



CITY OF KIRKLAND
Information Technology Department
123 Fifth Avenue, Kirkland, WA 98033 425.587.3050
www.ci.kirkland.wa.us

MEMORANDUM

To: David Ramsay, City Manager

From: Brenda Cooper, CIO

Date: July 24th, 2006

Subject: Kirkland Free Wireless



RECOMMENDATION

No formal recommendation at this time. This is an update on the wireless pilot project for Council. Council members who are interested in using the wireless are encouraged to take advantage of the service.

POLICY IMPLICATIONS

None at this time.

BACKGROUND DISCUSSION

Project History

During the last budget process, City Council approved a wireless pilot project for selected city parks. The goals of the project were to run a pilot program from this summer through the following summer and use that time to gather usage information and community reaction the project. We will keep the council informed about the project as it continues, and will produce both a budget white paper for the upcoming budget process and a formal report near the end of the project. Council may be asked to provide preferences on next steps at each of those times. Next steps could be to leave the pilot in place as is, to expand the network either as a free service or in partnership with a private firm, or to dismantle the network.

Current Status

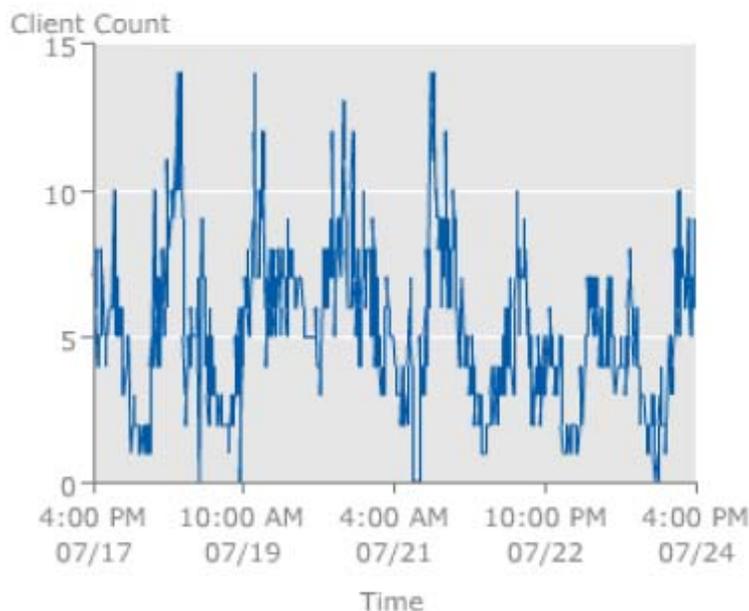
The pilot project is up and running. It has been installed and in test mode since early June. We had hoped to take it "prime time" on June 21st, but we experienced a number of technical challenges as parts of the project turned out to be more complex than we anticipated. This memorandum is being written on July 24th, and at this time we believe the system is stable enough to be moved from test to production mode on August 1st.

The pilot area includes Marina Park, Peter Kirk Park, and parts of downtown. Coverage expectations and other usage information are on the website in a FAQ format, and a copy has been provided to you as part of this report.

Even though we have been in test mode, there has been a lot of community usage so far. Below is an example report for the last seven days which shows that around fourteen computers at a time are connected during peak periods, and that usage seldom falls off to zero. We expect that usage will go up as we move from the test phase.

On Demand Reporting

Associated 802.11b/g Clients for 'Outdoor Phase1'



Communication To and From the Community

So far we have announced the presence of the network with information in Currently Kirkland, on the front page of the City website, and with signs in the coverage area which look like the round project logo that is on the top of this memo. Our Kirkland Courier page for August will feature the pilot project, and we will also issue press releases. We plan to post a web survey and to have an email discussion group that interested people can join. We will also explore providing information at the Wednesday Market and on fliers that we can distribute to the local businesses.

