**Doll Email**

A few specific answers:

• Yes, we have the raw data that could be used for responses by neighborhood.

• Trends and story line:

◦ Mapping to show the changes over time would be fabulous.

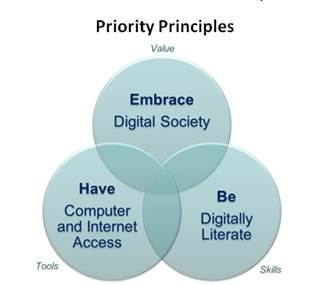
◦ I think illustrating the data using the key challenge points below would be good; these are the challenges we have called out in our summary reports and by Ward. Showing data on a map by income, race, age and education would be very interesting.

◦ Organize the data around the key principles of Tools/Access, Skills/Literacy and Value/Embracing Digital Society.

◦ Could also build on what we have for the User/Non-User Profiles, and how we have organized the box-plot data into the categories of View of Digital Society, Tools, Literacy, Information Consumption, and Engagement. I think these categorizations provide for broader analysis of the data and would be great to see on a map and compared over time.

◦ Mobile (Smartphone/Tablet) compared to Desktop/Laptop with Internet at home, and looking at the power differences of the tools for engagement, creation, work and education needs, job seeking, economic development etc. (advantages/disadvantages of having cell phone only as your Internet at home)

◦ Value and priority: how is the value of and type of digital access and literacy changing as technology, education, the economy and workforce demands continue to change? What is important for a community to track?



Access to Tools: People need affordable and reliable computers and broadband Internet access. Access opens up a world of possibilities and allows full participation in our society.

Digital Literacy: Beyond having access to technology, people need to understand digital technologies and how to use them effectively to achieve their educational, economic, civic, and social goals.

Value: To embrace the digital society, people must see the benefits to their life. The City is stronger, the more its residents take advantage of computing and the vast sea of knowledge the Internet offers.

Key Challenge Points from the Survey

Ø The data on access and use of technology points to a digital equity gap along the lines of income, race, age and education.

Ø Overall, too many residents do not feel very comfortable finding and applying for jobs online; only 65% of unemployed respondents looking for work have a computer with Internet at home.

Ø Residents are not comfortable attaining education online and are not often accessing health information.

Ø While households with children agree to the importance of computers and Internet access at home, there is a 16% gap between whites and people of color in access within households with children.

Ø The Internet is not being used often by residents to find community resources, engage in civic activities or communicate with government.

Ø Residents do not feel they know enough to deal with cyber security issues.

**Connected Nation:** [**http://www.connectednation.org/node/3526**](http://www.connectednation.org/node/3526)

**Hi,**

**I’m a journalist at the Minneapolis Star Tribune doing research on the digital divide in the United States, with a special focus of course on Minnesota.**

**I’m wondering if there’s anyone at Connected Nation who would be willing to speak with me about the digital divide in general, the ways that the gap has been narrowed in recent years and what disparities remain with regards to Internet access?**

**I’m also curious how/if the FCC’s new definition of high-speed Internet from earlier in the year has affected various goals and benchmarks for helping the country get more connected with greater access to high-speed broadband?**

**If there’s anyone willing to talk to me about these subjects, that would be invaluable to my efforts and understanding. Thanks!**

**Best,**

**-Jeff Hargarten**

**Minnesota Office of Broadband Development:** [deed.broadband@state.mn.us](mailto:deed.broadband@state.mn.us)

**Hi,**

**I’m a journalist at the Star Tribune doing research on the digital divide in the United States, with a special focus of course on Minnesota.**

**I’m wondering if there’s anyone at Office of Broadband Development who would be willing to speak with me about the digital divide in general, the ways that the gap has been narrowed in recent years and what disparities remain with regards to Internet access in Minnesota? We’ve written quite a bit about the expansion of rural Internet access, but I’m interested in anything the Star Tribune perhaps haven’t covered in much depth.**

**I’m also curious how/if the FCC’s new definition of high-speed Internet from earlier in the year has affected various goals and benchmarks for helping the state get more connected with greater access to high-speed broadband?**

**If there’s anyone willing to talk to me about these subjects, that would be invaluable to my efforts and understanding. Thanks!**

