

**8c. Wireless Internet Service Feasibility Study**

**Recommended** Motion to receive wireless study report and refer it to September  
**Action:** 26 study session for further review, analysis, and discussion of  
issues and options. Direct staff to conduct any follow-up  
activities Council feels appropriate at this time.

**PURPOSE OF DISCUSSION:**

The purpose of this item is to present to Council the summary report of the Wireless Internet Service Feasibility Study requested by Council. While the utility of data from any report is always time sensitive, it is staff's recommendation that Council refer the report to an upcoming study session for detailed discussion and direction. This will allow Council members, ISD #283 School Board members, and the several other interested stakeholders following this study time to both review report findings and provide input for Council consideration. St. Louis Park Schools (ISD #283) and the City are partners in this study.

**BACKGROUND:**

At its May 23 special meeting, Council authorized execution of a contract with Virchow, Krause & Company, LLP (VK) for completion of a study of the technical, market, and financial feasibility and options to ensure access to competitively priced wireless high speed Internet service. VK is a member of the TwinWest Chamber of Commerce. This study follows results of an informal community interest survey of residents and businesses on this topic. Results from those who expressed an opinion clearly indicated that further study was warranted.

Staff most recently updated Council at its August 22 study session (see attached report). Since that time, a number of additional meetings have taken place and analysis completed. In addition, the Town Hall meeting was aired several times on cable TV in late July and in the month of August. Additional input on the study has been received.

The consultant was asked to complete a feasibility study focused on the market, technical, and financial issues around wireless technologies. In other words, VK's goal was to determine whether there is sufficient interest among residents and businesses in high-speed wireless Internet service, if it is technically possible to make such a service work, and if sufficient revenues can be generated to meet operational and replacement costs. VK also looked at several different business models. After Council reviews these findings, its role primarily turns to one of policy – what are the issues raised by the study, how have they or should they be addressed, and is this fundamentally something that can enhance the strength of the community?

**STUDY CONTEXT:**

This study was undertaken as a result of Council's interest in studying the potential for high-speed wireless Internet services as it relates to a number of challenges that are witnessed nationwide:

- Increasing perception that access to high-speed Internet service is becoming an **essential service** similar to water, sewer, streets, and electricity utilities.
- **Availability** of high-speed Internet service is not universal throughout many communities.
- **Price** of high-speed Internet service. Internet service is considered high by many subscribers.
- Price of high-speed Internet service. Internet service is not **affordable** for many others.
- **Choice** of high-speed Internet service Internet service providers, where it exists, is often limited to one.
- Access to affordable high-speed Internet service appears to be of most interest to **residents and small businesses** – important because small businesses create most jobs in America.
- **Municipal and School Operations** – Police, Fire, Public Services, Educational Tools – can benefit greatly from high-speed Internet service (Corpus Christi, Texas centers its wireless project on these areas).
- **Mobility / Portability** is offered with *wireless* high-speed Internet service – wireless is here and growing.
- **St. Louis Park competes** with 800+ cities in Minnesota and 18,000+ cities nationwide for residents and businesses to come and stay here
- About **200 other cities** nationwide are currently in the planning or implementation stages for high-speed Internet services
- **USA ranks Number 16** worldwide in high-speed Internet penetration rates.

## **STUDY FINDINGS:**

The study revealed a number of findings, which are detailed in the attached report, and highlighted below:

- **Residential and Business Surveys** revealed significant interest among both the residential and business community for competitively priced wireless high-speed Internet service.
- **City Branding** of wireless high-speed Internet service increases residential and business interest.
- **Technically**, it is feasible to provide wireless high-speed Internet service.
- **Financially**, the analysis indicates that a wireless high-speed internet services would cash flow based on input from likely residential and business subscribers.
- **Public Safety and Public Services** would benefit significantly from a wireless high-speed Internet service as much work is done remotely and on a mobile basis, and speed is essential service provision efficiency improvements. This could offset a significant portion of costs.
- **Educational Applications** available to students, parents, and teachers through wireless high-speed Internet service would strengthen schools.
- **Price** is critical, with residents indicating a monthly price point of under \$25 and small businesses under \$30.