Most of the feedback that we've received has been provided for you below. We included comments about the project, but did not include emails that only addressed technical issues, although we can get those for you if you like. Almost all of the feedback we've received directly has been positive, although the kirklandblog questioned the project. We've provided all of the information we have that strongly supports or pans the project, since a primary goal of the

project is to gather community reaction. Please keep in mind that since this is all email feedback, and is all voluntary, the information below should not be considered comprehensive or statistically accurate.

Email Feedback

I'm sitting here at Tully's on Lake Street. Thanks for the free WiFi – it's great!

Dear Kirkland,

Although, I have internet through another company, I sometimes use the free Kirkland Wifi when I am not at home. It makes it convenient to sit down at a coffee shop in downtown Kirkland and work on your computer. Keep it going!

love it. Faster, stronger, coverage ASAP please

This is an excellent idea. I have often wondered about this.

I have been a stay-at-home single dad who has spent a tremendous amount of time with my daughter doing this like playing in the parks. Having the ability to have my laptop with me would enable me to stay in contact with the business I started (for this reason) at intervals between activities.

In my opinion this a foolish way to spend taxpayer dollars. Parks are for the public to enjoy and a place to get away from laptops etc.

Wow! This is awesome. I think that it's a great idea for the city to offer wireless access in public places. personally, I live next to Juanita Beach Park and would love to be able to chill there and work there sometimes.

pls keep up the good work!

Your service is really convenient and a great idea... but it seems to be running very slow for "broadband"... your home page takes for ever to load... also, I tried to do some file downloading and it wouldn't work at all...

Hope you iron out the bugs and keep it up.

Hello Kirkland,

Free Wi-Fi in the parks is a great idea. BTW, my office is in the Parkplace building (tower portion) and I am able to connect from here pretty well too.

Thank you for doing this. I am traveling all day on the eastside during the week. Since I stumbled onto the wireless connection in Kirkland, I literally plan my day so that I'm in the Kirkland area around lunchtime. I can grab lunch, check my email and be back on the road. The added bonus is I've found some great lunch spots as well.

It's great. I'm sending you this email from the free wireless in Kirkland right now.

Thanks,

It reminds me of what a great place Kirkland is to live now that I can do my work while roaming from coffee house to coffee house!

Great use of taxpayer money. I hope this works well for everybody.

Let me know if there anything I can do to help (my roof?).

Thank you!

This is awesome! I sent this in as a suggestion a while ago (presumably along with a lot of other folks), glad someone was listening!

Thank you city of Kirkland for free wifi!! I love that I can come downtown to study and have FREE wireless (free is always a good thing for a poor college student!!) SO THANK YOU KIRKLAND!!

I LOVE IT! I find it very nice to be able to have access while downtown and enjoying the outdoors! This is a great addition to our city and park system. My only complaints are that I wish it was started about two years ago, and I hope it becomes more consistent....Thanks and keep up the great work.

I am a fairly new local tax payer in Kirkland and I think this is a creative, fun idea. Its very innovative, gets people out of their homes and will be excellent for downtown businesses as well.

I work out of my home, but this will offer me an opportunity to do otherwise.

I am in support of it 100%.

Although I'll unlikely to use WiFi at those locations, it is a very good start. The locations that I think would be benefiting a lot from a project like this are parks where people "hang out" for a longer period of time (just as in coffee shops), not just sit down for a cup of java or stroll through. Juanita Beach, Juanita Bay, the parks along the water south of downtown, Everest, etc, etc.

All in all a great idea and I realize that it has to start somewhere. Please do not take the success, or potential lack thereof, as a sign on how it'd be in the rest of Kirkland. WiFi will be gladly accepted once it roils out city wide.

Providing wireless service should be fairly to very inexpensive and there are numerous other "pilots" from where experiences can be drawn, such as limit connection time, reduce throughput, add some type of security, etc, etc.

One issue, and it is all about engineering, is to prevent "neighbors" to WiFi locations to get a free ride and sort of use up the available capacity in lieu of paying for a "fixed" (wired or wireless) high-speed connection.

At the end, it is all about making sound technical decisions, and market the service so the investment actually gets used.