**Best,**

**-Jeff Hargarten**

**TLI: Naomi McDonald, spokesperson,** [naomim@umn.edu](mailto:naomim@umn.edu)

Hi Naomi,

I’m a journalist with the Star Tribune doing research **on the digital divide in the United States, with a special focus of course on Minnesota.**

**I’m wondering if there’s anyone at TLI with any expertise or insights into the subject who might be willing to speak with me? I’m interested in isolating some of the key challenges that remain with connecting and educating the digitally disadvantaged, even as the gap has seemingly closed considerably in recent years.**

**Any information is very greatly appreciated. Thanks!**

**-Jeff Hargarten**

About Minneapolis tech survey: [Otto Doll](mailto:otto.doll@minneapolismn.gov" \t "), [otto.doll@minneapolismn.gov](mailto:otto.doll@minneapolismn.gov)

Hi Otto,

I’m a journalist with the Star Tribune looking at the 2014 Community Technology Survey results, and I’m wondering if you or someone else might be able to help walk me through a few things and answer some questions about the survey?

Any information is very greatly appreciated. Thanks!

-Jeff Hargarten

Hi Jennifer,

I’m a journalist at the Star Tribune. Danna McKenzie at DEED referred me to you as someone with some insights into the digital divide in Minnesota when it comes to education and public access to technology.

If you’re so inclined and have the time, I’m wondering if you can lend some of your knowledge to my research in the digital divide as it currently stands in Minnesota? If you have time either before or after the holiday, that’s fine since my time and deadlines are pretty flexible at the moment.

Your time, any information or insights are greatly appreciated. Thanks!

-Jeff Hargarten

**Fiber adoption:** http://broadbandnow.com/Fiber

Rosenblum Variety column: <http://www.startribune.com/rosenblum-twin-cities-families-get-needed-lift-across-digital-divide/345958842/>

A stubborn digital divide remains, with 28 percent of Americans still not connected to the Internet, according to EveryoneOn, a national nonprofit working to eliminate Internet inequities. Most come from low-income and minority communities, including schoolchildren falling behind in their studies, elderly people unable to access online health exchanges and job-seekers seemingly doomed to unemployment now that more than 90 percent of recruiters are hiring via social media.

The divide is deep in our progressive Twin Cities, too. A 2012 survey by the city of Minneapolis found that only 57 percent of residents of the Phillips neighborhood have computers with Internet access, as do 65 percent of residents on the Near North Side, compared with 82 percent of households citywide.

That’s why an 11th-hour save by Internet provider Comcast deserves our thanks. Comcast leapt in to partner with St. Paul-based PCs for People to offer 8,500 Twin Cities families low-priced Internet services that they were about to lose.

PCs for People’s executive director, Casey Sorensen, explained that along with giving away nearly 10,000 refurbished computers this year, his nonprofit has offered Internet services to thousands of low-income Twin Citians through a wireless-data network from Sprint.

Comcast blowing up TC speeds: <http://www.startribune.com/comcast-expands-broadband-capacity-in-several-business-areas/331405631/>

Another on Comcast speeds increasing: <http://www.startribune.com/comcast-to-double-internet-speeds-for-many-in-twin-cities-for-free/322744691/>

**FCC changes high-speed internet definition:** <http://www.latimes.com/entertainment/envelope/cotown/la-et-ct-comcast-time-warner-fcc-broadband-20150131-story.html>

**http://www.mhta.org/report-mn-not-on-track-to-meet-2015-broadband-goals/**

MHTA – A report by the *[Governor’s Broadband Task Force](http://mn.gov/commerce/topics/Broadband/Governors-Broadband-Task-Force.jsp" \t " _blank)* concludes Minnesota is not on track to meet the state’s current broadband goals. They were established by the legislature in 2010 and include universal access and high speed deployment to all residents and businesses as soon as possible, but not later than 2015.

“While the Task Force is encouraged to report that progress is being made toward the state’s  
broadband goals, we are not on track to meet them by 2015,” Task Force members wrote in their report to Governor Mark Dayton. “The private sector is continuing to expand service and new technology is improving the quality of the service across the state. But without partnership from the public sector, it will be incredibly challenging to ensure that all Minnesotans have access to high-speed broadband.”