- **Small Business Support** in St. Louis Park for wireless high-speed Internet service is strong.
- **Major Industry Support** for wireless high-speed Internet service exists from companies such as Dell, Cisco, and Intel.
- **TwinWest Chamber of Commerce** has taken the position that municipal governments should not enter the free market and become a provider of high-speed internet services.
- **Promoting Innovation** is desirable among some businesses which have approached the City in support of a municipal role.
- **Risks** are always present, especially when important and bold decisions are pending, and so due diligence is necessary to mitigate and manage risk.

### **STUDY ISSUES:**

Issues emerge along the path of any significant study, and in this study here are the issues that have gained the most attention. All of these issues have been addressed by the many study documents for Council review:

- **Security Concerns:** The concern that wireless high-speed Internet service is inherently insecure and subject to intrusion. While it is true that people must secure wireless routers they buy for their homes, any wireless devices contemplated in a study project would be secured prior to deployment.
- **Legal Concerns:** First amendment and liability concerns about information transmitted over the Internet. As an industry practice, these are addressed by current Internet Service Providers with legally supportable language. Similar practices are employed by cities that play a role in this service.
- **Health Concerns:** A significant amount of material in the report relates to health concerns raised most prominently at the July 26 Town Hall meeting. As a result of this meeting, people concerned with this issue provided a set of materials which are included in the study. Some materials cite major concerns, while others suggest minimal concerns. Importantly, many of these studies relate to technologies that emit significantly higher power levels than wireless technologies contemplated in the City's study. Nevertheless, the consultant was directed to conduct further research into health concerns raised on July 26, and findings of that research are included in the report. The consultant indicates that they have found no evidence of harmful effects that would be introduced by a Wi-Fi network they may recommend for the City.
- **Role of Government in Utilities:** There are various views of the proper role of government when it comes to any utility service that could be provided in the free market. Indeed, the large bulk of telecommunications services are provided by the private sector in the free (and often regulated) markets. Some markets do not result in the desired level of competition around price, service, choice, and innovation. Some people believe this is the best possible outcome, while others believe services that are evolving into essential utilities suggest different approaches. These different approaches include reconsideration of regulation and other potential roles for government. Regulation of telecommunications occurs most significantly at the state and federal levels. One role some local governments are beginning to play is to promote innovation and free markets through priming use of newer technologies such as wireless high-speed Internet access.

This role can take many forms including partnerships with innovative private sector companies. A concern raised is that any role cities may play in the provision of telecommunications services will put private sector companies out of business or discourage investment. This may be true; however, to date we have found no evidence to support this.

City staff and the consultant feel all these issues that emerged raise fair questions deserving of respectful follow-up. The study documents reflect that follow-up, and that follow-up is significant. Council has the option to direct staff to conduct further follow-up, such as financing the cost of subject matter experts to address security, legal, health, and role of government concerns.

### **OPTIONS:**

As the City Council and School Board review findings of this report and determine next steps, several options are presented. These range from the Private Enterprise model, which is the status quo or “do nothing” model, to the Universal Access model where the public sector builds, operates, and maintains a wireless high-speed Internet utility with free access. Here is what the study concludes thus far:

- First and foremost, the **Philosophical Decision** as to whether high-speed Internet access is becoming an essential service in which the City has some role regarding price and availability can only be informed by many of the study documents. The ultimate policy decision rests with elected officials.
- If elected officials are interested in a role, the study suggests that a **Public – Private Partnership** holds the greatest promise for a successful service. This allows the private sector to do what it does best in terms of providing a competitive service option and technical support, while the City is able to bring its strengths of branding, affordability, and access.
- Approximate 7,000 **Subscribers** (36% of all residences and 15% of all businesses) are required for the wireless high-speed Internet utility to cash flow based on subscriptions alone. These percentages are challenging and yet have also been met in other communities.
- **Price Point** analysis suggests a residential monthly price point of under \$25 and small business price point of under \$30.
- **Cost Sharing** of the wireless high-speed Internet utility for other purposes such as Public Safety and other public services reduces reliance on subscriber fees. This is similar to the benefit realized when other utilities use the same infrastructure to deliver additional services.
- **Maximizing Participation**, not revenue, is one goal contemplated by this approach to wireless high-speed Internet service.
- If elected officials are interested in moving forward without full commitment to a wireless project, the study offers an option to try a **Pilot Project**. This may be desirable as a way to both conduct a proof of concept and test some of the issues raised during the course of the study. Should a full commitment ultimately be made, a pilot project will also have offered the chance to work through many technical issues.

