth Advisory Board conducted a survey of almost 300 teens in Eagan.

Key findings include:

- Overall, 75% are satisfied with their Internet connection. For Comcast and DSL customers, 93 were satisfied. Only 43% of dial-up customers were satisfied with their connection.
- Overall, two-thirds of teens thought that their connection was “fast enough”. The inverse was true for dial-up users with two-thirds indicating dissatisfaction with their connection.
- 102 dial-up and “did not know connection” respondents answered the question regarding availability of high-speed Internet services. Of this sample, 52% indicated that this service was unavailable to their homes. With other analysis indicating that Comcast service is available throughout Eagan, these teens either live outside of Eagan or are unaware of services offered in the community.
- Almost one-quarter of respondents indicated that the cost of their Internet connection was a financial burden to their family. Over one-third of teens using dial-up connectors indicated that the cost was a burden to their family while less than 20% of teens with high-speed connections felt that cost was a burden.
- Teens listed the following uses for faster Internet:

	<i>Responses</i>
○ Just “faster”	34
○ Don’t know	23
○ Download files	14
○ Download music	14
○ Watch movies	13