The Task Force has 13 members appointed by the governor who represent different areas of the state. It is chaired by Margaret Anderson Kelliher, who is the president and CEO of MHTA.

The report includes several recommendations, including tax credits and grants that would incent Minnesota’s broadband providers to build more connectivity in unserved areas. It also highlights a “dig once” policy aimed at streamlining fiber construction. Other recommendations include scholarships that would provide access to poor students and increased funding for schools and libraries to provide high-speed Internet access.

The Minnesota Department of Revenue has not finalized the cost of all of the recommendations, but the report currently outlines more than $4 million in expenditures for the next budget cycle. The governor will review the recommendations and submit a proposal to the legislature.

Minnesota defines broadband speed at 10 megabits per second download and six megabits per second upload. Current estimates show 62% of Minnesota homes have access to service at those levels. Rural Minnesota continues to have the most significant gaps in service.

The Task Force will continue its work in 2013 with more meetings scheduled around the state. The report outlines opportunities to focus on targeted broadband issues related to access, adoption and use. Members will generate another end-of-the-year report and may also release “White Papers” or other commentary throughout the year.

**Minnesota’s Digital Divide**

The digital divide in Minnesota, which was larger a decade ago, has started to close dramatically, but the state is still behind comparable states in providing adequate technological access and education to poor and rural areas of our cities and state.

<https://www.connectednation.org/sites/default/files/bb_pp/mnplanningreport_all_screen.pdf>

Fiber-optic in Minnesota sucks:

25 Mbps – 55.13%

50 Mbps – 50.53%

100 Mbps - 46.86%

<http://www.twincities.com/localnews/ci_26003095/minnesota-wide-broadband-goal-unlikely-be-met-by>

[**http://www.connectednation.org/node/1790**](http://www.connectednation.org/node/1790)

**Minnesota Releases New Broadband Availability and Adoption Statistics Report**

(ST. PAUL, MN) St Paul, MN The state of Minnesota made an empowering move today towards increasing high-speed Internet access and adoption across the state. The Minnesota Department of Commerce and its partner, Connect Minnesota, released an in-depth report that takes a state-wide snapshot of Minnesota's technological landscape. The Minnesota Broadband Availability and Adoption Statistics report, now available on Connect Minnesota's website (http://www.connectmn.org/research/), is a key element for strategic planning and further development of high-speed Internet access and adoption programs across the state.

"We are focused on ensuring Minnesota has the broadband access we need for our consumers, businesses and institutions to provide opportunity and competiveness in our global economy," said Mike Rothman, Commissioner of Commerce, the designated agency partner for Connect Minnesota for the federally-funded broadband mapping initiative. "This map is an important first step in the progress for access to broadband Internet."

This assessment of the broadband market in Minnesota is conducted by Connect Minnesota in partnership with the Minnesota Broadband Task Force and the Minnesota Department of Commerce. This working paper aims to provide a detailed review of the current state of broadband in Minnesota that will spark discussion across multiple broadband stakeholders in the state on key policy and strategies to expand and enhance the broadband experience for all Minnesotans.

"The data contained in this detailed report will serve as an integral resource for spurring broadband development and adoption plans," said Brian Mefford, CEO of Connect Minnesota's nonprofit parent organization, Connected Nation. "This research will assist in facilitating the fulfillment of technological modernization goals that have been set for Minnesota."

Highlights from the report:

Minnesota's broadband marketplace is interesting when comparing the few urban areas of the state with their rural counterparts. Because three-fifths of Minnesotans reside in the Minneapolis-St. Paul area, broadband inventory data shows high availability of upper speed tier broadband in the state.

The outlook, however, for the state's remaining households indicates fewer choices and slower speeds. Furthermore, while only available to less than 4 percent of Minnesota households, fiber to the home broadband is available in more than 50 of Minnesota's 87 counties.

An estimated 66,647 Minnesota households (3.41 percent) lack basic broadband service and remain unserved by terrestrial, fixed broadband. It is further estimated that approximately 93.76 percent of Minnesota households have broadband available at download speeds of 3 Mbps or more. This implies that an estimated 118,313 Minnesota households have basic broadband available but lack fixed broadband service of at least 3 Mbps downstream.