- It is also possible that over time, private sector interest in the provision of wireless high-speed Internet service at competitive prices throughout St. Louis Park could reach the point where a **partial or full exit strategy** makes sense to employ. This could involve sale of both intellectual and infrastructure assets in ways that promote continued service to residents and small businesses, and access to the City and Schools for Public Safety, public service and educational purposes.

**PUBLIC PROCESS:**

The report includes information on many of the efforts at public notification and public process related to this study. Here is a brief list of some major efforts:

- Informal Community Interest Surveys to Residents and Businesses
- Letters from Interested People
- E-Mails from Interested People
- Voice Mails and Phone Calls from Interested People
- *Park Perspective* Residential Newsletter Articles
- *Business Line* Newsletter Articles
- St. Louis Park *Sun Sailor* Articles
- Minneapolis *Star Tribune* Article
- City Web Site
- “Park Perspective” Cable Channel 17 Show
- TwinWest Chamber Task Force Meetings (May – September 2005)
- July 26 Town Hall Meeting
- Cable TV Replays of July 26 Town Hall Meeting
- Sunrise Rotary Meeting
- St. Louis Park Business Council Meetings
- Lenox Men’s Club Meeting
- St. Louis Park City Employees Meeting
- City Intranet Information

**ACTION STEPS:**

The study provides an outline of potential action steps should the Council and School Board determine there is actual interest in a wireless high-speed Internet utility. This includes information on a pilot project alternative. In any event, it is projected that any citywide wireless high-speed Internet utility could be fully activated in the fall of 2006.

**NEXT STEPS:**

It is recommended that Council accept the consultant’s report, receive input and comments at tonight’s meeting, refer this item for further discussion and direction at its September 26 study session, and direct staff to conduct any additional follow-ups deemed appropriate at this time.

**Attachments:** August 22, 2005 City Council Study Session Report  
Summary Report – Wireless Internet Service Feasibility Study  
(Supplement – copy available in Office of City Clerk)

**Prepared By:** Clint Pires, Director of Technology and Support Services

**Approved By:** Tom Harmening, City Manager

**COUNCIL REPORT FROM AGENDA PACKET OF 8/22/05**

<b>Wireless Study Update of August 22, 2005</b>	<b>Technology &amp; Support Services</b>
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**PURPOSE OF DISCUSSION:** To update Council on the status of the citywide wireless study, address any questions, and receive on-going input. Staff and the consultant will be present to discuss the study. This update will also include follow-ups to the July 26 Town Hall and TwinWest Chamber of Commerce meetings. The agenda for those meetings included the following items:

1. Background on why St. Louis Park is studying providing wireless Internet access (Clint)
2. Currently available Internet and wireless services (Tom Asp, Virchow & Krause)
3. Results of the recently conducted informal and random wireless surveys (Tom)
4. Options that appear feasible in St. Louis Park at this point in the study (Tom)
5. Public Q & A and comment period

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**STUDY SCHEDULE AND UPDATE:** The study is on 3 month schedule for completion. VK and City staff met on May 24 to share background information and study context, set meetings, and plan remaining steps to complete the project. Presented below is the high-level study due diligence timeline with status reports

## 2005 CITYWIDE WIRELESS STUDY DUE DILIGENCE TIMELINE

### FEBRUARY 29 – MAY 8

- Determine whether there are reasons to consider collaboration with the School District and/or other surrounding communities that may be interested in providing a similar service (to make the system usable over a wider geographical area).