The following link will get you to the kirklandblog comments on the project:
http://kirklandweblog.typepad.com/kirkland_weblog/2006/07/wirless_in_the_.html

We've provided a link instead of just copying the blog, both for copyright reasons and because there is an ongoing conversation in the comments area that you might be interested in.

FAQ Information from our Website

Here is the FAQ page as of July 24th, 2006. Note that we add new information frequently.

Introduction

The City of Kirkland is running a pilot program to provide free wireless access in Marina Park and Peter Kirk Park, as well as parts of downtown that are near the parks. Hopefully this FAQ will answer any questions you may have about the project. If we missed a question that you have, please send your question via email to wireless@ci.kirkland.wa.us. As we get more questions, we'll update this document on our website at www.ci.kirkland.wa.us.

When will the wireless be available?

The service is up now in test mode, and you are welcome to use it if you like. Please be patient and expect some challenges as we finish tuning and testing. Please email us about your experience.

How is the testing process going?

Most people are having good experiences on the network. We've received many positive notes from users. However, sometimes the network reports that it has a good connection, when it really does not. The symptom for this is that web pages will be slow to load or will not load at all, and other applications may also cease working. If this happens to you, restarting your computer will fix it at least temporarily. Please let us know where you were and when. That may help us fix this problem.

How long will the pilot run?

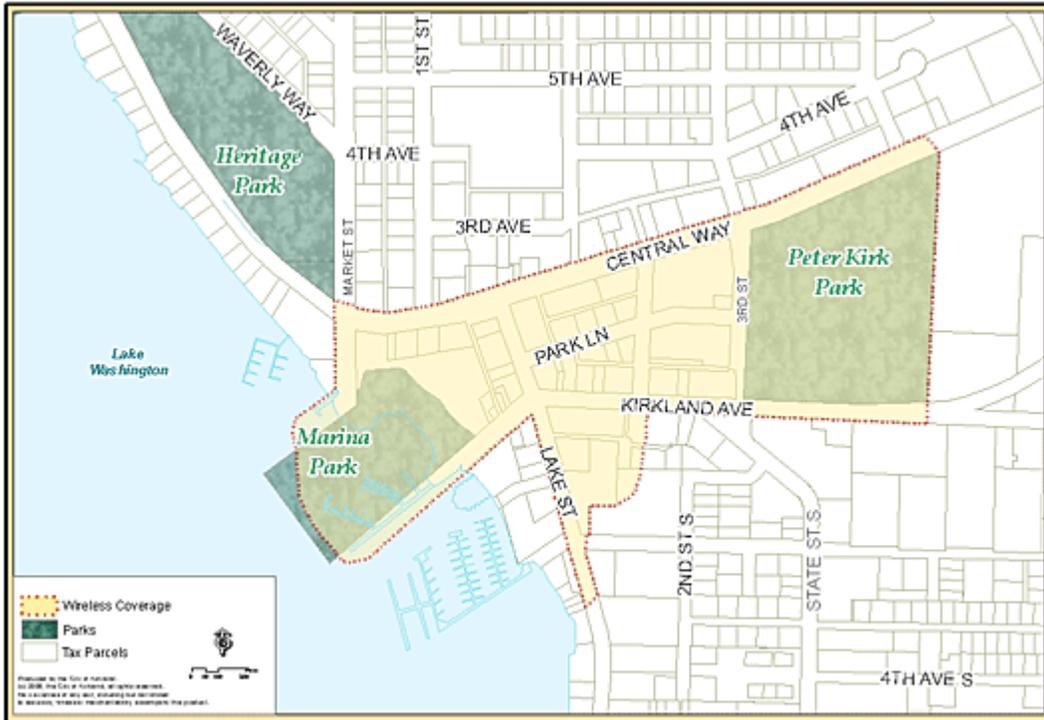
We plan to offer the service from the beginning of this summer to the end of next summer.

What happens after the pilot?