The adoption percentage of households across Minnesota that have broadband service in the home is 72 percent; by comparison, national surveys show that 67 percent of American households subscribe to home broadband service.

Statewide, 85 percent of all residents own a home computer. This translates into over 588,000 adults without a home computer, with 73 percent of those without a computer saying they do not believe they need one.

According to this report's findings, Minnesota does appear to be different from the much of the rest of the country in one important way.

Broadband speeds at higher speed tiers are significantly higher than many other states.

Minnesota's availability of broadband at the 50 Mpbs and 100 Mbps speed tiers is significantly greater than many other states. Also interesting is the prevalence of fiber-to-the-home broadband. While fiber is only available to 3.98 percent of households in Minnesota, this FTTH availability is spread across more than 50 of our counties, and not concentrated in just a few areas.

Connect Minnesota is the state's designated entity for the statewide broadband mapping and planning initiative under the U.S. Department of Commerce's National Telecommunications and Information (NTIA) State Broadband Data and Development (SBDD) program. Over the course of a five-year award period the project aims to expand broadband access and use across the state through broadband mapping, identifying barriers to broadband adoption, generating statewide awareness, creating local technology planning teams, and establishing computer ownership and Internet access programs.

Connect Minnesota provided the mapping data used in the National Broadband Map which was released by the NTIA last week. Connect Minnesota will continue to gather semi-annual updates on the broadband maps over the next four years. Citizens are encouraged to visit the map and offer feedback to ensure the highest level of accuracy.

[**http://www.connectednation.org/node/2641**](http://www.connectednation.org/node/2641)

**Minnesota Broadband Adoption on the Upswing**

**Adoption rate grows by 6 percentage points since 2011**

ST. Paul, MN – Connect Minnesota today released new data showing that broadband adoption in Minnesota is increasing, with 78% of households now subscribing to broadband service, up from 72% in 2011. That represents 3.2 million adults statewide with broadband service at home. One of the biggest jumps was in mobile broadband usage, which increased by 12 percentage points.

The data are available via an interactive widget on the Connect Minnesota website.

Among the key findings of the residential survey are:

369,000 Minnesotans who do not subscribe to home broadband service say they do not subscribe because they don’t feel that broadband is relevant to them, or they don’t believe they would benefit from having broadband at home.

Rural computer owners are more likely to have said good-bye to their desktop computers – In Minnesota, 41% of rural computer owners only have a laptop or tablet compared to 31% in non-rural Minnesota.

Within the past year mobile Internet usage has increased from 39% to 51% across the state. The freedom to access the Internet while away from home is the main reason why Minnesotans are subscribing to mobile broadband service on their cell phones.

Only 1% of Minnesotans who do not subscribe to mobile broadband on their cell phones cite concerns about mobile data limitations (or “data caps”) as the main reason why they don’t subscribe; among Minnesotans who have mobile plans that include data caps, nearly one in three say they went over their cap in the previous 12 months (32%).

This survey is conducted in support of Connect Minnesota's efforts to close Minnesota's digital gap and explores the barriers to adoption, rates of broadband adoption among various demographics, and the types of activities broadband subscribers conduct online, among other findings.

“The adoption statistics we released today show that more Minnesotans have access to and are adopting broadband,” said Connect Minnesota’s State Program Manager William Hoffman. “The ongoing efforts to increase broadband access, adoption, and use across Minnesota will result in continued economic and social benefits for our state.”

While the results show adoption is increasing, there are 904,000 adults who do not subscribe to the empowering technology of high-speed Internet. To address this digital divide, Connect Minnesota offers the Every Community Online program where it offers free digital literacy training and low-cost computers and Internet access.

Connect Minnesota's 2012 Residential Technology Assessment was conducted in late 2012 and includes responses from 1,201 residents. The survey was conducted as part of the State Broadband Initiative (SBI) grant program, funded by the U.S. Department of Commerce, National Telecommunications and Information Administration, and by the American Recovery and Reinvestment of 2009.