STATUS: Completed and School District agreed to partner while no bordering suburbs agreed to partner in the study. The potential to expand and provide service to surrounding communities should a service actually become available in St. Louis Park was discussed. The Minneapolis project was further along in its schedule, and had reached the RFP phase.

- Design informal business and residential community interest surveys.

STATUS: Completed by staff in April.

- TwinWest Chamber Mayor and Manager Luncheon.

STATUS: Held on March 17 and City staff, the Mayor, and Chamber representatives discussed the study directed by Council. Attendees discussed concerns about the proper role of government in ensuring access to competitively priced wireless high speed Internet service. Further discussed at the June 23 Twin West Mayor and Manager Lunch

- Distribute surveys with associated articles in *Park Perspective* and *Business Line* newsletters.

STATUS: Completed in April.

- Issue study consultant Request for Qualifications (RFQ).

STATUS: Completed and distributed on April 17 to approximately 15 consultants who either expressed interest or were established in this field of study. TwinWest Chamber distributed RFQ to its members to provide them an opportunity to respond.

- Meet with SLP Business Council Task Force.

STATUS: Met with TwinWest Chamber Task Force on May 5 to discuss study and potential ways in which Task Force could contribute. A second task force meeting was held on June 6. Consultant project team members were in attendance to review the study components and solicit feedback on the draft random residential and business surveys. A third task force meeting was held on July 26 following survey results and a meeting to present findings of the final report is

scheduled for September 7. Chamber staff has indicated they are currently working on a policy position statement to present to Council.

**MAY 9 - 23**

- Draft a vision statement for competitive high speed wireless Internet service provision.

STATUS: Draft ideas introduced to Council on May 9. A newer draft statement should also incorporate feedback from completed surveys and study research.

- Tabulate, analyze, and present informal business and residential community interest survey results.

STATUS: Completed and presented to Council on May 9. Survey indicated interest from both the residential and business communities in conducting further research. Results also shared with School District and TwinWest Chamber of Commerce to share with Task Force.

- Engage consultant.

STATUS: Completed at its May 23 special meeting, Council authorized execution of a contract with Virchow, Krause & Company, LLP (VK) for completion of a technical, market, and financial feasibility study.

**MAY 23 – AUGUST 22**

- Conduct market research in the community to measure the likely demand for high speed wireless Internet services at various price points.

STATUS: Residential and business telephone surveys completed and presented to Council on July 25.

- Gather stakeholder input.

STATUS: Meetings with Chamber Task Force. Meetings held with Lenox Men's Club and Rotary Club. Chamber Task Force and City provided names of potential key informants. Meetings held with City employees on August 1, including representatives of unions. Town Hall meeting held the evening of Tuesday, July 26 to share basic survey findings and gather input on the wireless concept options. Special invitations to the Town Hall meeting were made to various community interest groups.

- Research technical wireless alternatives available.

STATUS: Consultant has completed.

- Analyze various technical alternatives currently available and forthcoming.

STATUS: Consultant has completed.

- Recommend technical alternatives (including migration path to forthcoming technologies) that appear to fit St. Louis Park's particular situation.

STATUS: Consultant has completed.

- Based on the market research and technical research conducted, perform a Return on Investment (ROI) analysis that includes both hard and soft costs and benefits, business model options, and cash flow analysis that accounts for total cost of ownership and replacement. Follow-up on health concerns raised at July 26 Town Hall meeting, including extending an invitation to meet with concerned attendees with findings to date.

STATUS: In process based on above analyses and Council will be updated.

- Staff returns to Council with report findings, options, and recommendations.

STATUS: Council will receive an update with the completed study currently scheduled to be formally presented to Council at its September 19 meeting. Key elements of the final report to be discussed in a broad overview fashion include the following:

- Recommendations and Insights
- Business Models and Financial Overview
- Benefits and Costs Beyond the Balance Sheet
- Health Considerations
- Legal Considerations
- Action Steps

Staff and the consultant will be present at the Council meeting to provide further information and answer questions.