Throughout the project, we'll collect comments from users of the service. We'll learn what it costs to keep the program going throughout the pilot. The City Council will receive periodic updates, and when we feel there is enough information, city staff will make a recommendation to Council about whether to continue, expand, change, or stop the program.

What is the coverage area for the project?

Marina Park, Peter Kirk Park, and most of the downtown core.



[Click Here to download a higher resolution of the coverage map](#) (PDF)

How do I use the wireless network?

Simply bring your wireless-enabled laptop down, set your network id (SSID) to KIRKWIFI and connect. Access is free.

How secure is this network?

This is a free and open network, which means it is not secure. We don't recommend its use for business transactions that need wireless encryption. This is similar to most networks available in coffee shops or other locations that provide free or low-cost wireless service.

Will the network reach into businesses downtown?

That's a tough question. We designed it to provide access of the streets and benches, but any wireless network will penetrate into various buildings that it is around, depending on what natural interference like trees and walls exist. Since it is unsecured, we do not recommend that businesses choose to use this network to replace their regular business connectivity to the internet.

How will the city support this network? How do I get help if I have a problem connecting?

The city is committed to keeping the network up and running and working well. We encourage users to email us with questions and problems at wireless@ci.kirkland.wa.us. We will post common answers to frequent questions on our website. Yes, we realize that if you can't connect you can't send an email at that moment, but we do not have the staff to provide telephone or other direct support to customers. One of the things we will evaluate as part of the pilot is whether or not we should provide additional support.

I've read about other cities like San Francisco and Philadelphia providing city-wide wireless connectivity. Is the City planning to provide city-wide wireless access?

Large networks that provide city-wide coverage are expensive. One possible outcome of the pilot is a significant expansion of the program, which would probably require either extensive

citizen support for a taxpayer-funded network or partnership with local internet providers. We will evaluate those options. Kirkland is lucky to have a strong telecommunications business sector. We believe in municipal networking where appropriate, but we also support the success of our commercial providers. We chose parks and a portion of downtown for the pilot because those are public spaces where we feel access to the internet will enhance the quality of life for our citizens and for visitors to the area.

If I already operate a wireless network downtown, will this network interfere?

We hope not. The nature of this technology might require adjustments of our network. Please contact us at wireless@ci.kirkland.wa.us if you have questions or problems.

I am a downtown business owner. Can I advertise my business on this network?

Not during the pilot. Some city wireless networks which have for-profit partners include advertising as a revenue source. This option will be evaluated. Please tell us how you feel either as a user of the network (Do you mind having ads downloaded to your computer in exchange for free service?) and as a business owner (Would you advertise on a local wireless network?).

Are there any restrictions on usage?

There will not be any restrictions on usage at kick-off, but we may add restrictions (such as two hours usage a day) as needed at any time during the pilot. We'll let you know.

How fast will it be?

This will depend largely on how many people are connected and using it at any give time. The connectivity is shared by all wireless users and can become slower as more users connect and use the network.

When is this pilot planned to kick-off and this service readily available?

We plan to have the service, installed, tested and ready before the official start of summer in June. Because we are still waiting for equipment, we aren't ready to post a firm date. I really don't want to build any community expectation that we don't meet.

How will you measure the success of the pilot?

We are specifically evaluating both cost and community value. I think it's fair to say that if we keep the service up reliably, we have a good conversation with the community about whether or not they value the service, and the project stays roughly in-budget, we'll have succeeded. Since this is a pilot – we're testing a service – it doesn't matter if the next steps are to dismantle it, leave it in place, or expand it. It matters if we have a good conversation about it and learn from the project.

You said the pilot project is taxpayer-funded. What is the cost of the project?

Well, we're not done yet, so we don't have actual costs. The project was planned for during 2004, and priced based on a specific technology that is no longer even available. The original budget was \$114,671 for the approximately 15 month pilot. Almost half of that was for equipment and half for services and supplies (things like installation, signs, etc.). We've had to retool the technology completely. We're still under budget so far. More later!

What is the city's vision for wireless connectivity in Kirkland parks?

We're hoping this pilot will help us define a clear vision!