**2010 Minnesota study:** [**http://www.slideshare.net/mlcvista/exploring-minnesotas-digital-divide**](http://www.slideshare.net/mlcvista/exploring-minnesotas-digital-divide)

* **2010 data: 91 percent of Minnesotans have Internet access**
* **BUT only 61 percent of Minnesotans earning less than $15,000 per year to**
* **Only 73 percent of Minnesotans earning $15,000 to $25,000 per year access the Internet**
* **Have nots: seniors, ESL, rural residents, adults without a high school diploma, low-income adults, disabled adults**
* **In Minnesota, a lack of perceived relevance drives non-adoption to broadband rather than actual access**

**Minneapolis connectivity and technological prowess**

**MPR 2007:** [**http://www.mprnews.org/story/2007/12/06/digitaldivide**](http://www.mprnews.org/story/2007/12/06/digitaldivide)

**White House study 2015:** [**https://www.whitehouse.gov/sites/default/files/wh\_digital\_divide\_issue\_brief.pdf**](https://www.whitehouse.gov/sites/default/files/wh_digital_divide_issue_brief.pdf)

“The benefits of this technological revolution, however, have not been evenly distributed. Millions of Americans still do not regularly use a computer, and research shows that there remain substantial disparities in both Internet use and the quality of access. This “digital divide” is concentrated among older, less educated, and less affluent populations, as well as in rural parts of the country that tend to have fewer choices and slower connections. “

**TechdotMN 2010: http://tech.mn/news/2010/05/06/what-is-the-digital-divide-and-why-does-it-matter-to-minnesota-get-to-know-13-ken-nelson/**

**2012 Rural Minnesota internet survey: http://www.ruralmn.org/wp-content/uploads/2012/11/2012-broadband1.pdf**

**Fiber map:** [**http://www.scribblemaps.com/maps/view/fiberusi**](http://www.scribblemaps.com/maps/view/fiberusi)

**Fiber lottery:** [**http://www.techrepublic.com/article/the-google-fiber-lottery/**](http://www.techrepublic.com/article/the-google-fiber-lottery/)

**Strib story on fiber availability:** [**http://www.startribune.com/us-internet-intensifies-battle-for-high-speed-dollar-in-south-mpls/298723851/**](http://www.startribune.com/us-internet-intensifies-battle-for-high-speed-dollar-in-south-mpls/298723851/)

**Minneapolis wireless network:** [**https://en.wikipedia.org/wiki/Minneapolis\_wireless\_internet\_network**](https://en.wikipedia.org/wiki/Minneapolis_wireless_internet_network)

By December 2010, USI Wireless had approximately 20,000 subscribers, according to the company's CEO, Joe Caldwell.[[6]](https://en.wikipedia.org/wiki/Minneapolis_wireless_internet_network#cite_note-strib2010-6) The company's original target was 30,000 subscribers by 2012; Caldwell expected the company would reach this milestone by 2013, due to delays in setting the network up.[[6]](https://en.wikipedia.org/wiki/Minneapolis_wireless_internet_network#cite_note-strib2010-6) Nonetheless, the firm made a $1.2 million profit in 2010[[6]](https://en.wikipedia.org/wiki/Minneapolis_wireless_internet_network#cite_note-strib2010-6) and counted 27,000 subscribers by 2014.[[8]](https://en.wikipedia.org/wiki/Minneapolis_wireless_internet_network#cite_note-1gb-8) Meanwhile, in 2010, the city of Minneapolis was paying $1.25 million annually for the wireless service but using only six percent of the capacity which it had purchased.[[6]](https://en.wikipedia.org/wiki/Minneapolis_wireless_internet_network#cite_note-strib2010-6) Some complaints were raised by various municipal departments from whose budgets the cost of the network subscription was being deducted, regardless of whether they were utilizing it.[[6]](https://en.wikipedia.org/wiki/Minneapolis_wireless_internet_network#cite_note-strib2010-6) More departments, however, were beginning to use the network, including city inspectors and 90 other city employees, a trend which was expected to lead to a usage of fourteen percent of the city's purchased capacity by the end of 2011.[[6]](https://en.wikipedia.org/wiki/Minneapolis_wireless_internet_network#cite_note-strib2010-6)

The city of Minneapolis had connected 30 security cameras and 35 electronic street signs to the network by the end of 2010, with the intention to connect 50 network-enabled [parking meters](https://en.wikipedia.org/wiki/Parking_meter) and 10 garbage trucks to the system in the near future.[[6]](https://en.wikipedia.org/wiki/Minneapolis_wireless_internet_network#cite_note-strib2010-6) Fire and police conversion to the citywide network was also underway, though the city was taking necessary precautions to ensure that the two services, who will ultimately have their own dedicated frequency, continue to offer uninterrupted public safety service.[[6]](https://en.wikipedia.org/wiki/Minneapolis_wireless_internet_network#cite_note-strib2010-6)

About 200 free wireless access points were set up around the city to aid with the city's goal of increasing access to the internet. US Internet paid $500,000 up front and agreed to pay five percent of its yearly revenues for seven years to maintain them, totaling about $10 million.[[5]](https://en.wikipedia.org/wiki/Minneapolis_wireless_internet_network#cite_note-2006mpr-5) By 2010, 44 such points had been set up at community centers around Minneapolis,[[6]](https://en.wikipedia.org/wiki/Minneapolis_wireless_internet_network#cite_note-strib2010-6) out of a total of 117 which had also gone up in parks and on street corners around the city.[[17]](https://en.wikipedia.org/wiki/Minneapolis_wireless_internet_network#cite_note-stribmcguire-17) Per the request of law enforcement officials who were concerned about the potential ability to surf the internet anonymously, the free login points require the user to enter a username, password, and credit card number.[[17]](https://en.wikipedia.org/wiki/Minneapolis_wireless_internet_network#cite_note-stribmcguire-17)

**Key 2014 findings:** [**http://www.minneapolismn.gov/it/inclusion/WCMS1P-118865**](http://www.minneapolismn.gov/it/inclusion/WCMS1P-118865)

**Only 6% of whites don’t have any Internet access at home, compared to 24% of African Americans and 10% of other races/multiracial or Hispanic respondents.**

**Too many residents do not feel very comfortable finding and applying for jobs online; only 65% of unemployed respondents looking for work have a computer with Internet at home.**

* Digital equity is a component of equity in Minneapolis: The data on access and use of technology points to a digital equity gap along the lines of income, race, age and education.
* Overall 15% of households do not have a computer with Internet access at home, which translates into 24,750 households in Minneapolis.
* Value proposition: The importance of home Internet access increased substantially with level of use; virtually all high-level users described Internet access as essential, while non-users were most likely to say that home Internet access was not at all important.
* Only 6% of whites don’t have any Internet access at home, compared to 24% of African Americans and 10% of other races/multiracial or Hispanic respondents. While there is less variation based on preferred language for respondents with computers and smartphones, 90% of whites have computes with Internet at home compared to 66% of African Americans and 81% of other races or Hispanic.
* Families with Children:  Overall, 90% of households with children have access to a computer with Internet access and families recognize that having a computer with Internet access is essential for their household. When we look at the data by race and ethnicity, 97% of white alone/non-Hispanic households have access to a computer with Internet at home compared to 81% of households with children from all other races/ethnicities.
* Income: Respondents earning $50,000 a year or more were significantly more likely to own a desktop computer, tablet, cell phone and game console with Internet access.
* Education: Those with a high school education or less felt that access to a computer and Internet at home was less important compared to their counterparts. Residents with more education were more likely to own computers, tablets and cell phones with Internet access, were more comfortable using these devices, and tended to use the Internet for activities such as emailing, attending online classes and communicating with government.
* Age: Residents aged 55 and older are least likely to be computer and Internet users.
* While comfort level with mobile devices has increased significantly, more residents of all ages need skills in online communication and collaboration —such as, publishing to the Internet, creating websites, maintaining blogs and even coding their own applications.
* Too many residents do not feel very comfortable finding and applying for jobs online; only 65% of unemployed respondents looking for work have a computer with Internet at home.
* Residents are not comfortable attaining education online and are not often accessing health information.
* The Internet is not being used often by residents to find community resources, engage in civic activities or communicate with government.
* Residents are frequently using email, social media and obtaining information online, however engagement activities are occurring less frequently, including communicating with government and economic development through direct selling of goods and services on the Internet.
* Residents do not feel they know enough to deal with cyber security issues